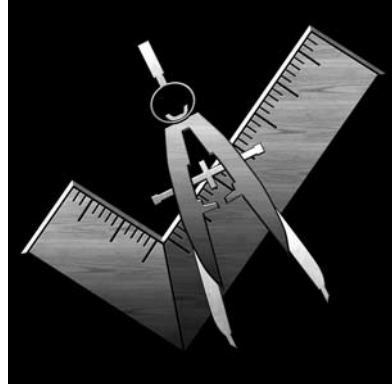


Track 'n Trade 5.0

User's Manual



A Special Thanks to:

Lan Turner	Janie Russell
Erik Larson	Paige C. Mehlhoff
Nick Russell	Joe Chambers
Jacob Anawalt	Kimberly Lyon
Phillip Arnoldson	Matt Langenheimer
Brad Dickson	Kendell Fabricius
Derrick Hathaway	Erik Akins
Todd Hendricks	Dana Bigboy

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Gecko Software, Inc.
271 N. Springcreek Parkway, Suite A
Providence, UT 84332
www.GeckoSoftware.com

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Introduction to Futures

The Basics of Futures Trading

Introduction

Originally, the stock market was created as a way for companies to raise capital. By exchanging ownership in a company for cash, early business ventures were able to raise capital to buy equipment or build factories. Companies hundreds of years ago, as well as today, primarily use the stock market as a means to raise capital.

The modern futures market evolved not from a need to raise capital, but from a need to transfer risk. The futures market makes it possible for those who want to manage price risk (hedgers) to transfer that risk to those who are willing to accept it in the hopes of a profit (speculators).

Futures markets are first and foremost a risk transference vehicle. They also provide price information that the world looks to as a benchmark in determining value of a particular commodity or financial instrument on any given day or at any specific time of the day. These benefits, risk transference and price discovery, reach every sector of the world economy where changing market conditions create economic risk in the diverse fields of agricultural products, foreign exchange, imports, exports, financing, and investment vehicles.

What are Futures?

Futures contracts are standardized to meet the specific requirements of buyers and sellers for a variety of commodities and financial instruments. Quantity, quality, and delivery locations are pre-established. The only variable is price, which is discovered through an auction-like process on the trading floor of an organized futures exchange.

Example

An individual buys one contract of March Corn at \$2.25 per bushel on January 2nd, initiating a long position. This contract calls for the delivery of 5,000 bushels of Number 2 Yellow Corn seven days before the last business day of the delivery month (March) at an exchange-recognized facility. If the purchaser of the March Corn contract wishes to exit his position on February 15th, he can do so by selling one March Corn contract.

Assuming that the contract was sold at \$2.45 per bushel, the holder of the March Corn contract would receive \$1,000.00 (before broker commissions and fees) for holding the position for six weeks:

$$\begin{aligned}\text{Profit or Loss} &= \text{Sale Price} - \text{Purchase Price} \times \# \text{ of bushels} \\ &(\$2.45 - \$2.25 = \$0.20 \times 5,000 = \$1,000.00)\end{aligned}$$

The person in this example is \$1,000.00 richer for the experience, and has no further obligation in the Corn market because the sale of the March Corn futures contract at \$2.45 per bushel offset the earlier purchase at \$2.25 per bushel.

Notice in the previous example that all of the features of the contract were predetermined by the exchange, except the price:

- Quantity: 5,000 bushels for Corn futures
- Quality of the Corn: #2 Yellow
- Delivery time: 7th to last business day of the contract month
- Location: exchange-recognized warehouse or transfer station

Because futures contracts are standardized (with price as the only variable), buyers and sellers are able to exchange one contract for another and actually offset their obligation to deliver or take delivery of the commodity underlying the futures contract. **Offset** means to take an equal and opposite position in the futures market to one's initial position.

Margins and Guaranteeing Futures

The exchanges and their members are able to guarantee all trades because they require all parties in a transaction to deposit performance bond margins. **Performance bond margins** are financial guarantees required of both buyers and sellers of futures contracts to ensure fulfillment of the contract obligations. That is, buyers and sellers are required to take or make delivery of the commodity or financial instrument represented by the futures contract unless the position is offset before the contract expiration.

Before entering into a transaction, both parties have to post an **Initial Margin Requirement**. The initial margin requirement is the amount of money a party must have on account with a clearing firm (your broker) at the time the order is placed. Initial margin funds must be on deposit before any trade can be accepted. **Maintenance Margin** is a set minimum margin (per outstanding futures contract) that a party to a futures contract must maintain in his margin account to hold a futures position. Initial margin requirements vary from commodity to commodity, but are generally between 5% and 10% of the total value of the contract.

Example

If March Corn futures are trading at \$2.11/bushel, the initial Margin Requirement for CBOT Corn futures is \$405.00 per contract, with a maintenance margin requirement of \$300.00. Our speculator must have at least \$405.00 on deposit with his broker before he could enter the market. He would need to have an account liquidating value of at least \$300.00 per contract in order to stay in the position.

Let's assume that our speculator has \$1,000 in his account and decides to buy 2 contracts of March Corn at \$2.35/bushel on January 2nd. He is able to buy this because he has more than the initial margin requirement of \$810.00 (\$405.00 initial margin x 2 contracts = \$810.00). With a \$50.00 round turn commission rate (\$25.00 in and \$25.00 out) our speculator's broker would charge him \$50.00 in commissions as well.

If March Corn settled at his entry price of \$2.35/bushel, his account liquidating value would be \$950.00 (\$1,000.00 initial deposit - \$50.00 commission) to buy 2 contracts of Corn. Since the liquidating value of the speculators account (funds on deposit + open position profit or loss) is greater than the maintenance margin requirement of \$300.00 per contract or \$600.00 for 2 March Corn, he is able to stay in the trade.

The next day, much to our speculator's detriment, Corn prices drop by 5 cents. Our speculator now has an open position loss of -\$500.00 and an account liquidating value of \$450.00 (\$1,000.00 - \$50.00 commission - \$500.00 open position loss = \$450.00). Since this value is less than the Maintenance Margin requirement of \$300.00 per contract, or \$600.00, our speculator is on a Margin Call.

In order to keep the position, the speculator must either send enough money to bring the account back above the Initial Margin Requirement of \$810.00 or liquidate the position. The Maintenance Margin Requirement is the minimum amount of money which must be in the account (including open position profits and losses) to maintain an open position in the futures market. If the value of the account dips below this level, then the account holder must either send additional funds to his broker or liquidate the position. Usually, traders have 5 business days to get funds posted to the account, but in some cases the brokerage firm may liquidate the futures positions in order to meet the Margin Call.

Reminder

Brokerages have the right to liquidate your position immediately, and many may require you to wire funds right away to avoid liquidation. Be aware that margin requirements are subject to change without notice.

Initial Margin is the minimum amount of money you must have in your account to open up a futures position. **Maintenance Margin** is the minimum amount of money you must have in your account to maintain the position.

In the Corn example, the initial margin was \$405.00 per contract, meaning that a trader must have at least \$405.00 per contract in his margin account before a Corn futures position can be entered into. After the position is entered into a balance of \$300.00 per contract, the Maintenance Margin must be maintained in order for the position to be left open. If the available funds in the account (funds deposited + open position profit or loss) are less than the Maintenance Margin Requirement, then more funds must be deposited or the futures positions will be liquidated or offset by taking an opposite position in the futures market.

Reminder

Long or buy positions are offset or closed by selling, while short or sell positions are offset or closed out by buying.

The dual margining system (initial and maintenance) of the futures market ensures that all positions are adequately financed and the integrity of the futures market is secure. The exchanges set the minimum margin requirement based on the volatility and dollar value of the contract. Margin levels are subject to change both up and down at the discretion of the Exchange. Most brokerage firms charge the exchange minimum margin, but they are entitled to charge more. Be sure to check with your broker before entering into any futures transaction.

The Long and Short of Trading

There are two basic positions one can have in the futures markets, a long or short position.

A **long position** entails the purchase of futures contracts in anticipation of rising prices. A buyer enters into a long position when he/she purchases a futures contract. Long positions are profitable if the underlying futures contract increases in price during the holding period. Selling the same quantity and contract-month that one initially purchased offsets a long position. Long positions are typically used by consumers to hedge against rising prices and initiated by speculators in anticipation of higher prices.

A **short position** entails the sale of futures contracts in anticipation of lower prices. A short position is entered into by initially selling a futures contract. In the futures market, unlike the stock market, it is just as easy to establish a short position as a long position. Short positions are profitable if the underlying futures contract decreases in price during the holding period. Buying the same quantity and contract month that you initially sold offsets your short positions. If the resulting purchase price is less than the original sale price, a profit is achieved. However, if the resulting purchase price is greater than the original sale price, a loss is incurred. Commodity producers who wish to avoid potentially lower prices (as a short position increases in value and prices decline) usually establish short positions.

Calculating Profit/Loss

Determining the profit or loss associated with a position is the same regardless of either a long or short position. The profit or loss from a futures position is calculated as follows:

$$\text{Profit or Loss} = \text{Sell Price} - \text{Buy Price} \times \text{Contract Size} \times \text{Number of Contracts}$$

Example

Assume a speculator thinks that Corn prices will go down in the coming weeks. He sells 2 March Corn contracts at 235 cents per bushel (\$2.35) initiating a short position.

Having studied the behavior of Corn using his Track 'n Trade 5.0, our speculator was correct, and Corn prices fell from 235 to 220 over the next two weeks. Given the -15 cent drop in Corn prices, our speculator has a \$1,500.00 open position profit and decides to “cash in” his winning by buying 2 March Corn futures at 220.

Profit or Loss = Sell Price - Buy Price x Contract Size x Number of Contracts

$$= 235 - 220 = +15 \text{ cents}$$

$$= \$0.15 \times 5,000 \text{ bushel contract size} = \$750.00 \text{ per contract}$$

$$= \$750.00 \text{ per contract} \times 2 \text{ contracts} = \$1,500.00 \text{ (before commissions and fees)}$$

Now assume that another speculator buys 2 March Corn at 235 initiating a long position. After two weeks, prices drop by -.15 cents to 220, and he offsets the long position by selling 2 March Corn at 220. His loss from the transaction would be -\$1,500.00 before commissions and fees.

Profit or Loss = Sell Price - Buy Price x Contract Size x Number of Contracts

$$= 220 - 235 = -15 \text{ cents}$$

$$= -\$0.15 \times 5,000 \text{ bushel contract size} = -\$750.00 \text{ per contract}$$

$$= -\$750.00 \text{ per contract} \times 2 \text{ contracts} = -\$1,500.00 \text{ (before commissions and fees)}$$

As you can see, whether you are long or short, the basic idea of speculating in the futures market is to “buy low” and “sell high.” In the futures market this can be done in any order. You can initiate a long position by buying the futures first and offsetting by selling at a later time. If the sale price (exit price) is higher than the purchase price (entry price), you profit. Or, you can initiate a short position by selling the futures first and then offsetting the contract(s) at a later time by buying them. A profit will always occur if the sale price is higher than the purchase price.

Points vs. Cents

The profit or loss amount is determined by the contract you are trading. Each futures contract is quoted in a slightly different manner, and as such your profit or loss calculation for most markets is slightly different. The following highlights the major markets and how they are quoted. Of course, Gecko Software’s Track ‘n Trade 5.0 will convert price moves to profit or loss for you, but these examples will help you understand how it is done.

Grains: Corn, Wheat, Oats, and Soybeans are quoted in cents per bushel, with a contract size of 5,000 bushels. A Corn price of 235 is really \$2.35 per bushel. Each of these grains moves in 1/4 cent increments, which equates to \$12.50 before commissions and fees. The profit or loss of a one cent move is \$50.00 before commissions and fees.

Meats: The contracts are quoted in cents per pound. If Live Cattle is trading at 74.00, the price is actually 0.74 cents per pound. Meat prices move in 0.025 cents per pound increments, but usually the last 0.005 cent per pound is dropped, so a price quote of 74.02 is really 74.025, while a price quote of 74.17 is actually 74.175. Live Cattle, Lean Hogs, and Pork Bellies contracts call for delivery of 40,000 pounds, making a 0.025 cent per pound worth \$10.00 before commissions and fees. The profit or loss of a one cent move is \$400.00 before commissions and fees. Feeder Cattle prices are quoted the same way, except they call for 50,000 pounds, making a 0.025 cent move is worth \$12.50 and a one cent move in Feeder Cattle worth \$500.00 before commissions and fees.

“Softs” or Exotics: Coffee, Sugar, and Orange Juice are all quoted in cents per pound, but each has a different contract size. A Coffee price of 50.40 is 50.40 cents per pound, an Orange Juice price of 89.95 is 89.95 cents per pound, and a Sugar price of 762 is really 7.62 cents per pound (prices in Sugar are quoted in cents per hundred weight). Cocoa prices are quoted in dollars per metric ton, so a price of 1301 is really \$1301 per metric ton.

The contract size for Coffee is 37,500 pounds, making a 1 cent move worth \$375.00 before commissions and fees. Orange Juice futures call for delivery of 15,000 pounds, making a 1 cent move worth \$150.00 before commissions and fees. Sugar is traded in 112,000 pound increments, making a 1 cent move in Sugar equal to \$1,120.00 before commissions and fees. Cocoa contracts call for 10 metric tons at delivery, making a \$1 move in Cocoa worth \$10.00 before commissions and fees.

Metals: Gold and Platinum prices are quoted in dollars per troy ounce. Most quote vendors display their prices in this format as well, so prices are easy to read. A Gold price of 285.10 is \$285.10 per troy ounce, while a Platinum price of 475.5 is \$475.50 per troy ounce. However, each contract has a different contract size. Each Gold futures contract represents 100 troy ounces, so a \$1.00 per troy ounce move equates to \$100.00 before commissions and fees. Platinum futures represent only 50 troy ounces, as Platinum is much more rare than Gold. Each \$1.00 per troy ounce move in Platinum is equal to \$50.00 before commissions and fees.

Silver and Copper Futures are quoted in cents: cents per troy ounce in Silver, and cents per pound in Copper. A Silver price of 452.5 is actually \$4.525 per ounce, while a Copper price of 70.20 is really \$0.7020 per pound. Each Silver contract represents 5,000 ounces, making a 1.0 cent move equal \$50.00 before commissions and fees. Copper contracts control 25,000 pounds of copper, making a 1.00 cent move equal \$250.00 before commissions and fees.

Petroleum: Crude oil is quoted in dollars per barrel (bbl). A price of 20.50 is \$20.50 per barrel. Each contract represents 1,000 barrels of oil, making a \$1.00 barrel move equal to a \$1,000.00 profit or loss before commissions and fees.

Heating Oil and Unleaded Gasoline are the same as at the pump (minus taxes and service station mark-ups) in cents per gallon. A price of 52.46 is \$0.5246 per gallon. Both contracts call for delivery of 42,000 gallons; therefore, a 1 cent per gallon equates to \$420.00 before commissions and fees.

Currencies: Currencies represent an exchange rate, or how many US Dollars it takes to buy one Swiss Franc, Japanese Yen, Euro, or Mexican Peso. Prices are quoted in many different fashions, but the basic convention is that a 0.01 move in the Swiss Franc or Yen equals \$12.50 before commissions and fees because of the contract size. The Canadian Dollar, US Dollar Index, and Euro have a different contract size, and a 0.01 move equates to \$10.00 before commissions and fees.

Financials: The same basic principles apply to the financial markets, which are generally quoted in terms of points. Prices are usually read as is, though some, like the treasury securities (US, TY, FV, TU), are traded in different combinations of 1/32nd or 1/64th. Each of these markets has the dollars per point already calculated into Gecko Software's Track 'n Trade 5.0 application, and a list of the different contract sizes and pricing terms are available from the various exchanges they trade on, as they do not follow a single convention.

Margins, Cents, Points, & the Power of Leverage

Before entering into either a long or short position, one must post a performance bond or have the initial margin requirement. Because it is only necessary to post a fraction of the underlying value of the worth of the underlying contract, futures are a highly leveraged trading vehicle.

Initial margin requirements vary from market to market, but are generally only 3% to 18% of the value of the underlying contract value.

Example

If March Corn is trading at 211 per bushel (\$2.11/bushel), the current initial margin requirement is \$405 per contract. Each Corn futures contract represents 5,000 bushels of Corn, so the underlying value of a contract of Corn at 211 is \$10,550. In other words, for \$405 you can control \$10,550 worth of Corn. By putting up just 3.9% of the value of the contract, you can control 5,000 bushels of Corn. (Margin requirements are subject to change without notice.)

In this example, a 1 cent move in the price of Corn (\$50.00 before commissions and fees) represents a 12.3% return on the Initial Margin Requirement. This is the power of leverage. A small move in the price of the futures contract can mean a large move in your account.

Because of this kind of leverage, a 3.9% move in the price of Corn could give you a 100% return, double your money, or a loss of it all, if properly or improperly positioned. The power of trading on margin is that a small move in the price of the underlying equates to a large return (either positive or negative) on the money posted.

Just as physical leverage increases the amount of force used, like a pulley lifting very heavy objects, financial leverage increases the amount of money, which can be made or lost in the markets. As they say in Chicago, “The futures markets have made millionaires of more young men than Rock and Roll.”

However, we want to point out that leverage is a two-edged sword. Over leveraging your trading is a sure fire way to lose your money. Because of the leverage of a roulette wheel, each bet on a specific number pays off at 35 to 1. If you bet “6” and the ball bounces and lands on “6”, every \$1 you bet is paid back to you with \$35 dollars.

Let’s say you start off with \$1 and bet “6” and win. You now have \$35 and bet it all on “6”, which comes up again. You take your \$1,225 winnings and let them ride on “6” again and win, reaping \$42,875. Let it ride again, making a phenomenal \$1,500,625. You let it ride one more time, and up pops “00.” You lose everything.

Though roulette is strictly a game of chance, the above results are possible with futures because of the leverage involved. If you buy 1 Corn futures contract at 210 and the price goes up to 219, you have enough open position profit to post margin for a second contract. Prices then rise another .04 cents, and you buy a third contract. With Corn prices having risen .13 cents, you were able to buy 3 contracts with an initial investment of only \$405.00. However, all it takes is a .05 cent decline in the price of Corn and all your profits are gone. If you were lucky enough to see another 5 cent rise, you would yield a \$1,450.00 profit or a 358% return on the initial margin.

It is possible to make highly leveraged, and possibly highly profitable, transactions in the futures markets by trading with relatively little financial cushion and pyramiding contracts. However, it has been our experience that those who practice this type of trading generally do not end up making money, but losing it.

Most people are attracted to trading futures because of the leverage involved, and it is the leverage that seems to ruin most traders. Though futures trading should only be done with genuine risk capital, this does not mean you should take undo risk. As a general rule of thumb, traders should learn to diversify their risk, only placing a small percentage of their capital at risk at any given time.

Though this style of trade will reduce the largest “bang for your buck” in the short run, it may prevent you from losing everything. In order to learn this game, you need to be able to stick around to learn all the rules (both written and unwritten), and the only way to stick around is through prudent money management.

Orders to Manage Your Future

The size of your account and the amount of risk you are personally able to bear is a completely personal matter. Some very successful traders—like Richard Dennis, who is rumored to have parlayed \$1,000.00 into several millions in the futures markets—have made fortunes starting with relatively small sums of money. Most professional fund managers risk as little as 1% of their account equity on any given trade.

Unfortunately, both of these methods are probably out of the question for most people starting out in the futures market. The odds of turning \$1,000.00 into several million in a couple of years is akin to hitting “6” on the roulette wheel 5 times in a row, but risking 1% of a \$1,000 means only risking \$10.00 per trade, which is just not practical. By postponing your entrance into the futures market until you have, for example, a \$5,000.00 minimum of genuine risk capital (not the kids college fund, the rent, or your next mortgage payment), you could achieve a level of diversity and risk, theoretically then risking 10% of your account (\$500.00 before commissions and fees) on any one trade realistically. This would greatly reduce your risk of ruin and increase your ability to trade longer and hopefully become more proficient in the long run.

Types of Orders

At the core of all risk management and trading is using the appropriate order for your market objective. The following are some basic definitions of the common order types, all of which can be replicated in Gecko Software’s Track ‘n Trade 5.0 charting software.

The **market order** is the most common type of order. With a market order, the customer states the number of contracts of a particular delivery month of a specific commodity he/she wishes to buy or sell. The price of the order is not specified, as the market order is filled “at the market” or at the current price when the order enters the trading pit. Market orders are placed when the speculator or hedger wants in or out of the market fast, since time is the most important factor in this type of order, not price. **Market on Close** is a common variation of this type of order, and is used when the trader wishes to have his/her order executed during the closing of the market (closing range). The **Market on Open** is another common variation, instructing the order to be filled during the markets opening price range.

The **limit order** specifies a price limit at which the order can be filled. The limit order can only be filled at the specified price “or better.” For example, a customer wishing to buy two July Corn contracts at 210 when July Corn is trading at 211 would place the following order: “Buy two July Corn at 210, limit.” **Buy limit orders** must be placed at the current market price or lower. The lower the price the better, and limit orders can only be filled at the specified price or lower.

Introduction to Futures

A customer wishing to sell two July Corn contracts at 215 when July Corn is trading at 211 would place the following order: “Sell two July Corn at 215, limit.” **Sell limit orders** must be placed at the current market price or higher. The higher the price the better, and sell limit orders can only be filled at the specified price or higher.

When a buy limit is placed above the market it can turn into a market order and get filled immediately. If the current price is below the limit price, the market is in a better situation and the buy limit becomes a market order. The same principle applies to sell limits: when a sell limit is placed below the market, it becomes a market order if the higher market price is better.

Gecko Software’s Track ‘n Trade 5.0 helps you learn all these rules by allowing you to simulate and practice placing these orders and making sure you have each order under your belt before ever moving on to trade the live markets.

A **stop order** is not executed until the market reaches the specified price level. Once the stop level is hit, the stop order becomes a market order. Opposite of limit orders, buy stops are always placed above the market, while sell stops are placed below the market.

A customer wishing to buy July Soybeans at 485 when the current market price is 475 would place a stop order as follows: “Buy one July Soybean at 485, stop.” If the Soybean market trades as high as 485 or is bid at 485, the order would become a market order and would be filled as quickly as possible.

A customer wishing to sell July Soybeans at 465 when the market is currently priced at 475 would place a stop order as follows: “Sell one July Soybean at 465, stop.” If the Soybean market traded as low as 465 or was offered at 465, the order would become a market order and would be filled as quickly as possible.

Example

Stop orders are usually used to liquidate earlier transactions, to cut losses, or protect profits. Let’s assume that a speculator bought three July Corn at 210 and the market is currently trading at 225. He may wish to protect some of his 15-cent profit per contract (\$2,250.00 profit before commissions and fees) by placing a sell stop at 220, to protect 10 cents (\$1,500 of the profit before commissions and fees). Placing the following order would do this: “Sell three July Corn at 220, stop.”

There are many other different types of orders, such as stop limits and market if touched orders, but the above orders are the most commonly used and are really the only orders a beginning trader needs to learn.

Look Before You Leap

A Message from the CEO

Before starting a business it is important to have a business plan and have adequate capital. Most new businesses start off with a dream, and the proprietor's willingness to work hard. Despite hard work, they can fail because of unforeseen difficulties, poor preparation, or lack of capital. Remember this when starting your trading business: try to have adequate capital and plan for the unforeseen by developing and testing a trading plan.

Before trading, it is imperative that you develop a trading plan.

Your trading plan should be capitalized with money you can afford to lose. Generally trading funds are categorized as genuine risk capital if it is money that you can afford to lose. Again, this is not your child's college education fund, the mortgage money, or grocery money. Proper planning and adequate capitalization are the cornerstones of any new venture.

The first step in building a house is drawing up plans for the completed house. The workmen who erect the house consult the blueprints when placing walls, sinks, appliances, and electrical outlets. The transition from bare ground to a finished home is laid out in the blueprints, or the plan for the completed structure. Trades should be planned with as much detail. Every situation should be planned for, so decisions are not made in the heat of the moment when money is on the line.

The goal of your trading plan is to allow you to make decisions before things happen, giving you a blueprint for trading before entering the market. A basic trading plan should include the following features as a minimum:

- Trade entry
- Initial risk or stop loss point
- Criteria for stop loss movement
- Criteria for profitable trade exit

Once you have developed your trading plan, put it to the test by "Paper Trading." Paper trading is fictitious trading, or simulated trading, best done using Gecko Software's Track 'n Trade 5.0 market simulator program, in which you simulate buying and selling futures contracts, without risking real money. The whole purpose of paper trading is to be as realistic as possible when doing it. It does no good to practice trading with a million dollars, if you are going to start with \$10,000. Don't practice your trading in the S&P if you are intending to actually trade Corn. Keep your practice as realistic as possible.

The one major downfall to paper trading is that it does not involve real money. It is very easy to live through a fictitious losing streak but quite different to live through it when it is your money on the line. Because paper trading does not involve real money, your emotions are kept at bay, but tend to creep up when real money is involved.

Gecko Software's Track 'n Trade 5.0 comes with over 30 years of historical data on over 50 different markets, allowing you to learn the markets and develop a trading plan. Four different plug-ins are available for Track 'n Trade 5.0 to help you maximize your trading strategies. The plug-ins are listed below:

Accounting Plug-in: Enables Track 'n Trade 5.0 users to simulate placing life-like orders, applying deposits and making withdrawals. Also, it keeps track of commissions paid to your simulated (or live) broker, tracks orders placed, profits & losses, and even simulates margin calls.

Options Plug-in: The order tools included with this plug-in automatically snap to the different strike prices to show you the actual dollar value of the option on that particular day. Track 'n Trade 5.0 users who have this plug-in keep track of options profit and losses concurrent with your futures orders, allowing them to practice mixing futures and options strategies simultaneously.

Seasonal Plug-in: Comprised of three indicators for the seasonal market, this plug-in assists the Track 'n Trade 5.0 user to calculate seasonal trends and market probability, and gives historical averages. All this information is based on what has happened to a particular seasonal contract in the past.

Spreads Plug-in: Place orders directly on the spread chart and let Track 'n Trade 5.0 automatically simulate placing both orders in the opposing contracts, and calculate your daily profits and losses in the Accounting and Simulation Plug-in module.

Commitment of Traders Plug-in: Gives you the overall picture of what is happening behind the scenes of each market. It actually tells you who's buying and who's selling, from large professional trade, commercial traders, and small speculators. This information is a great indicator for which way the market will turn.

Bulls 'n Bears Trading System: The first trading system designed for Track 'n Trade 5.0 users. This trading system includes easily usable tools to see if the market is bullish or bearish. Bulls 'n Bears allows you to change the sensitivity of the system according to your trading style, whether you are an aggressive trader or a more traditional trader.

So, before ever attempting to trade in the futures market, develop a strategic plan. Your trading plan should be realistic and well tested over past history. Once it has been developed, take six months and paper trade; "simulate" trading in "real time," using Track 'n Trade 5.0. If the plan still holds up, then remember the mantra of futures traders: "Plan your Trade, and Trade Your Plan."

Good Luck,
Lan H. Turner, CEO
Gecko Software, Inc.

Getting Started

Navigating Your New Software

Installation

Whether you purchased Track 'n Trade 5.0 by downloading it from the internet or to be installed by CD-ROM, your installation process will be the same. The installer will guide you through the steps required to install Track 'n Trade 5.0 on your computer.

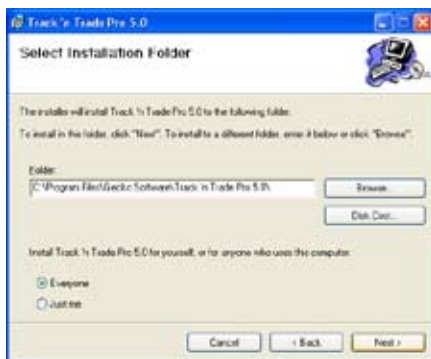


EULA

Please read through the End-User License Agreement. If you agree to the terms of use, select the circle next to “I Agree” and you will be able to click Next to view the next window.

Location

Read the instructions and select which installation process you would like to follow, and where to install it on your computer's hard drive if that is your choice. Then select the shortcuts you would also like to install. Click the Next button when you are finished.



Log-in

The start up screen will appear the first time you open Track 'n Trade 5.0. Select whether you own Track 'n Trade 5.0 or if you are using a trial version. Enter your username and password on the next page.

- If you were already a customer of Gecko Software when you purchased Track 'n Trade 5.0, use the same username and password from your Account Manager.
- If you purchased Track 'n Trade 5.0 by phone, your username and password will be in your confirmation email.
- If you purchased Track 'n Trade 5.0 online, use the username and password you set up.



Saving Username and Password

The option to save your username and password is available in Track 'n Trade 5.0. Remember, logging in gives you access to your financial information through Track 'n Trade 5.0, and others may use these saved passwords to access this information.

Account Manager

The Account Manager was created to give Gecko Software customers a convenient resource to update their personal information with us, such as your billing, shipping, and payment information.

To access the Account Manager, log-in to Track 'n Trade 5.0, click on the Help Menu, and select Account Manager. The Account Manager will open in your default browser. (You will not need to enter your email address and password if you are already logged-in to the program.)



Or, access your Account Manager by visiting www.trackntrade.com or www.geckosoftware.com and click on Account Manager. To log-in to the Account Manager, use the same username and password you use to access the Track 'n Trade 5.0 software program. There are links below the log-in to help you in case you forget this information. If you do not have a password, click on the “Click Here to Sign-Up” button on the bottom of the screen. It is helpful to read the information given here.

Once you have logged in, a screen will appear with your information on it. The top of the screen is a menu with Home, Update Account, Order History, and Available Products tabs.

Home | Update Account | Order History | Available Products

From the **Home** page you can view your Account Details at the top left corner, which include your current address and phone number. You can change this information by clicking Review. You will also see any Account Notices, such as a notice that one of your subscriptions needs to be renewed. Below will be a list of your current subscriptions and a list of the software programs you currently own.

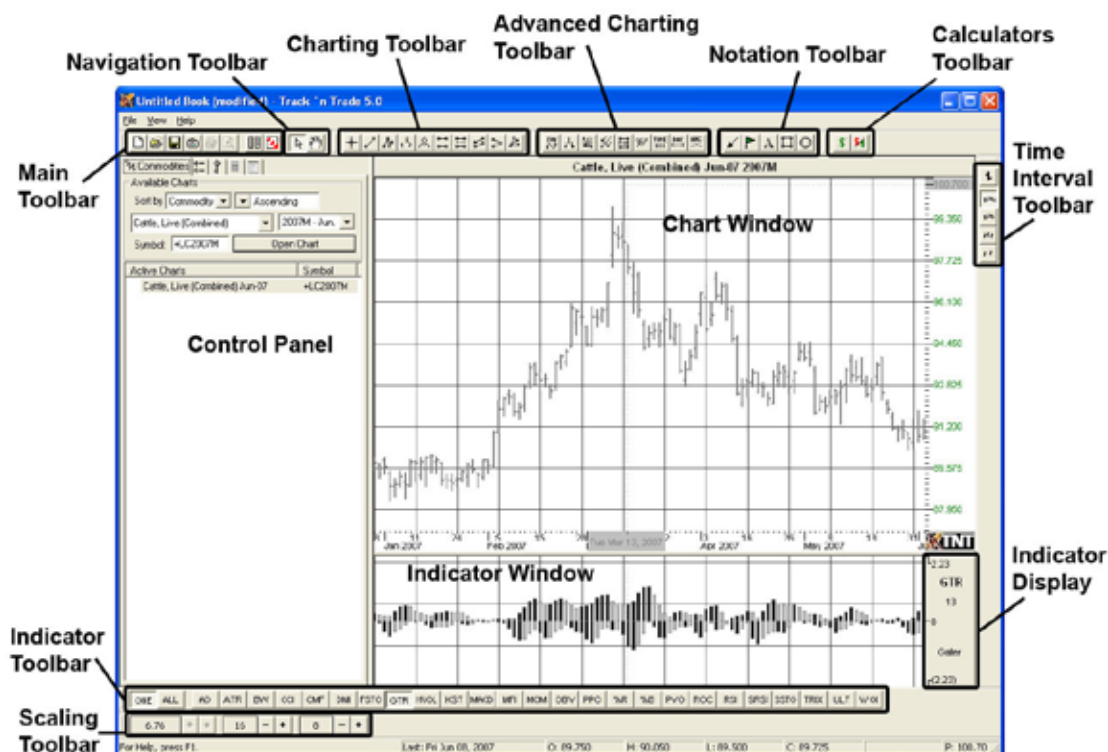
The **Update Account** page is where you can update your Billing and Contact Information, Shipping Information, Payment Information, and your Password. It is important to keep this information up-to-date.

On the **Order History** page, there will be a chronological list of all your orders. To view them in detail, click on the Details link on the right side of the screen.

The last page on the menu is **Available Products**. Here you can view all the Gecko Software products you do not own. Please browse through and make purchases from this window.

Getting Started

This section will introduce you to the basic functions and features of Track 'n Trade 5.0. First, we'll take a look at your workspace. The screenshot below is what you will see when you open Track 'n Trade 5.0. Use this as a reference for the rest of the manual. The following pages will explain each Toolbar and Menu labeled here and their functions.



Keyboard Shortcuts Quick Reference

Ctrl and ↑	Scroll Chart Up
Ctrl and ↓	Scroll Chart Down
Ctrl and ←	Scroll Chart Left
Ctrl and →	Scroll Chart Right
Page Up	Scroll Screen Half Up
Page Down	Scroll Screen Half Down
Ctrl and Page Up	Scroll Screen Quarter Up
Ctrl and Page Down	Scroll Screen Quarter Down
←	Step Chart Back 1 Tick
→	Step Chart Forward 1 Tick
Home	Move Chart to Beginning
End	Move Chart to End
Shift	Highlight Day Under Cursor
Delete	Delete Selected Object or Tool
Tab	Move to Next Open Chart
Shift and Tab	Move to Previous Chart
Ctrl	Lock Tool to 45 or 90 Degrees
+	Increment Calculator
-	Decrement Calculator
F9	Show Text on All Overlay Indicators
Ctrl and F9	Move Overlay Indicator Text
H	Show and Hide Control Panel
Ctrl-click Screen Capture	Copy Chart to Clipboard
Ctrl-Shift-click Screen Capture	Copy Chart and Control Panel to Clipboard
Shift-click Screen Capture	Save Chart Control Panel to File

File Menu

File	View	Help
New		Ctrl+N
Open...		Ctrl+O
Save		Ctrl+S
Save As...		
Remember Last Book		
Print...		Ctrl+P
Print Preview		
Print Setup...		
Download Data		
1 chartbook.tnt		
Exit		

Open a new blank chartbook by clicking on **New**, or open an already saved chartbook by clicking on **Open**.

Save the current chartbook with existing name by clicking **Save**. If the chartbook hasn't been saved, the **Save As** window will open for you to name the chartbook that you are working on.

Remember Last Book will load the last chartbook you had open. The last eight chartbooks you have opened are listed below Data Download.

Print the chart window by selecting **Print**. **Print Preview** will open a window showing what the chart will look like when it is printed. **Print Setup** gives options for printing the chart.

Download Data will open the Data Download window in your browser.

Exit closes the program.

View Menu

View	Help
✓ Toolbar	
✓ Status Bar	
✓ Play Controls	
✓ Charting Tools	
✓ Notation Tools	
✓ Accounting Tools	
✓ Advanced Tools	
✓ Indicator Buttons	
✓ Sizing Controls	
Current Price Bar	
Tool Button Lock	
✓ Show Drawing Tools	
Commodity Chooser...	
Long Term Settings	
Spread Margins	
Load Themes...	
Save Themes	

Use this dropdown menu to select which toolbars you would like to appear on your screen. The toolbar is selected when a checkmark appears beside it. Toolbars you can choose to show or hide are **Main Toolbar**, **Status Bar**, **Play Controls**, **Charting Tools**, **Notation Tools**, **Accounting Tools**, **Advanced Tools**, **Indicator Buttons**, **Sizing Controls**, and **Current Price Bar**.

You may also select **Tool Button Lock** that gives you the ability to use the tool you have selected an unlimited amount until you select another tool. If this option is not selected, your tools will only last for one drawing and default back to the pointer tool. Deselecting **Show Drawing Tools** will hide any drawn tools on your chart.

The **Commodity Chooser** option will open the Commodity Chooser window. Select **Long Term Settings** to customize your long term charts or select **Spread Margins** to open the spread margins window.

Select **Load** and **Save Themes** to customize your themes.

Help
Online Manual
Keyboard Shortcuts
How To Videos - Online
Online Help
Live Tech Support...
Report A Problem...
My Account Manager...
Reset Questions
About Track 'n Trade
Check for Updates

Help Menu

Online Manual, Keyboard Shortcuts, How To Videos, Online Help, Report A Problem, and My Account Manager will open a window in your browser and link you to the appropriate website.

When you click on **Live Tech Support**, a pop up window will direct you to call Gecko Software, Inc., at the appropriate phone number (435-752-8026). The tech support will give you a meeting ID that you can type into the appropriate box.

There are times when you will receive a pop up window asking if you want to finish an action (such as deleting a chart). If you select “Don’t ask me again” in the window, you won’t receive the notification next time you complete the same action. By selecting **Reset Questions**, you will start receiving all pop up windows again.

Clicking on **About Track ‘n Trade** will open a window with information about the version installed, the activation code, and the plug-ins installed.

Click on **Check for Updates** for new updates for the software or to update your version of the software to include any new plug-ins you may have purchased.

Main Toolbar



New: Closes your current chartbook and opens a new blank chartbook.

Open: Closes your current chartbook and opens a window for you to choose a previously saved chartbook.

Save: Saves your open charts as a chartbook.

Screen Capture: Saves your open chart as an image. Shift-click saves your chart window plus your control panel. (Ctrl-click copies the screenshot to your clipboard and makes it ready to paste. Shift-Ctrl will copy your chart window plus your control panel.)

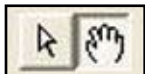
Print: Prints the chart window.

Print Preview: Opens a window showing what the chart will look like when its printed.

Commodity Chooser: Opens the Commodity Chooser window.

Data Update: Opens the Data Download window in your browser.

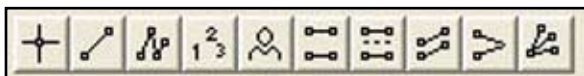
Navigation Toolbar



Pointer: Default tool used for selecting tools and features in the software.

Scrolling Hand: Used in chart window to click and drag a chart.

Charting Toolbar



Crosshair: Used to draw a line vertically and horizontally on a chart.

Line: Used to draw support and resistance lines.

Multi-Line: Used to draw an alternating support and resistance line.

123: Used to chart a 123 top or bottom formation.

Head and Shoulders: Used to chart a Head & Shoulders top or bottom formation.

Narrow Sideways Channel: Used to identify a horizontal channel.

N% Ruler: Used to measure a retracement.

Inclining/Declining Channel: Used to identify an inclining or declining channel.

Wedge: Used to identify any type of wedge or triangle.

Trend Fan: Used to identify a trend fan.

Advanced Charting Toolbar



Elliot Wave: Used to chart an Elliot Wave.

Dart/Blip: Used to identify a Dart/Blip.

Gann Fan: Used to chart a Gann Fan.

Andrews Pitchfork: Used to chart an Andrews Pitchfork.

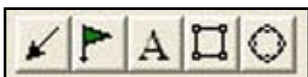
Fibonacci Retracement: Used to measure a Fibonacci Retracement.

Fibonacci Time Zones: Used to measure a Fibonacci Time Zone.

Day Offset: Used to measure the number of trading days versus actual days between two points.

Arc: Used to identify a rounded top or bottom formation.

Notation Toolbar



Notation Arrow: Used to draw arrows to help point out areas of interest.

Flag: Used to place a flag or graphic.

Text: Used to type text.

Rectangle: Used to draw a rectangle.

Circle: Used to draw a circle.

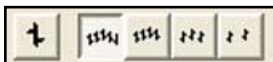
Calculators Toolbar



Dollar Calculator: Used to find the dollar value between two points on the chart.

Risk/Reward: Used to find the difference between two points of the risk and reward zone.

Time Interval Toolbar



Center Chart: Takes existing price bars on all charts open and centers them in your chart window.

Daily Chart: Each price bar represents a day.

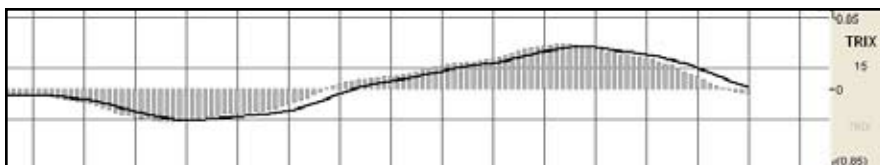
Long Term Daily: Each price bar represents a day, but the chart includes all available data.

Long Term Weekly: Each chart price bar represents a week.

Long Term Monthly: Each chart price bar represents a month.

Indicator Window

This window displays the Indicators.

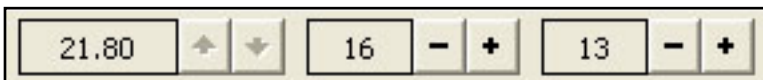


Indicator Toolbar



Use this toolbar to select the indicators you would like to be shown in the Indicator window.

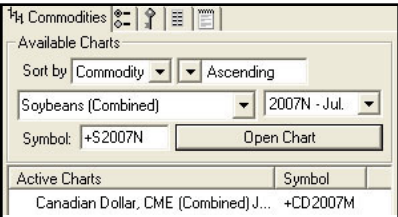
Scaling Toolbar



The first set of controls scales the vertical height of the price bar. The middle set of controls scales the number of price bars displayed per inch on the chart. The last set of controls scales the days along the bottom of the chart and the points displayed on the right side of the chart.

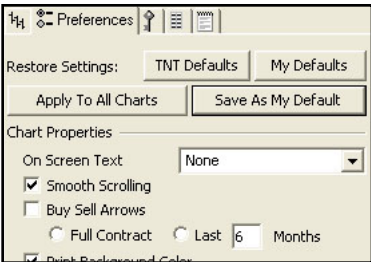
Control Panel

The control panel is on the left side of your screen. It includes five tabs: **Commodities**, **Preferences**, **Key**, **Data**, and **Notes**.



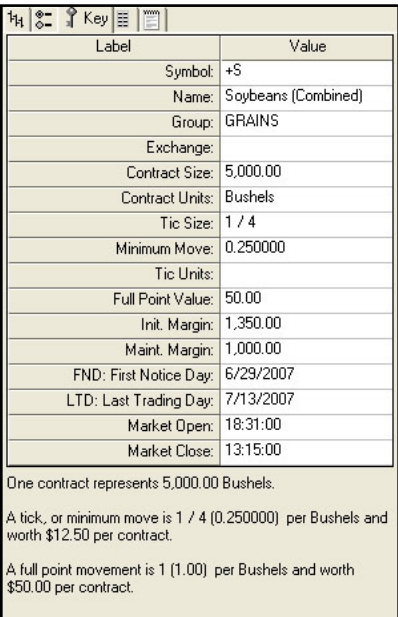
Commodities

This section of the Control Panel gives you the ability to open a chart, add a chart to your Chartbook, and to select between the charts that are open. See the Chartbooks section for more details.



Preferences

The Preferences Tab will help you customize how your chart looks and information on your chart. It defaults to chart settings, but will also show the options for customizing Technical Tools and Indicators. This is where you can change colors, fonts, and line type for your chart and indicators.



Key

This section displays the key details and data from the contract displayed in the Chart Window. (Terms are explained in depth in the Introduction to Futures chapter.)

Symbol: Gecko Software’s symbol for the commodity.

Name: Name of the commodity.

Group: The group is a category for commodities.

Exchange: The exchange is where the commodity’s trades are processed.

Contract Size: Number of units that one contract represents.

Contract Units: The unit of measurement.

Tic Size: The tic size is defined as the smallest increment the quote of a contract will fluctuate.

Minimum Move: Tic size represented as a decimal value.

Tic Units: The unit of measure for quotes. This unit should be the same as the unit that the Exchange uses.

Full Point Value: This value represents what a move in the ones place is worth.

Init. Margin: The initial margin for your account.

Maint. Margin: The maintenance margin for your account.

First Notice Day (FND): Date that the contract will expire.

Last Trading Day (LTD): Last day to trade the open contract.

Market Open: The time that the market opens.

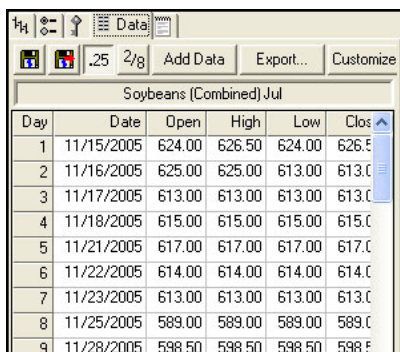
Market Close: The time that the market closes.

Options Expiration: The date that options will expire worthless or be automatically exercised into futures orders.

Options Strike Interval: The value for the minimum spacing between options, as listed by the Exchange.

Options Min. Move: The value of the minimum price fluctuation for the options contract.

No. of strikes above/below: The value used to calculate strikes above the highest high and below the lowest low in generated Black and Scholes data.



Day	Date	Open	High	Low	Close
1	11/15/2005	624.00	626.50	624.00	626.5
2	11/16/2005	625.00	625.00	613.00	613.0
3	11/17/2005	613.00	613.00	613.00	613.0
4	11/18/2005	615.00	615.00	615.00	615.0
5	11/21/2005	617.00	617.00	617.00	617.0
6	11/22/2005	614.00	614.00	614.00	614.0
7	11/23/2005	613.00	613.00	613.00	613.0
8	11/25/2005	589.00	589.00	589.00	589.0
9	11/28/2005	598.50	598.50	598.50	598.5

Data

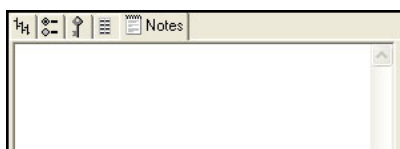
The Data tab will give you the historical data for each day a specific symbol had traded. It will give you the open price, close price, highest price, and lowest price on the day. It also shows the volume traded. Values for indicators are added when the indicator is open.

The disk button is used to save any changes you have made to the data, so that they are available the next time you run the software. The disk button with the red arrow on it is for undoing any data changes you have made but have not

saved. If you have already saved the incorrect value, this action will not recall the original value.

You can select to see all data in decimal or fractional format. Most commodities are traded as decimal values and will be displayed as a decimal everywhere.

To customize the Data tab, click on the Customize button and the Customize window will open. In this window, you can select which data is displayed in the Data tab. To change the data column display order, use the + or - keys on your keyboard to move the selected item up or down in the list.

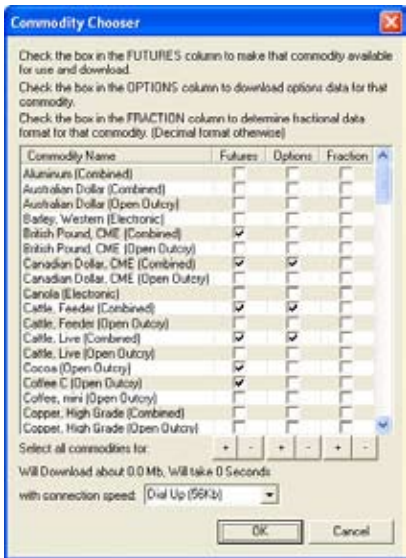


Notes

The Notes tab is for your convenience to use as a note pad for your research and trading strategy. A separate note pad is provided for each chart.

Data Downloads

Before you can look at any charts, you need to download the specific commodities that you would like to view. The data download utility in Track ‘n Trade 5.0 is called FIDO and is simple to use. Easily control the commodities that you download with the Commodity Chooser and keep current with FIDO.



Commodity Chooser

You can bring up the commodity chooser window by selecting the Commodity Chooser button from your Main toolbar, selecting Commodity Chooser... from your View menu, or clicking Click to Choose a Commodity from the dropdown menu in the Commodity tab of your Control panel.

In this window, you can select which commodities you would like to download. The options data is only available if you own the Options Plug-in and the Futures & Options Data Subscription service.

Remember, you can open this window often and download more commodities in the future. If you would like to select or deselect all commodities, click on the + or - button at the end of each column.

Note: Saved Chartbooks containing charts from commodities that you have removed from the Chart Window will not be affected by the Commodity Chooser. This utility will not delete data from your hard drive. The Commodity Chooser will only hide the commodity from the Commodity tab and from the daily data downloads.

Commodity Symbols

Track 'n Trade 5.0 will accept contracts typed in the following format:



Symbol	Name	Exchange	Group
+AD	Australian Dollar (c)	CME/IMM	currencies
AD	Australian Dollar (o)	CME/IMM	currencies
+BP	British Pound, CME (c)	CME/IMM	currencies
BP	British Pound, CME (o)	CME/IMM	currencies
+CD	Canadian Dollar, CME (c)	CME/IMM	currencies
CD	Canadian Dollar, CME (o)	CME/IMM	currencies
+EC	Euro FX (c)	CME/IMM	currencies
+JY	Japanese Yen, CME (c)	CME/IMM	currencies
JY	Japanese Yen, CME (o)	CME/IMM	currencies
+MP	Mexican Peso (c)	CME/IMM	currencies
MP	Mexican Peso (o)	CME/IMM	currencies
+SF	Swiss Franc (c)	CME/IMM	currencies
SF	Swiss Franc (o)	CME/IMM	currencies
RZ	Euro/Swiss Franc (e)	NYBOT/FINEX	currencies
+DX	U.S. Dollar (c)	NYBOT/FINEX	currencies
DX	U.S. Dollar (o)	NYBOT/FINEX	currencies
AC	Ethanol (o)	CBOT	energies
+NG	Gas, Natural (c)	NYMEX	energies
+HU	Gasoline, Unleaded (c)	NYMEX	energies
+HO	Oil, Heating (c)	NYMEX	energies
+CL	Oil, Light Crude (c)	NYMEX	energies
+MB	Municipal Note 10 yr (c)	CBOT	financials
+US	U.S. T-Bond 30 yr (c)	CBOT	financials
US	U.S. T-Bond 30 yr (o)	CBOT	financials
+TY	U.S. T-Bond 10 yr (c)	CBOT	financials

TY	U.S. T-Bond 10 yr (o)	CBOT	financials
+TU	U.S. T-Bond 2 yr (c)	CBOT	financials
TU	U.S. T-Bond 2 yr (o)	CBOT	financials
+FV	U.S. T-Bond 5 yr (c)	CBOT	financials
FV	U.S. T-Bond 5 yr (o)	CBOT	financials
+ED	Eurodollar (c)	CME/IMM	financials
ED	Eurodollar (o)	CME/IMM	financials
+EM	LIBOR, 1mo (c)	CME/IMM	financials
EM	LIBOR, 1mo (o)	CME/IMM	financials
+C	Corn (c)	CBOT	grains
@YC	Corn, mini (e)	CBOT	grains
C	Corn (o)	CBOT	grains
+O	Oats (c)	CBOT	grains
O	Oats (o)	CBOT	grains
+RR	Rice, Rough (c)	CBOT	grains
RR	Rice, Rough (o)	CBOT	grains
+SM	Soybean Meal (c)	CBOT	grains
SM	Soybean Meal (o)	CBOT	grains
+BO	Soybean Oil (c)	CBOT	grains
BO	Soybean Oil (o)	CBOT	grains
+S	Soybeans (c)	CBOT	grains
@YK	Soybeans, mini (e)	CBOT	grains
S	Soybeans (o)	CBOT	grains
+W	Wheat, CBOT (c)	CBOT	grains
@YW	Wheat, CBOT, mini (e)	CBOT	grains
W	Wheat, CBOT (o)	CBOT	grains
KW	Wheat, KCBT (o)	KCBT	grains
MW	Wheat, MGEX (o)	MGEX	grains
@RS	Canola	WCE	grains
+DJ	Dow J. IA (c)	CBOT	indices
YM	Dow J. IASM \$5, mini (e)	CBOT	indices
+GI	GSCI (c)	CME/IOM	indices
+ND	NASDAQ 100 (c)	CME/IOM	indices
NQ	NASDAQ 100, mini (e)	CME/IOM	indices

NK	Nikkei 225 (o)	CME/IOM	indices
+RL	Russell 2000 (c)	CME/IOM	indices
+SP	S&P 500 (c)	CME/IOM	indices
SP	S&P 500 (o)	CME/IOM	indices
ES	S&P 500 Stock, mini (e)	CME/IOM	indices
+MD	S&P MidCap 400 (c)	CME/IOM	indices
MD	S&P MidCap 400 (o)	CME/IOM	indices
CR	CRB (o)	NYBOT/NYFE	indices
YX	NYSE Composite, regular old (o)	NYBOT/NYFE	indices
+FC	Cattle, Feeder (c)	CME	meats
+LC	Cattle, Live (c)	CME	meats
PB	Hogs, Frozen Bellies (o)	CME	meats
+LH	Hogs, Lean (c)	CME	meats
DA	Milk, fluid class III (o)	CME	meats
@YG	Gold, mini (e)	CBOT	metals
@YI	Silver, mini (e)	CBOT	metals
+HG	Copper, High Grade (c)	NYMEX/COMEX	metals
+GC	Gold (c)	NYMEX/COMEX	metals
+PA	Palladium (c)	NYMEX/COMEX	metals
+PL	Platinum (c)	NYMEX/COMEX	metals
+SI	Silver (c)	NYMEX/COMEX	metals
LB	Lumber, random length (o)	CME	softs
CC	Cocoa (c)	NYBOT/CSCE	softs
KC	Coffee C (o)	NYBOT/CSCE	softs
SB	Sugar #11 (o)	NYBOT/CSCE	softs
CT	Cotton #2 (o)	NYBOT/NYCE	softs
OJ	Orange Juice, FC (o)	NYBOT/NYCE	softs

Legend for the Commodity Symbols:

+ Combined Contract

(c) Combined Data

(o) Open Outcry Session

(e) Electronic Session

Commodity Month Symbols

F	January	N	July
G	February	Q	August
H	March	U	September
J	April	V	October
K	May	X	November
M	June	Z	December

Data Update

The Data Update button is located next to the Commodity Chooser button in your Main toolbar. Click on this button to open the data download program, FIDO.

Before opening FIDO, Track ‘n Trade 5.0 will check for product updates. If an update is available you will be notified and given a window to choose “Yes” or “No” on the update. It is recommended that you install each update as it becomes available. After you are finished with the program update, you will be returned to FIDO.



If the data update does not begin automatically, click on “Begin” to start the data update. A window will appear when the data update is completed. Click on OK and exit out of the FIDO window to return to Track ‘n Trade 5.0.

Note: Do not press the power or reset buttons on your computer if FIDO freezes and you are unable to close the window. If this happens, press the buttons Ctrl, Alt, Delete at the same time to open the “Windows Task Manager” (only press them ONCE). Select FIDO.exe from the

list and click on the “End Task” button. This will close FIDO and allow you to restart Track ‘n Trade 5.0.

Firewalls

A firewall is a piece of software or hardware that protects your computer from being accessed by other people on the Internet. A firewall only allows basic types of Internet and network communications. But it keeps you safe and is important to have.

In order to speed up the downloading process, Track 'n Trade 5.0's FIDO does not use conventional means to download data. Because of this, Track 'n Trade 5.0 may encounter problems downloading through the firewall. It may appear that the downloader is idle for a long period of time and then it will display an error stating it could not find the server. This is because the firewall does not allow the server to send the new data to your computer.

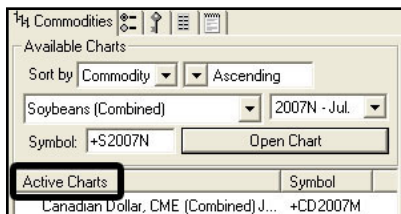
Track 'n Trade 5.0 has a new feature to allow for both standard and non-standard methods for downloading data. The standard method uses Port 80 which is accepted by most firewalls as regular traffic, but this method is slower. The non-standard method uses Port 60184 and will need to have an exception made in order for this method to work with a firewall; this method is much faster than Port 80 in downloading data.

Configuring Track 'n Trade 5.0 for Firewalls:

1. Click on the Data Update button from the Main toolbar to start FIDO.
2. Click on the button located in the far right called "Options."
3. If you are working with a firewall, select "Port 80" and then click the "OK" button.
4. Close FIDO, then restart by clicking on the "Data Updates" button.

Chartbooks

Just like a novel is made up of many single pages, a chartbook contains many individual charts. Each chartbook can contain several charts, each individual chart becoming the “pages” of your chartbook. Every time you open Track ‘n Trade 5.0, a blank chartbook named Untitled Book will open. You can either continue with this new chartbook or open a chartbook that has already been created and saved.



Each chart that you open and view from the Commodities tab is listed below in the Active Charts list found on the left side of the screen. This list is your “Table of Contents” for your chartbook. Charts are listed in alphabetical order in this window. To switch between charts simply double-click on the different charts listed.

Creating a New Chartbook

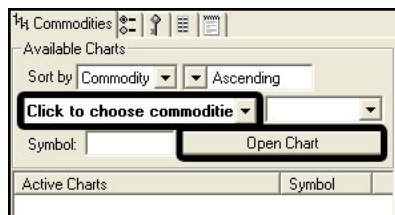
Track ‘n Trade 5.0 will automatically open a new chartbook whenever you open the program. This new chartbook needs “pages” or charts added to it. You can add pages to your chartbook by opening charts in the commodity tab. If you know the symbol for the chart you are looking for, you can type it into the entry box next to Symbol and press enter. (You can look up a complete list of commodity symbols at help.geckosoftware.com.)

A complete list of commodity symbols and commodity month symbols can be found in the Data Download section. If you do not know the symbol of the market you want to see, find your chart by choosing the market, month and year:

- Choose your commodity from the dropdown menu
- Choose the month and year from the dropdown menu to the right
- Click on the “Open Chart” button below

Sorting the Commodity List

Notice that you have sorting options above the Choose a Commodity drop down menu. You can sort commodities by Group or Exchange, and you can display them in Ascending or Descending order.



Active Charts	Symbol
Cocoa (Open Outcry) Jul-07	CC2007N
Cotton #2 (Open Outcry) Jul-07	CT2007N
Gold, COMEX (Open Outcry) Jul-07	GC2007M
Hogs, Lean (Combined) Jul-07	HC2007M
Soybeans (Combined) Jul-07	+S2007N

Delete Chart
Export Data...

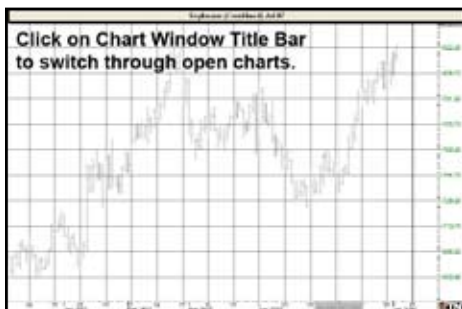
Removing Charts in your Chartbook

Now that you have charts in your chartbook, you have the ability to add and remove charts as you wish before you save it as a chartbook. Right click on the chart you would like to remove and select “Delete Chart” from the dropdown menu. A Confirm Chart Deletion window will appear on your screen. Click OK.

Switching Between Charts in your Chartbook

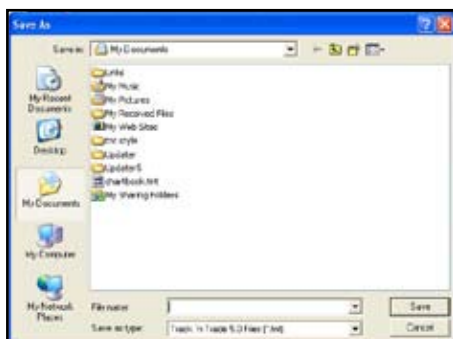
When you have several charts open in your Active Charts window, there are several ways for you to switch back and forth between them:

- Double-click the chart you would like to view in the Active Charts list
- Click on the chart window Title Bar
- Click on the current chart and press the Tab key on your keyboard



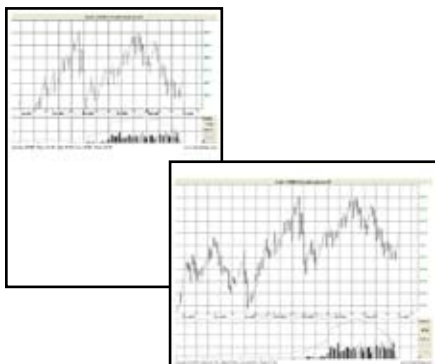
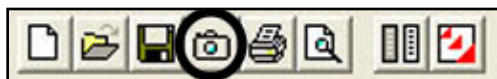
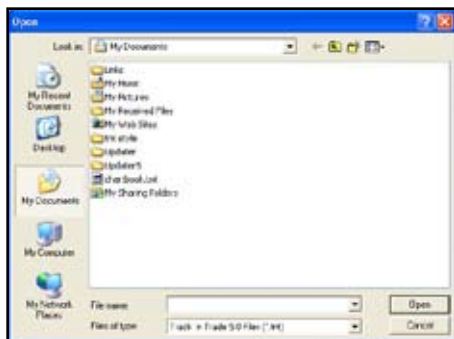
Saving and Closing a Chartbook

When you are content with how your Active Chart list is setup, you can save it as a chartbook to open later. Click on the File menu and select “Save” or click the Save button on your Toolbar. The Save As window will open. It is recommended that you rename your chartbook to avoid accidentally overwriting the file next time a chartbook is saved.



To save over or replace a chartbook that has already been saved, select “Save As” from the File menu. Type in a new name or select the chartbook you want to save over.

Note that the default folder is My Documents. If you choose to save your chartbook into a different folder, remember that this is the location in which your chartbook will be saved. Some Track ‘n Trade users have named Books according to Groups, Commodities, or Exchanges based on the charts that they are saving in the Book. As you become familiar with Track ‘n Trade 5.0, you will be able to develop a system of your own.



Opening an Existing Chartbook

To open an existing chartbook, you can click on the File menu and select “Open,” or click on the Open button on your Main toolbar. The Open window will appear.

In the Open window, select the file you would like to open and click on the Open button.

You will also find that a recently saved chartbook will be in the bookmark section at the end of the File menu.

Saving Charts as an Image

Many Track ‘n Trade 5.0 users include Chartbooks and images of their charts in emails, websites, presentations, etc. To save a current chart as it appears on your screen as an image, click on the Screen Capture button in your Main toolbar.

The Save Chart Image window will open. You may specify the file name, location, and file type (the standard web file types are .gif or .jpg). Once the image is saved, you are ready to email it or import it into a document.

Printing a Chart

To print a chart in Track ‘n Trade 5.0, click on the File menu and select “Print.” The Print screen will open for your default printer. You can also print a chart by clicking on the Print button on your Main toolbar.

The printed chart will always have the Indicator Window printed at the bottom of the chart. The size of the chart will depend on the size that it is when you press the Print button. To change from Portrait to Landscape, click on “Print Setup” from the File Menu. Selecting the Landscape button will print a full-page chart, while Portrait will print a half-page chart.



For an idea of what the chart will look like printed, select Print Preview from the File menu or your Main toolbar to view the output before printing the chart. The last day's open, high, low, and close will also be printed on the chart.

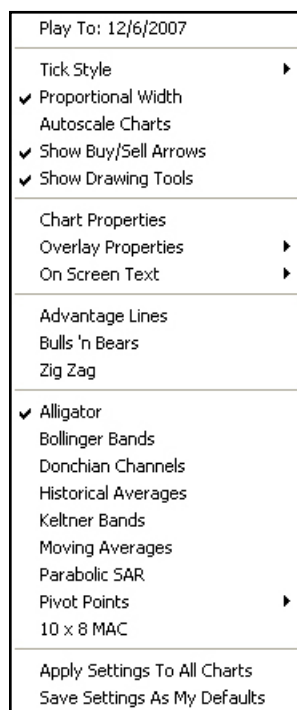
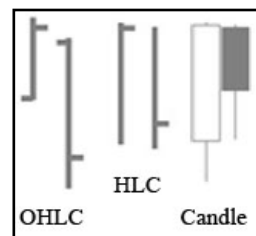
Charting Preferences

You can specify how your chart looks by using the Preferences tab in your Control Panel or by right-clicking in your chart window and using selections from the dropdown menu.

Right-click Menu

When you highlight Tick Style, a menu will appear to the right of the dropdown window. From here, you can select which style of ticks you would like to appear on your chart.

OHLC will show the open, high, low, and close tick marks for the day. **HLC** will be the same, without the initial open tick. **Close** will take the closing prices for each day and turn your chart into a line graph. **Close EX** stands for Close Extended. It will look like Close with the close price as an extended horizontal line. **Candle** will show your price bars as candlesticks. (Candlesticks are explained in the Candlesticks chapter at the end of the manual.)



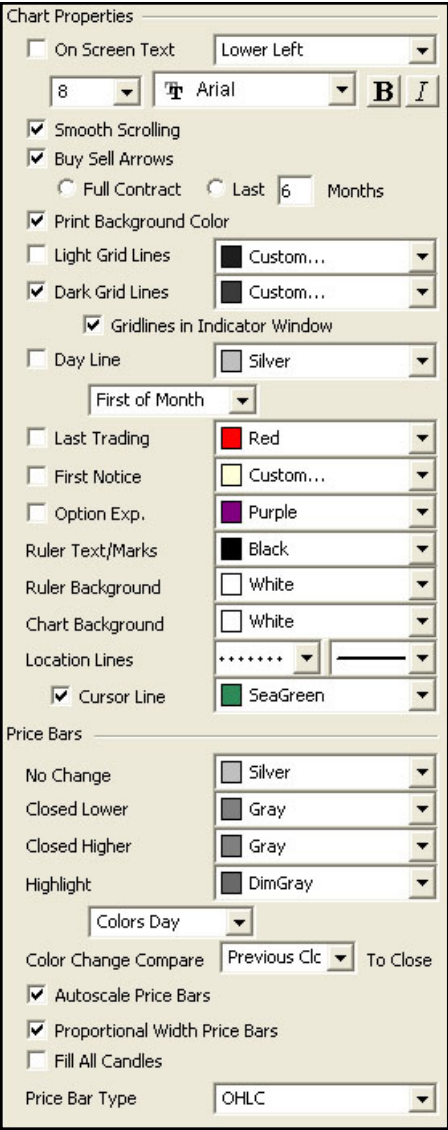
Selecting **Proportional Width** will make your price bar width proportional to the scale of your chart.

Autoscale Charts forces the chart to scale the price bars displayed in the chart window based on the highest and lowest point available in this set of price bars. It will rescale the chart as you go forward or backward in time. (If you would like to center your chart without turning on the Autoscale feature, click on the Center button in your Time Interval toolbar.)

Select **Show Buy/Sell Arrows** to view buy/sell arrows on your chart. If this option is not selected, buy/sell arrows will not appear on your chart even if you have an indicator selected that has buy/sell signals.

Select **Show Drawing Tools** to view all the drawings you've made on your chart. Deselecting this option will not delete the drawings. Once you re-select this option, your drawings will reappear on your chart.

If you select **Chart Properties**, the chart preferences will open in your control panel.



Preferences Tab

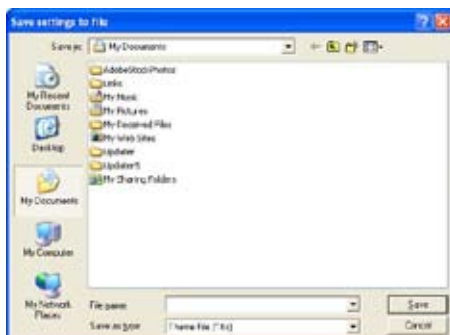
The Preferences tab is located in the Control Panel. Chart preferences appear in the window by default. Any time you don't see chart preferences when your preferences tab is open, click on your chart in the chart window and the chart preferences will appear.

In this tab, you can customize every detail of how your chart looks. You can specify colors and sizes of all the features on your chart.

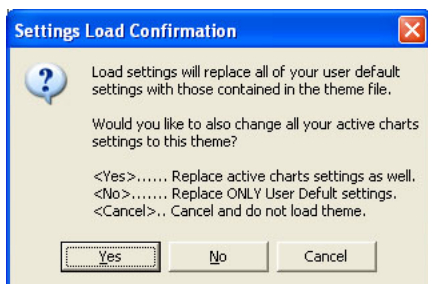
Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.

Themes

Track 'n Trade 5.0 gives you the ability to save your personal settings as a theme. With different themes, you can apply many pre-set characteristics quickly to a chart.



When you have your settings how you like them, select **Save Themes** from your View menu. The Save settings to file window will appear. Choose where you would like your themes to be saved, name your theme, and click on “Save.”



Select **Load Themes** from your View menu to apply a saved theme. The Settings Load Confirmation window will appear. Click Yes if you want to replace all user default settings with your theme and have your theme apply to all active charts. Click No if you only want to replace your user default settings with your theme, but don't want your theme to apply to your active charts. Clicking Cancel will exit the window and no theme will be applied.

The Open window will appear if you select Yes or No. Find your saved theme and click “Open.”

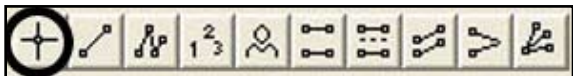
Charting Tools

Analyzing Charts with Charting Tools

Introduction

Track 'n Trade 5.0 has a complete set of charting tools that enable the futures trader to apply concepts from technical analysis to their charting. Take a look at some of the technical analysis formations and trends in this chapter and see how to apply these concepts in trading with Track 'n Trade 5.0 charting tools.

Crosshair Tool



The first tool in the Charting toolbar is the Crosshair tool. This tool is helpful when lining up your technical indicators and recurring price patterns. Click the Crosshair button and position the crosshair on your chart and click your mouse. The crosshair draws a line vertically and horizontally on the chart. To help place the crosshair line on a specific value, the cursor price is displayed on the vertical line of the crosshair.

Moving a Crosshair

To select the drawing, click on the center point of the crosshair and drag to the new location. Release your mouse button to place. The tool is selected when a box appears at the center point.

Deleting a Crosshair Drawing

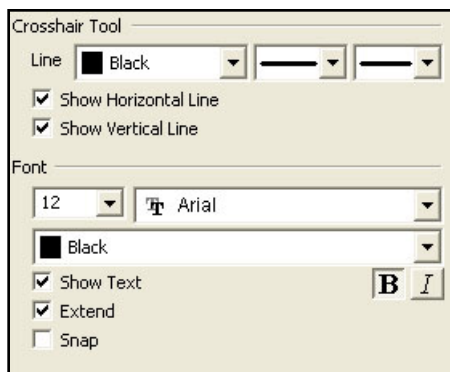
There are two ways to delete the Crosshair tool. If your crosshair is selected (you've clicked on it and the box appears at the center point), you can press the Del (Delete) key on your keyboard. You can also place your mouse cursor over the crosshair and right-click. In the drop-down menu, select "Delete."

If you only want to delete the horizontal or vertical line of the crosshair, select the crosshair by clicking on it and view the preferences in the control panel. Select or deselect "Show Horizontal (Vertical) Line." A check will appear in front of the item when it is selected.

Preferences

Select the crosshair by clicking on it. The properties will appear in the preferences section of your control panel. Or, right-click on the drawing and select properties from the dropdown menu.

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.

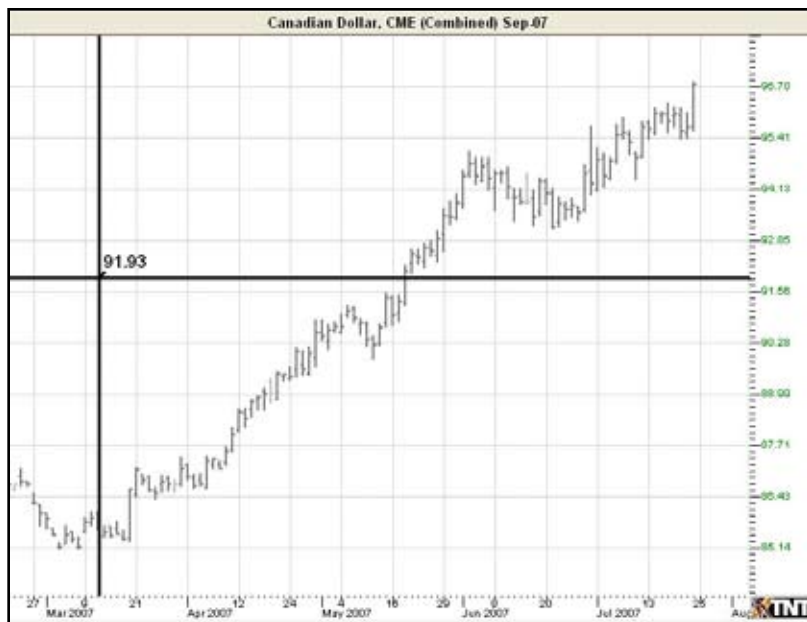


Crosshair Tool: You can choose the color, line style, and line thickness of your crosshair. Deselect **Show Horizontal Line** or **Show Vertical Line** to hide your lines.

Font: Select the font, size, and color of the text. You can also choose to bold or italicize your text. Select the checkbox next to **Show Text** to hide or show your text on the chart.

Select **Extend** if you would like your line to extend into the Indicator window. Select **Snap** if you want your crosshair to snap to price bars when moved.

Example of the Crosshair Tool

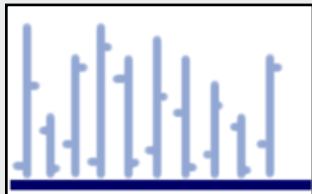


The remaining technical tools are used to identify technical analysis formations and trends. Take a look at the different patterns available then read about how to use each of the technical tools and apply the technical concepts learned.

Support and Resistance - Technical Analysis

Markets have a tendency to move in troughs and peaks or, more appropriately, "Support and Resistance."

Support



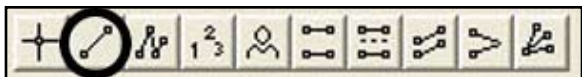
These troughs are called support, indicating that support is level. This shows that buying interest is strong enough to overcome selling pressure. A decrease in price is reversed and prices rise once again. Typically, a support level is identified by a previous set of lows.

Resistance



Resistance is essentially the opposite of support. Resistance is defined as a horizontal ceiling where the pressure to sell is greater than the pressure to buy. An increase in price is reversed and prices revert downward. Typically, support can be located on a chart by a previous set of highs.

Line Tool



To draw a support or resistance line, also referred to as a trend, use the Line tool. Select the Line tool from your Charting toolbar. Click on your chart where you want the line to begin. Hold down the mouse button and move to the position you want your line to end. Release mouse button to place.

Resizing the Line

Select the line drawing by clicking on it. The line is selected when boxes appear at the ends of the line. Click on one of the boxes and drag it to the desired length. Release the mouse button to place the end point of the line.

Moving the Line

Select the line drawing by clicking on it. Click on the line, not an end box, and drag the line to the new location. Release the mouse button to place.

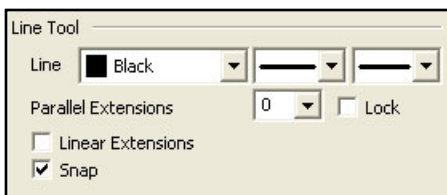
Deleting the Line

Select the line drawing by clicking on it. Press the Del (Delete) key on your keyboard. You can also right-click the line drawing and select “Delete” from the dropdown menu.

Preferences

Select the line drawing by clicking on it. The properties will appear in the preferences section of your control panel. Or, right-click on the drawing and select properties from the dropdown menu.

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.



Line Tool: You can choose the color, line style, and line thickness of your line.

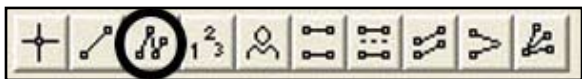
Parallel Extensions: Select from the dropdown menu how many lines you would like to add. Deselect **Lock** if you want to be able to move them independently.

Select **Linear Extensions** to extend your line to the edge of your chart window. Select **Snap** if you want your crosshair to snap to price bars when moved.

Example of the Line Tool



Multi-Line Tool



Some contracts will have a continuous line, or trend, of alternating support and resistance. To illustrate these multi-lines, select the Multi-Line tool from your Charting toolbar. Click on the chart where you want your line to start. Move your mouse to the next point on your multi-line and click to place. Repeat this until the last point. When placing the last point on the multi-line, right-click to finish.

Resizing the Multi-Line

Select the multi-line drawing by clicking on it. You will know the multi-line is selected when boxes appear at the ends of the multi-line. Click on a box and drag it to your desired length. Release the mouse button to place.

Moving the Multi-Line

Select the multi-line drawing by clicking on it. Click on the multi-line, not a box, and drag it to the new location. Release mouse button to place.

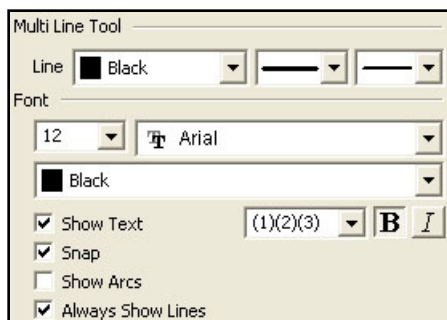
Deleting the Multi-Line

Select the multi-line drawing by clicking on it. Press the Del (Delete) key on your keyboard. You can also right-click the multi-line drawing and select “Delete” from the dropdown menu.

Preferences

Select the line drawing by clicking on it. The properties will appear in the preferences section of your control panel. Or, right-click on the drawing and select properties from the dropdown menu.

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.

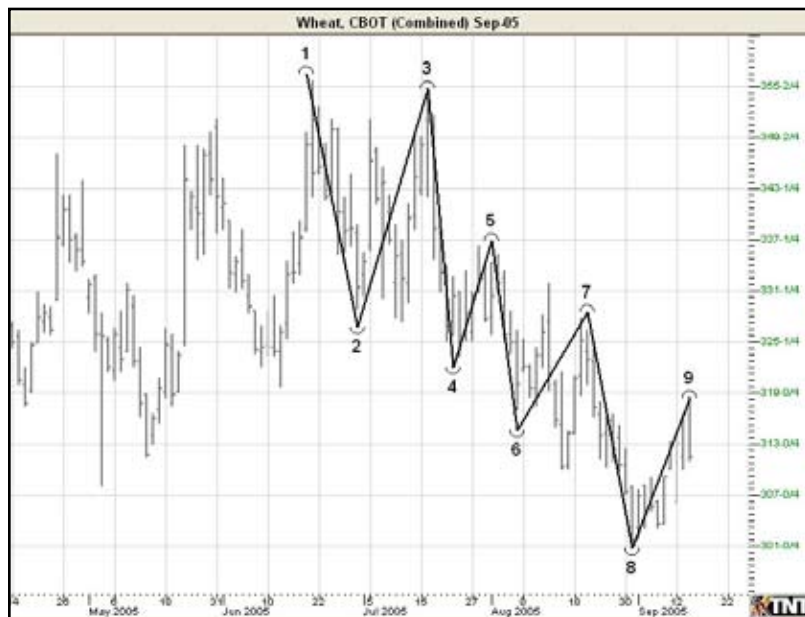


Multi Line Tool: You can choose the color, line style, and line thickness of your lines.

Font: Select the font, size, and color of the text. You can also choose to see numbers or letters. Select **Show Text** to hide or show your text on the chart.

Select **Snap** to have your lines snap to price bars when moved. Select if you would like to **Show Arcs** or **Always Show Lines** on your drawing.

Example of Multi-Line Tool



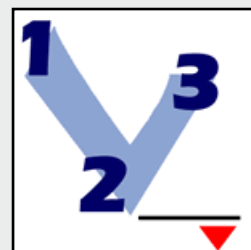
123 Formations - Technical Analysis

The 123 formation anticipates a change in trend. There are both top and bottom formations.

123 Top Formation

The 123 top formation anticipates a change in trend, from up to down, on a break below the number two point. This formation is easily identified because the number 1 point is the annual price high for the contract.

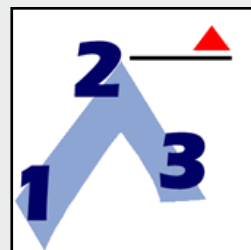
To trade a 123 top formation, place a **sell** order on a break down past the 2 point. Then place a stop loss order just above the 1 point (an industry standard) or just above the 3 point (a more conservative stop loss placement).



123 Bottom Formation

The 123 bottom formation anticipates a change in trend from down to up on a break above the number 2 point. A 123 bottom formation is easily identified because the number 1 point is the annual price low.

To trade a 123 bottom formation, place a **buy** order just above the 2 point. Then place a stop loss order just below the 1 point (an industry standard) or just below the 3 point (a more conservative placement).



123 Tool



Use the 123 tool to chart both top and bottom formations. To draw a 123 formation, select the 123 tool from your Charting toolbar. Position the mouse pointer over the spot you would like to place the 1 point and click to place. Move to the 2 point and click to place. Move to the 3 point and click to place.

Resizing the 123 Drawing

Select the 123 drawing by clicking on it. You will know the 123 drawing is selected when boxes appear on the corners. Click on a box and drag it to your desired length. Release the mouse button to place.

Moving the 123 Drawing

Select the 123 drawing by clicking on it. The drawing is selected when boxes appear at the 1, 2, and 3 end points. Drag to the new location and release the mouse button to place.

Deleting the 123 Drawing

Select the 123 drawing by clicking on it. Press the Del (Delete) key on your keyboard. You can also right-click the 123 drawing and select “Delete” from the drop-down menu.

Preferences

Select the 123 drawing by clicking on it. The properties will show up in the preferences section of your control panel. Or, right-click on the drawing and select properties from the dropdown menu.

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.

123 / ABC Tool

Line Black — —

Font

12 ⌵ Arial ⌵

Black ⌵

☒ Show Text 123 ⌵ **B** *I*

☒ Snap

☒ Show Arcs

☐ Always Show Lines

☐ 1 - 2 / A - B

☐ Fibonacci

☒ User Defined: (20.3,40,50,...)

⌵

Labels ⌵ ☐ Reverse

☐ 2 - 3 / B - C

☐ 123 / ABC Retracement

☐ Fibonacci

☒ User Defined: (20.3,40,50,...)

⌵

Labels ⌵ ☐ Reverse

☐ 3 - 4 / C - D

☐ Fibonacci

☒ User Defined: (20.3,40,50,...)

⌵

Labels ⌵ ☐ Reverse

☐ Projections

☐ Fibonacci

☒ User Defined: (20.3,40,50,...)

⌵

123 / ABC Tool: You can choose the color, line style, and line thickness of your lines.

Font: Select the font, size, and color of the text. You can also choose to see numbers or letters. Select **Show Text** to hide or show your text on the chart.

Select **Snap** to have your lines snap to price bars when moved. Select if you would like to **Show Arcs** or **Always Show Lines** on your drawing.

1-2/A-B, 2-3/B-C: Select if you would like to see **Fibonacci** Retracements on either line or type in your own values in **User Defined**. Choose from the **Labels** dropdown menu to view the marks as price, percent, or both. Select **Reverse** to change the direction of your values.

3-4/C-D: Select if you would like to see a third prediction line after point C. You can view **Fibonacci** Retracements on this line or type in your own values in **User Defined**. Choose from the **Labels** dropdown menu to view the marks as price, percent, or both. Select **Reverse** to change the direction of your values.

Select **Projections** to view a projected line extended from the C-D line. You can view **Fibonacci** Retracements on this line or type in your own values in **User Defined**.

Example of the 123 Top and Bottom



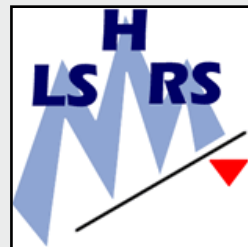
Head & Shoulders Formations - Technical Analysis

This formation can appear anywhere in the chart and is made up of the Head, Left Shoulder, and Right Shoulder. There are both top and bottom formations.

Head & Shoulders Top Formation

In this formation, the middle peak, the Head (H), is higher than either shoulder (LS, RS). This formation anticipates a drop in price below the Neckline (shown by the red arrow).

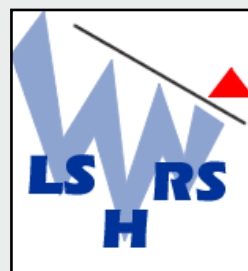
To trade a Head & Shoulders top formation, place a sell order on the break of the Neckline. Your stop loss order should then be placed just above the Head. The stop loss order can also be placed above the Right Shoulder as a more conservative point.



Head & Shoulders Bottom Formation

This formation is an inverted version of the Head & Shoulders top formation. A Head & Shoulders bottom anticipates a rise in price above the Neckline.

To trade a Head & Shoulders bottom formation, place a buy order on the break up from the Neckline. Then place a stop loss order just below the Head. The stop loss order can also be placed below the Right Shoulder as a more conservative point.



Head & Shoulders Tool



To identify a H&S top or bottom formation, use the Head & Shoulder tool. Select the Head & Shoulders tool from your Charting toolbar. Position the mouse pointer where you would like to place the Left Shoulder (LS) point and click to place. Move to the valley point between the LS and the Head (H) and click to place. Move to the H point and click to place. Move to the valley point between the H and Right Shoulder (RS) and click to place. Move to the RS point and click to place.

Resizing the Head & Shoulders Drawing

Select the H&S drawing by clicking on it. You will know the drawing is selected when boxes appear on the corners. Click on a box and drag it to your desired length. Release the mouse button to place.

Moving the Head & Shoulders Drawing

Select the H&S drawing by clicking on it. The tool is selected when boxes appear at the LS, H, and RS end points. Drag to the new location and release the mouse button to place.

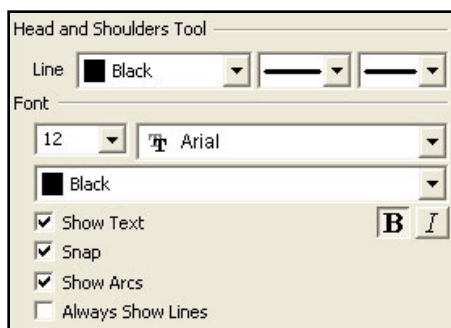
Deleting the Head & Shoulders Drawing

Select the H&S drawing by clicking on it. Press the Del (Delete) key on your keyboard. You can also right-click the drawing and select “Delete” from the dropdown menu.

Preferences

Select the H&S drawing by clicking on it. The properties will appear in the preferences section of your control panel. Or, right-click on the drawing and select properties from the dropdown menu.

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.

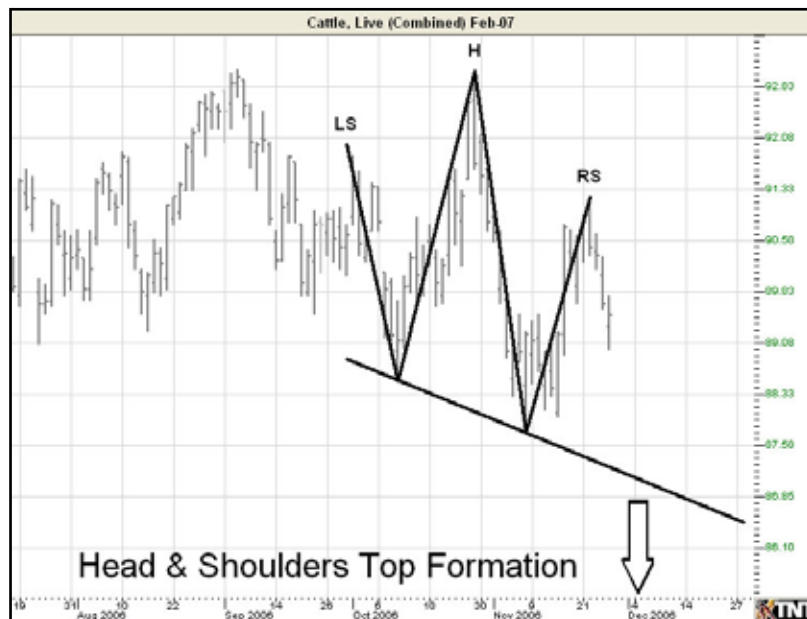


Head & Shoulders Tool: You can choose the color, line style, and line thickness of your lines.

Font: Select the font, size, and color of the text. Select **Show Text** to hide or show your text on the chart.

Select **Snap** to have your lines snap to price bars when moved. Select if you would like to **Show Arcs** or **Always Show Lines** on your drawing.

Example of Head & Shoulders Top and Bottom



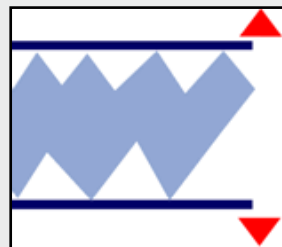
Channels - Technical Analysis

A trend channel consists of a section of price bars that are between parallel support and resistance lines. There are three types of channels: the Narrow Sideways Channel, the Inclining Channel, and the Declining Channel.

Narrow Sideways Channel

A Narrow Sideways channel is a formation that features both resistance and support with a sideways movement. Support forms the low price bar, while resistance provides the price ceiling.

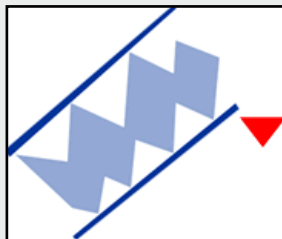
To trade a Narrow Sideways channel, place an order to **buy** on a break up and out of the channel, or **sell** on a break down and out of the channel.



Inclining Channel

The Inclining channel is a formation with parallel price barriers along both the price ceiling and floor. Unlike the Narrow Sideways channel, the Inclining channel has an increase in both the price ceiling and price floor. The breaking of the bottom trend line on this formation shows a change in trend from bullish to bearish.

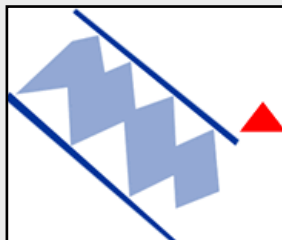
To trade an Inclining channel, place an order to **sell** on the break down and out of the channel.



Declining Channel

The Declining channel is the exact opposite of the Inclining channel formation. The Declining channel has a decrease in both the price ceiling and price floor. The breaking of the top trend line on this formation shows a change in trend from bearish to bullish.

To trade a Declining channel, place an order to **buy** on the break up and out of the channel.



Narrow Sideways Channel Tool



Illustrate a Narrow Sideways channel in a chart by selecting the Narrow Sideways Channel tool from your Charting toolbar. Position the mouse pointer where you would like to place the top-left point of the channel and click. Continue to hold down the mouse and drag it to the bottom-right point of your channel. Release the mouse button to place.

Resizing the Narrow Sideways Channel

Select the Narrow Sideways channel by clicking on it. You will know the channel is selected when boxes appear on the corners. Click on a box and drag it to your desired location. Release the mouse button to place.

Moving the Narrow Sideways Channel

Select the Narrow Sideways channel by clicking on it. Drag to the new location and release the mouse button to place.

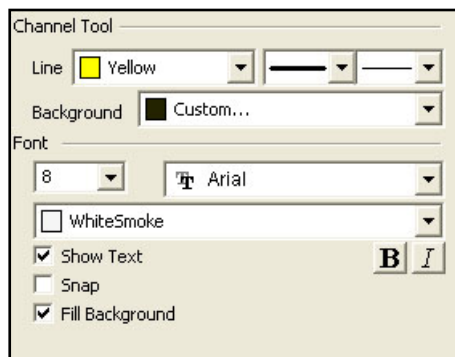
Deleting the Narrow Sideways Channel

Select the Narrow Sideways channel by clicking on it. Press the Del (Delete) key on your keyboard. You can also right-click the channel and select “Delete” from the dropdown menu.

Preferences

Select the channel by clicking on it. The properties will appear in the preferences section of your control panel. Or, right-click on the drawing and select properties from the dropdown menu.

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.

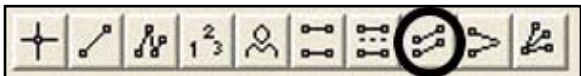


Channel Tool: You can choose the color, line style, and line thickness of your lines, as well as the background color. (To make the background transparent, deselect **Fill Background** at the bottom of your preferences.)

Font: Select the font, size, and color of the text. Select **Show Text** to hide or show your text on the chart.

Select **Snap** to have your lines snap to price bars when moved.

Inclining/Declining Channel Tool



Identify an Inclining or Declining Channel by selecting the Inclining/Declining Channel tool from your Charting toolbar. Position the mouse pointer where you would like to place the top-left point of the channel and click. Move to the bottom-left point and click again. Move to the bottom-right point and click again. Position the mouse pointer where you would like to place the top-right final point of your channel and click to place.

Resizing the Inclining/Declining Channel

Select the channel by clicking on it. You will know the channel is selected when boxes appear at the corners. Click on a box and drag it to your desired location. Release the mouse button to place.

Moving the Inclining/Declining Channel

Select the channel by clicking on it. Drag to the new location and release the mouse button to place.

Deleting the Inclining/Declining Channel

Select the channel by clicking on it. Press the Del (Delete) key on your keyboard. You can also right-click the channel and select “Delete” from the dropdown menu.

Preferences

Select the channel by clicking on it. The properties will appear in the preferences section of your control panel. Or, right-click on the drawing and select properties from the dropdown menu.

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.



Trend Channel Tool: You can choose the color, line style, and line thickness of your lines, as well as the background color. (To make the background transparent, deselect **Fill Background** at the bottom of your preferences.)

Select **Snap** to have your lines snap to price bars when moved.

Example of Inclining/Declining Channels



50% Retracements - Technical Analysis

Markets move in waves called retracements. These waves have up and down trends.

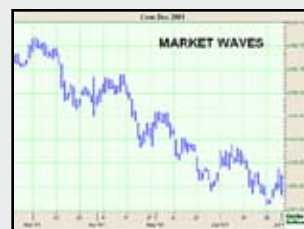
Up Trend (Bull Market)

In the diagram to the right, the market is in an overall uptrend; however, within the uptrend are small areas where the market falls back, or “retraces,” each time establishing a new higher high.



Down Trend (Bear Market)

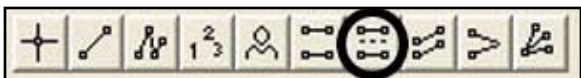
This chart shows how the market made lower highs and lower lows, while still maintaining the overall down trend. Each retracement was about 50% of the last move before they continued on in their original direction.



Markets have a tendency to retrace half of the last move in overall long-term trends.



N% Tool



You can measure a retracement by selecting the N% tool from your Charting toolbar. Position the mouse pointer where you would like to place the top-left point of the channel and click. Continue to hold down the mouse button and drag to the bottom-right point of the channel. Release mouse button to place. The default on this charting tool is 50%. (For more information on retracements, see Fibonacci Time Zone and Fan tools in the *Advanced Charting Tools* section.)

Resizing the N% Channel

Select the channel by clicking on it. You will know the channel is selected when boxes appear on the corners. Click on a box and drag it to your desired location. Release the mouse button to place.

Moving the N% Channel

Select the channel by clicking on it. Drag to the new location and release the mouse button to place.

Moving the % Line in the N% Channel

Select the channel by clicking on it. Notice the box in the center of the middle line. Click and drag the box to move the line. As you change the position of the percentage line, the percentage value to the left will change as well.

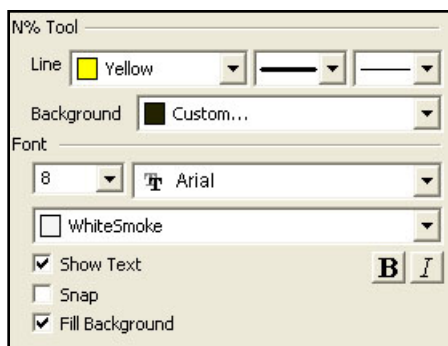
Deleting the N% Channel

Select the channel by clicking on it. Press the Del (Delete) key on your keyboard. You can also right-click the channel and select “Delete” from the dropdown menu.

Preferences

Select the channel by clicking on it. The properties will appear in the preferences section of your control panel. Or, right-click on the drawing and select properties from the dropdown menu.

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.



N% Tool: You can choose the color, line style, and line thickness of your lines, as well as the background color. (To make the background transparent, deselect **Fill Background** at the bottom of your preferences.)

Font: Select the font, size, and color of the text. Select **Show Text** to hide or show your text on the chart.

Select **Snap** to have your lines snap to price bars when moved.

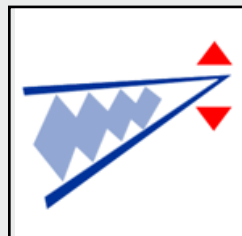
Wedges and Triangles - Technical Analysis

The wedge formation occurs when the slope of price bar highs and lows consolidate to a point. The triangle formation occurs when there is a pause in the current trend.

Inclining Wedge

The Inclining Wedge formation occurs when the slope of both lines is up with the lower line being steeper than the higher one.

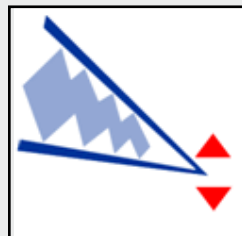
To trade the Inclining Wedge, place a **buy** on a break up and out of the wedge or a **sell** order on a break down and out of the wedge. Inclining Wedges with a prior downtrend are anticipated to break down and out, rather than up and out.



Declining Wedge

The Declining Wedge formation occurs when the slope of both lines is down, the top line being steeper than the lower one. This formation is opposite the Inclining Wedge.

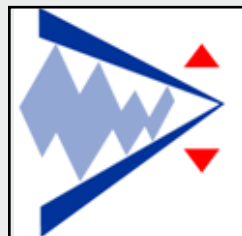
Trade the Declining Wedge the same as the Inclining Wedge. Declining Wedges with a prior uptrend are anticipated to break up and out, rather than down and out.



Symmetrical Triangle

A Symmetrical Triangle is likely to resume the previous trend after the pause forming the triangle. Notice the price bars form a perfect symmetrical triangle shape.

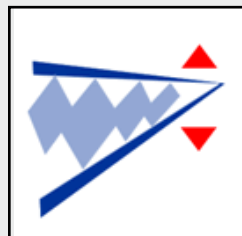
To trade a Symmetrical Triangle, place a **buy** order on a break up and out of the triangle or a **sell** order on a break down and out of the triangle.



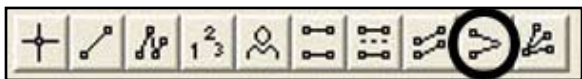
Non-Symmetrical Triangle

A Non-Symmetrical Triangle is exactly the same as the Symmetrical Triangle, except lacking symmetry. The formation resumes the previous trend when a break occurs.

Trade a Non-Symmetrical Triangle just as you would a Symmetrical Triangle.



Wedge and Triangle Tool



Identify any type of wedge or triangle by selecting the Wedge tool from your Charting toolbar. Position the mouse pointer where you would like to place the top point of the triangle and click. Move to the bottom point of the triangle and click again. Position the mouse pointer where you would like to place the final point of the triangle and click to place.

Resizing the Wedge/Triangle

Select the drawing by clicking on it. You will know the drawing is selected when boxes appear at the corners. Click on a box and drag it to your desired location. Release the mouse button to place.

Moving the Wedge/Triangle

Select the drawing by clicking on it. Drag to the new location and release the mouse button to place.

Deleting the Wedge/Triangle

Select the drawing by clicking on it. Press the Del (Delete) key on your keyboard. You can also right-click the drawing and select “Delete” from the dropdown menu.

Preferences

Select the drawing by clicking on it. The properties will appear in the preferences section of your control panel. Or, right-click on the drawing and select properties from the dropdown menu.

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.



Wedge Tool: You can choose the color, line style, and line thickness of your lines, as well as the background color. (To make the background transparent, deselect **Fill Background** at the bottom of your preferences.)

Select **Snap** to have your lines snap to price bars when moved.

Example of an Inclining and Declining Wedge



Example of a Symmetrical and Non-Symmetrical Triangle



Trend Fan - Technical Analysis

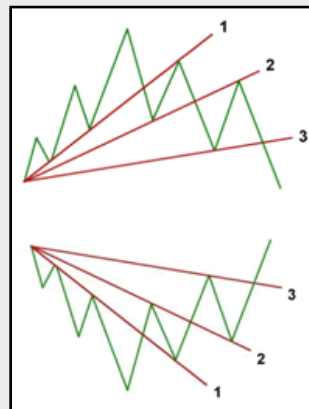
Trend Fans are an extension of the regular trend line. They accent simple trend line trading concepts by extending the single trend line to multiple fan lines that give a better look at a trend, its retracements, and market reversals.

Trend Fan

As a trend moves up in scale, a chartist will draw a line across price bar lows or, when a market is moving down, across the price bar highs.

As the market continues to make its retracement, we can draw another trend line across the next level of support or resistance. The line is support if the market is moving up and resistance if it is moving down.

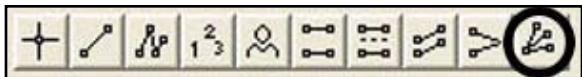
The last move of the trend was resistance for the first trend line, and is now support for the second trend line. The third trend line shows that the market has made a solid retracement down past this third fan line.



When the market crosses the third fan line, it is considered to be confirmation of market retracement. A market that was once considered bullish is now bearish, or if bearish, would now be considered bullish. When the market's price bars cross above or below the third trend fan line, this is your signal and confirmation that the market has shifted from bullish to bearish, or bearish to bullish.

To trade a Trend Fan, place an order to enter the market on the break out past the third Trend Fan line.

Trend Fan Tool



Identify a trend fan within a chart by selecting the Trend Fan tool from your Charting toolbar. Position the mouse pointer where you would like to place the main point of your trend fan. Move the mouse pointer to the end of the first line and click. Add as many lines of your trend fan as you would like. To place the last trend, position the mouse pointer at the end of the last line and right-click to place.

Resizing the Trend Fan

Select the drawing by clicking on it. You will know the drawing is selected when boxes appear at the ends of the lines. Click on a box and drag it to your desired location. Release the mouse button to place.

Moving the Trend Fan

Select the drawing by clicking on it. Drag to the new location and release the mouse button to place.

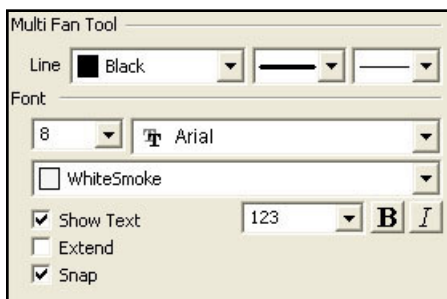
Deleting the Trend Fan

Select the drawing by clicking on it. Press the Del (Delete) key on your keyboard. You can also right-click the drawing and select “Delete” from the dropdown menu.

Preferences

Select the drawing by clicking on it. The properties will appear in the preferences section of your control panel. Or, right-click on the drawing and select properties from the dropdown menu.

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.

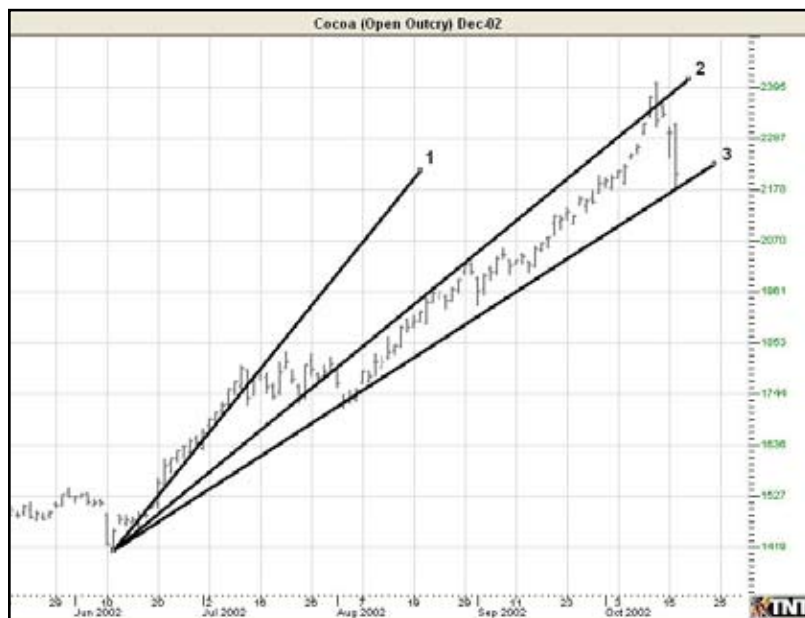


Multi Fan Tool: You can choose the color, line style, and line thickness of your lines.

Font: Select the font, size, and color of the text. Select **Show Text** to hide or show your text on the chart.

Select **Extend** if you would like your lines to extend to the edges of your chart window. Select **Snap** to have your lines snap to price bars when moved.

Example of a Trend Fan



Advanced Charting Tools

Fibonacci, Elliott, Gann, and More

3

Introduction

Gecko Software, Inc., has incorporated concepts and theories from leading technical and fundamental educators in the futures industry in Track 'n Trade 5.0 allowing you as a trader to apply their studies easily to your trading. In this section you will learn basics of their theories and how to apply them in Track 'n Trade 5.0 using the advanced charting tools provided you. For more detailed information on the different theories and concepts, see the educational products also offered by Gecko Software, Inc., at www.trackntrade.com.

Elliott Wave Theory

The Elliott Wave theory was developed by Ralph Nelson Elliott. He suggested that market behavior is based on waves rather than random timing. He believed that market prices rose and fell in a series of waves based on the same Golden Ratio or Golden Mean that Fibonacci proved.

Interpretation

The basic idea of the Elliott Wave theory is that a market rises in a series of five “waves” (as he called them), and a market declines in a series of three declines. Elliott's said the market rises on the first wave, declines on the second, begins to rise again on wave three, has a period of decline again on wave four, and finally completes the rise on wave five. The period of correction is referred to as a three-wave correction where the market declines for wave A, begins to rise for wave B, and falls again for wave C.

Elliott went on to further explain that a complete market cycle consisted of a 144 wave cycle, broken down into an 89 wave bull cycle, and a 55 wave bear cycle. This is based on his observation of Fibonacci's Golden Ratio. The series of numbers Fibonacci describes shows a relationship of 1:0.618. Elliott further showed that a market usually rises or falls based on this wave cycle. Each wave in the cycle has its own characteristics.

Five Wave Advance

- **One:** Normally very short and easy to miss.
- **Two:** A retracement wave. Gives back all or most of what the first one gained.
- **Three:** Usually very prominent. Follows a period of what appears as a consolidation, most people trade this wave.
- **Four:** Noted to be very intricate, yet still a consolidation. One of Elliott's main rules is that in a five-wave advance cycle, wave four can't overlap wave one.
- **Five:** Often very active. At some point declines and lead to the three wave corrective cycle.

Three Wave Decline

- **A:** Normally seen as a minor pullback of wave five of the advance cycle.
- **B:** Follows A of the downtrend and is often hard to spot. Should result in a third wave continuing down.
- **C:** Usually quite significant and many traders see this as a selling opportunity. The price bars form a perfect symmetrical triangle shape.

Resizing the Elliott Wave

Elliott Wave Tool

Line

Font

12 Arial

Black

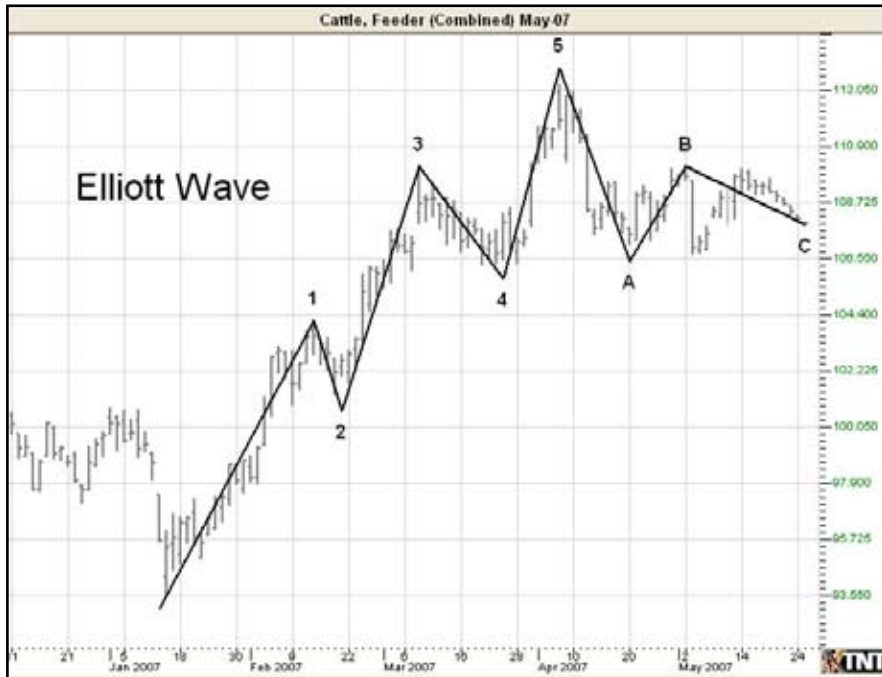
☒ Show Text (1)(2)(3) **B** *I*

☒ Snap

☒ Show Arcs

☒ Always Show Lines

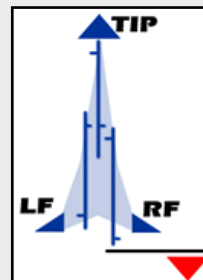
Example of an Elliott Wave



The Dart/Blip formation occurs when there is a dramatic price change which is followed by an equally dramatic price change.

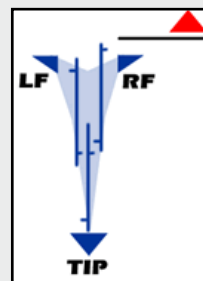
This formation is a sudden dramatic price increase followed by an equally dramatic drop in price. A dart formation can appear anywhere in a chart.

To trade a dart up, place a sell order on the break down of the Right Feather (RF) along with a stop loss order just above the Tip.



This formation is where a sudden dramatic price decrease occurs followed by an equally dramatic increase in price. A dart formation can appear anywhere in a chart

Place a buy order on the break up of the Right Feather, and place a stop loss order right below the Tip.



Trading on a Dart Formation is extremely risky.

To chart a Dart/Blip Up or Down formation, select the Dart/Blip tool from your Advanced Charting toolbar. Click your mouse on the Left Feather (LF). Move to the Tip of the dart and click your mouse again. Click on the Right Feather to finish your Dart.

Select the drawing by clicking on it. You will know the drawing is selected when boxes appear at the corners. Click on a box and drag it to your desired location. Release the mouse button to place.

Select the drawing by clicking on it. Drag to the new location and release the mouse button to place.

Deleting the Dart/Blip

Select the drawing by clicking on it. Press the Del (Delete) key on your keyboard. You can also right-click the drawing and select “Delete” from the dropdown menu.

Preferences

Select the drawing by clicking on it. The properties will appear in the preferences section of your control panel. Or, right-click on the drawing and select properties from the dropdown menu.

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.



Dart Tool: You can choose the color, line style, and line thickness of your lines.

Select **Snap** to have your lines snap to price bars when moved. Select if you would like to **Always Show Lines** on your drawing.

Example of a Dart Up and Down



Gann Fan Theory

W. D. Gann designed several techniques for studying price charts. One of these included the use of geometric angles in conjunction with time and price. Gann believed that specific geometric patterns and angles had unique characteristics that could be used to predict price action.

Gann's techniques require that charts be drawn with equal time and price intervals, so that a rise/run of one price unit for each time unit (called a 1 x 1 trend or angle) will equal a 45 degree angle anywhere on the chart. Gann believed that the ideal balance between time and price exists when prices rise or fall at a 45 degree angle relative to the time axis.

Interpretation

A Gann Fan is used to define a market direction or a new trend. For example, a bull market exists if prices are maintaining strength between the 1x2 lower line and 1x2 higher line. A bear market would be the exact opposite of the previous scenario. The Gann Fan is made up of nine angles based on this concept. These trend lines are used to indicate support and resistance levels. When one line is broken (by the entire days price range) prices should move to the next line. The drawing of these lines should start from either a market top or bottom.

It is important to note that this theory is based on a squared 45 degree angle on the chart. Obviously, a 45 degree angle drawn on a chart is no longer 45 degrees when the scale is changed without a change to the opposite scale as well. To “square” the Gann Fan to the current chart’s scaled settings, hold down the CTRL key on your keyboard while clicking and rescaling with the mouse pointer. Some Gann experts have reported that to get a truly “squared” chart, one must set the scaling to 8 price bars per inch for the width and 4 price bars per inch for the height.

Gann Fan Tool



You can apply this theory to your charts by selecting the Gann Fan tool from your Advanced Charting toolbar. Click where you want the Fan to start and continue to hold down the mouse button until reaching the top-right position of the fan. Release the mouse button to place.

Resizing the Gann Fan

Select the drawing by clicking on it. You will know the drawing is selected when boxes appear at the corners. Click on a box and drag it to your desired location. Release the mouse button to place.

Moving the Gann Fan

Select the drawing by clicking on it. Drag to the new location and release the mouse button to place.

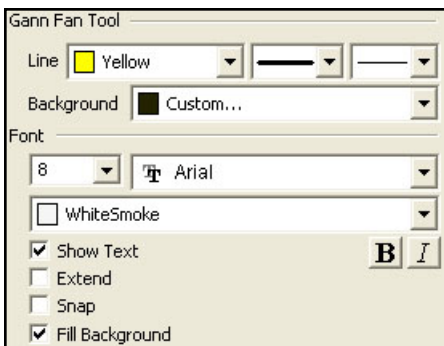
Deleting the Gann Fan

Select the drawing by clicking on it. Press the Del (Delete) key on your keyboard. You can also right-click the drawing and select “Delete” from the dropdown menu.

Preferences

Select the drawing by clicking on it. The properties will appear in the preferences section of your control panel. Or, right-click on the drawing and select properties from the dropdown menu.

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.

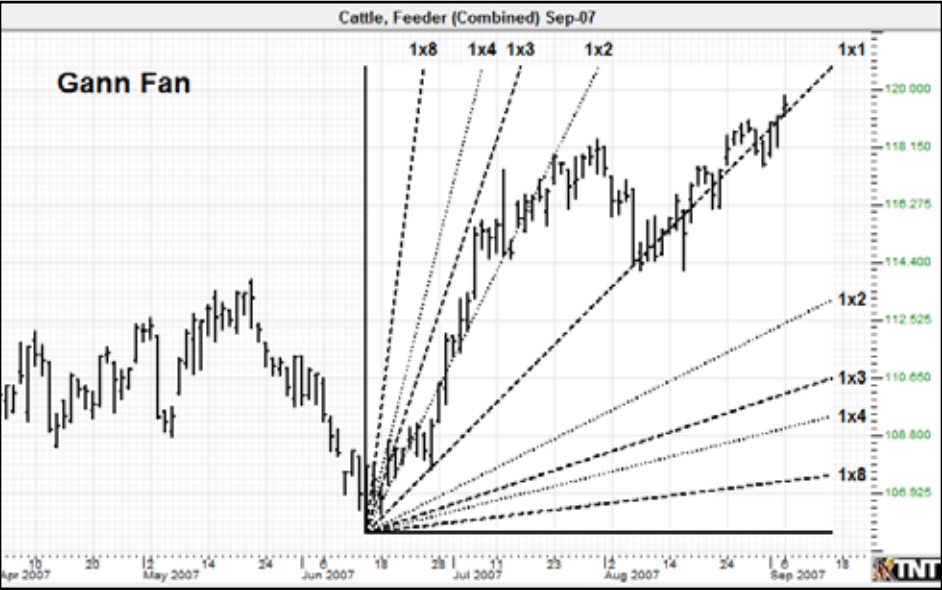


Gann Fan Tool: You can choose the color, line style, and line thickness of your lines. Select what color you want the background to be. (To make the background transparent, deselect **Fill Background** at the bottom of your preferences.)

Font: Select the font, size, and color of the text. Select **Show Text** to hide or show your text on the chart.

Select **Extend** if you would like your lines to extend to the edges of your chart window. Select **Snap** to have your lines snap to price bars when moved.

Example of the Gann Fan



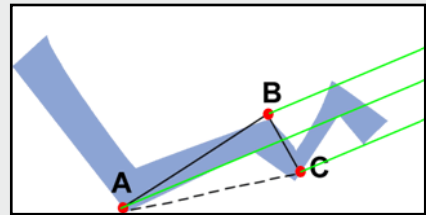
Andrews Pitchfork Theory

Dr. Alan Andrews developed a channel technique to show areas of support and resistance from a baseline. This use of a median line is the key to using the Andrews Pitchfork. Buying near lows and selling near highs that are identified by the “tines” of the pitchfork. The basic premise is to trade the channel from one level of support or resistance to the next.

Interpretation

The first element to draw the Andrews Pitchfork is the centerline. The middle tine, or median line, begins at the most recent contract low or high. To plot the direction of this point we must attain the other two points. The top tine is determined by looking at the highest move made from the origin of the contract low or high. The next point is found by looking at the retracement of that move. For example, a contract begins at point A, rallies to point B, and sells off from point B to point C. A line is drawn from point B to point C, and the line originating at point A splits those two lines equally.

This pitchfork shows continuing points of support and resistance. The general use of this tool is to **sell** when the market rises to line B, take profits once prices reach line A, and **buy** when prices dip to line C. This series of movements within the pitchfork affords traders the opportunity to trade a channel system within a trending market.



Andrews Pitchfork Tool



You can apply this theory to your charts by selecting the Andrews Pitchfork tool from your Advanced Charting toolbar. Click where you want the handle of the pitchfork to be (at the end of the previous trend). Your next two clicks will form the base of the fork, or the tops of the next two trends. You can elongate the pitchfork to the length desired. Click to place.

Resizing the Andrews Pitchfork

Select the drawing by clicking on it. You will know the drawing is selected when boxes appear at the corners. Click on a box and drag it to your desired location. Release mouse button to place.

Moving the Andrews Pitchfork

Select the drawing by clicking on it. Drag to the new location and release the mouse button to place.

Deleting the Andrews Pitchfork

Select the drawing by clicking on it. Press the Del (Delete) key on your keyboard. You can also right-click the drawing and select “Delete” from the dropdown menu.

Drawing a Schiff

To draw schiff pitchfork (a pitchfork with the same base but with the median rooted at one of the square markers on your two dotted angle lines), you will use the schiff operation. First, you will want to specify in your Pitchfork preferences what color you would like the new pitchfork to be. If you don’t specify, the schiff will be the same color as your original pitchfork.

Right click on one of the square markers on the two dotted lines. Select “Add Schiff Median” from the dropdown menu. The schiff will appear, and you can resize as you would like.

Preferences

Select the drawing by clicking on it. The properties will appear in the preferences section of your control panel. Or, right-click on the drawing and select properties from the dropdown menu.

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.

Pitchfork Tool: You can choose the color, line style, and line thickness of your lines.

Extensions: Select the boxes next to the extensions you want to add to your pitchfork drawing. The odd numbers are placed below the main line, and the even numbers are placed above.

Andrews Pitchfork Tool

Line Black — —

Fixed Width Extensions

☐ 1 ☐ 5
☐ 2 ☐ 6
☐ 3 ☐ 7
☐ 4 ☐ 8

Sliding Extensions

Line Custom... — —

☐ Extension One
☐ Extension Two

☐ Distance Markers

☐ Fibonacci
☒ User Defined: (20,3,40,50,...)

Schiff Color Black

Font

8 Arial

☐ WhiteSmoke

☐ Show Text

☒ Snap

B **I**

Sliding Extensions: Select to have one or two sliding extensions. Click on the extension on your chart and drag it to where you want it. It will stay parallel to all other extensions. You can also choose the color, line style, and line thickness of your sliding extensions.

Distance Markers: Select to show Fibonacci retracements, or define your own distance markers.

Schiff Color: Select what color you would like your Schiff before drawing it.

Font: Select the font, size, and color of the text. Select **Show Text** to hide or show your text on the chart.

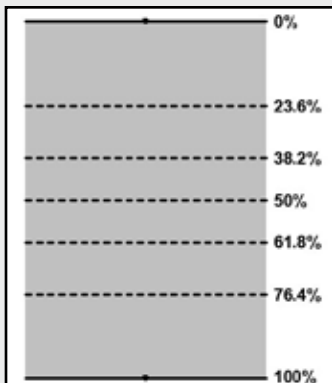
Select **Snap** to have your lines snap to price bars when moved.

Example of Andrews Pitchfork



Fibonacci Retracements

Fibonacci Retracement levels correspond with percentage retracements that occur in the ebb and flow of a market trend. According to the Elliott Wave Theory, market trends tend to occur in five distinct waves. (See the Elliott Wave section for more information.) Elliott asserted that these counter-trend waves will usually retrace against the trending waves by 38.2, 50, and 61.8 percent. These retracement percentages correspond to natural ratios discovered by the Greeks called the Golden Ratio and rediscovered by Fibonacci, a medieval Italian Mathematician.



Interpretation

Commodity prices will frequently consist of an initial wave, a second wave (often retracing 61.8% of the initial move), a third wave (usually the largest), another retracement, and finally a 5th wave (the last gap), which would exhaust the movement.

In Track 'n Trade 5.0, you have three tools that you can use to apply these concepts: Fibonacci Retracement, Fibonacci Time Zones, and Fibonacci Arc.

Fibonacci Ruler Tool



To measure the different retracement levels within a market, select the Fibonacci Ruler tool from your Advanced Charting toolbar. Click on the chart where you would like the ruler to begin. Hold the mouse button down and move to the lower right position of the rule. Release the mouse button to place.

Resizing the Fibonacci Ruler

Select the drawing by clicking on it. You will know the drawing is selected when boxes appear at the corners. Click on a box and drag it to your desired location. Release mouse button to place.

Moving the Fibonacci Ruler

Select the drawing by clicking on it. Drag to the new location and release the mouse button to place.

Deleting the Fibonacci Ruler

Select the drawing by clicking on it. Press the Del (Delete) key on your keyboard. You can also right-click the drawing and select “Delete” from the dropdown menu.

Preferences

Select the drawing by clicking on it. The properties will appear in the preferences section of your control panel. Or, right-click on the drawing and select properties from the dropdown menu.

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.

Fibonacci Ruler Tool: You can choose the color, line style, and line thickness of your lines, as well as the color of your background. (To make transparent, deselect **Fill Background** below show selections.)

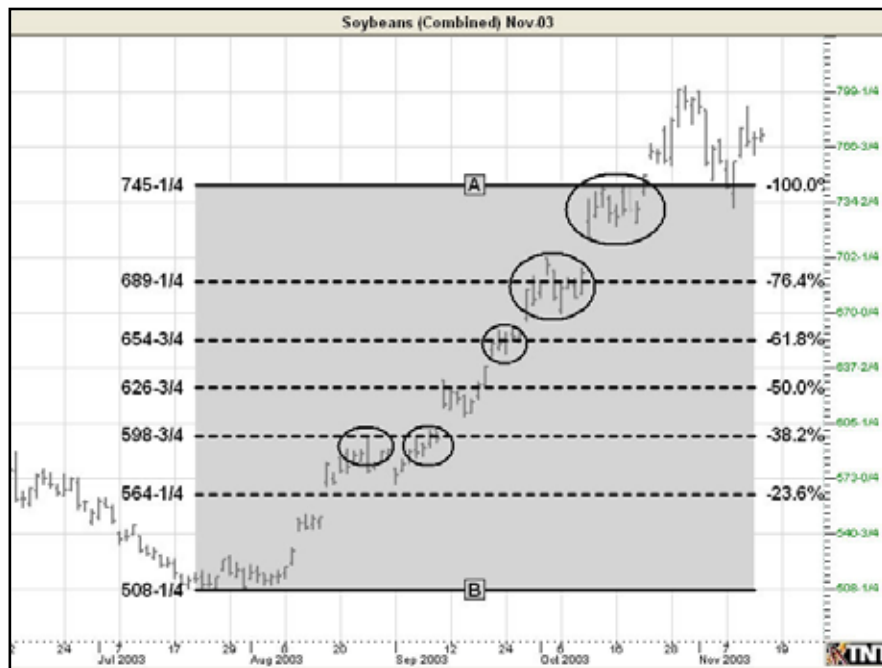
Select **User Defined** to enter your own values for the lines in your drawing. Select **Show Retracements** or **Show Projections** to view default extensions. You can also enter your own values in the User Defined fields.

Show: You can also choose to show **ABCD Predictions**, **Time Zones**, and **23.6% and 76.4%**.

Font: Select the font, size, and color of the text. Select **Show Text** to hide or show your text on the chart.

Select **Snap** to have your lines snap to price bars when moved.

Example of a Fibonacci Ruler



Fibonacci Arc Tool



To measure the different retracement levels within a market, select the Fibonacci Arc tool from your Advanced Charting toolbar. Move the mouse pointer to the point on the chart that will be the corner of your arc. Hold the mouse button and drag to your end point. Release the mouse button to place.

Resizing the Fibonacci Arc

Select the drawing by clicking on it. You will know the drawing is selected when boxes appear at the corners. Click on a box and drag it to your desired location. Release the mouse button to place.

Moving the Fibonacci Arc

Select the drawing by clicking on it. Drag to the new location and release the mouse button to place.

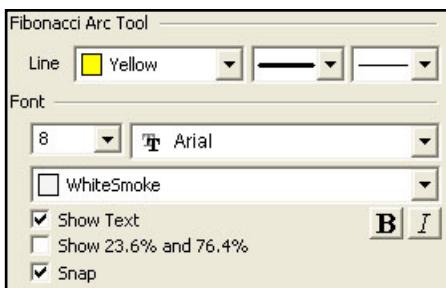
Deleting the Fibonacci Arc

Select the drawing by clicking on it. Press the Del (Delete) key on your keyboard. You can also right-click the drawing and select “Delete” from the dropdown menu.

Preferences

Select the drawing by clicking on it. The properties will appear in the preferences section of your control panel. Or, right-click on the drawing and select properties from the dropdown menu.

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.

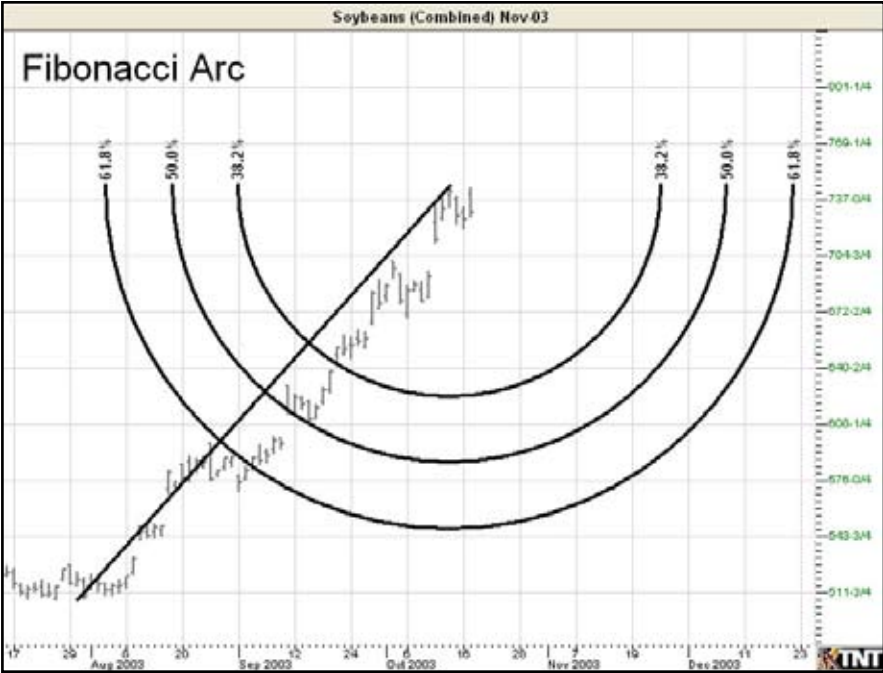


Fibonacci Arc Tool: You can choose the color, line style, and line thickness of your lines.

Font: Select the font, size, and color of the text. Select **Show Text** to hide or show your text on the chart.

Select **Show 23.6% and 76.4%** to view these two additional arc lines. Select **Snap** to have your lines snap to price bars when moved.

Example of a Fibonacci Arc



Fibonacci Time Zones Tool



The Fibonacci Time Zone uses Fibonacci numbers rather than the percentages used in the Ruler and Arc tools. Select the Fibonacci Time Zones from your Advanced Charting toolbar. Click where you want the upper left point. Hold the mouse button and drag to the bottom right position. Release the mouse button to place.

Resizing the Fibonacci Time Zones

Select the drawing by clicking on it. You will know the drawing is selected when boxes appear at the corners. Click on a box and drag it to your desired location. Release the mouse button to place.

Moving the Fibonacci Time Zones

Select the drawing by clicking on it. Drag to the new location and release the mouse button to place.

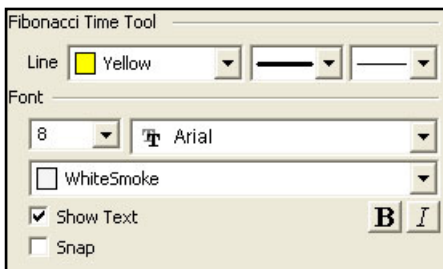
Deleting the Fibonacci Time Zones

Select the drawing by clicking on it. Press the Del (Delete) key on your keyboard. You can also right-click the drawing and select “Delete” from the dropdown menu.

Preferences

Select the drawing by clicking on it. The properties will appear in the preferences section of your control panel. Or, right-click on the drawing and select properties from the dropdown menu.

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.

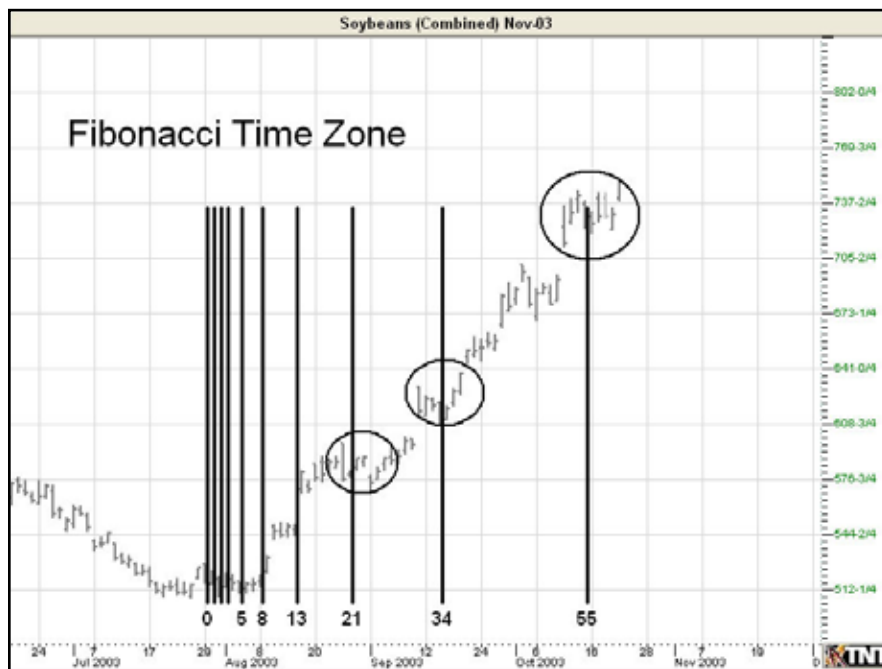


Fibonacci Time Tool: You can choose the color, line style, and line thickness of your lines.

Font: Select the font, size, and color of the text. Select **Show Text** to hide or show your text on the chart.

Select **Snap** to have your lines snap to price bars when moved.

Example of a Fibonacci Time Zone



Calculating Trading vs. Actual Days

In the futures industry trading, days are scheduled around holidays and weekends. When looking at a futures chart, it is difficult to determine how many actual days have passed while working a trade.

The number of trading days is also significant for traders using the number of trading days as a rule in conjunction with a formation. For example with the 123 Top or Bottom formation, many traders use the 10-20-50 rule. This rule defines a 123 if there are 10 trading days between the #1 and #2, and 10 days between the #2 and #3 points.

To calculate the actual, or trading, days on a chart, use the Day Offset Tool.

Days “Higher” and “Lower”

Another statistic used alongside formations and other theories is the day higher and lower calculation. This calculation determines how many days, in a defined set of price bars, were “higher” or “lower.” A day is considered a “Higher Day” if the close is higher than any previous close in the set of price bars selected. Conversely, a day is considered a “Lower Day” if the close is lower than any previous trading day in the defined set of price bars.

Day Offset Tool



The Day Offset tool enables you to measure the number of trading days versus actual days that are between two points on the chart. Also calculated on this tool is the number of days that the market closed high or lower in comparison with the previous day. Select the Day Offset tool from your Advanced Charting toolbar. Click where you would like to start and drag the horizontal line to where you would like it to end. Release the mouse button to place.

Resizing the Day Offset

Select the drawing by clicking on it. You will know the drawing is selected when boxes appear at the corners. Click on a box and drag it to your desired location. Release the mouse button to place.

Moving the Day Offset

Select the drawing by clicking on it. Drag to the new location and release the mouse button to place.

Deleting the Day Offset

Select the drawing by clicking on it. Press the Del (Delete) key on your keyboard. You can also right-click the drawing and select “Delete” from the dropdown menu.

Preferences

Select the drawing by clicking on it. The properties will appear in the preferences section of your control panel. Or, right-click on the drawing and select properties from the dropdown menu.

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.



Day Offset Tool: You can choose the color, line style, and line thickness of your line.

Font: Select the font, size, and color of the text. Select **Show Text** to hide or show your text on the chart.

Select **Snap** to have your lines snap to price bars when moved.

Example of the Day Offset Tool



Rounded Top & Bottom Formations

The Rounded Top & Bottom formation is a very gradual change in trend.



Rounded Top

The Rounded Top formation consists of a gradual change in trend from up to down.



Rounded Bottom

The Rounded Bottom formation consists of a gradual change in trend from down to up. This formation is the exact opposite of a Rounded Top Formation.



Double Top

This formation includes two distinct “tops” and anticipates a change in trend from up to down.



Double Bottom

This formation includes two distinct “bottoms” and anticipates a change in trend from down to up. This formation is the exact opposite of a Double Top.



Triple Top

This formation includes three distinct “tops” and anticipates a change in trend from up to down.



Triple Bottom

This formation includes three distinct “bottoms” and anticipates a change in trend from down to up. This formation is the exact opposite of a Triple Top.

Arc Tool



To illustrate a Rounded top or bottom formation on your futures chart, select the Arc tool in your Advanced Charting toolbar. Move the mouse pointer to the point on the chart that will be the corner of your arc. Hold the mouse button and drag to your end point. Release the mouse button to place.

Resizing the Arc

Select the drawing by clicking on it. You will know the drawing is selected when boxes appear at the corners. Click on a box and drag it to your desired location. Release the mouse button to place.

Moving the Arc

Select the drawing by clicking on it. Drag to the new location and release the mouse button to place.

Deleting the Arc

Select the drawing by clicking on it. Press the Del (Delete) key on your keyboard. You can also right-click the drawing and select “Delete” from the dropdown menu.

Preferences

Select the drawing by clicking on it. The properties will appear in the preferences section of your control panel. Or, right-click on the drawing and select properties from the dropdown menu.

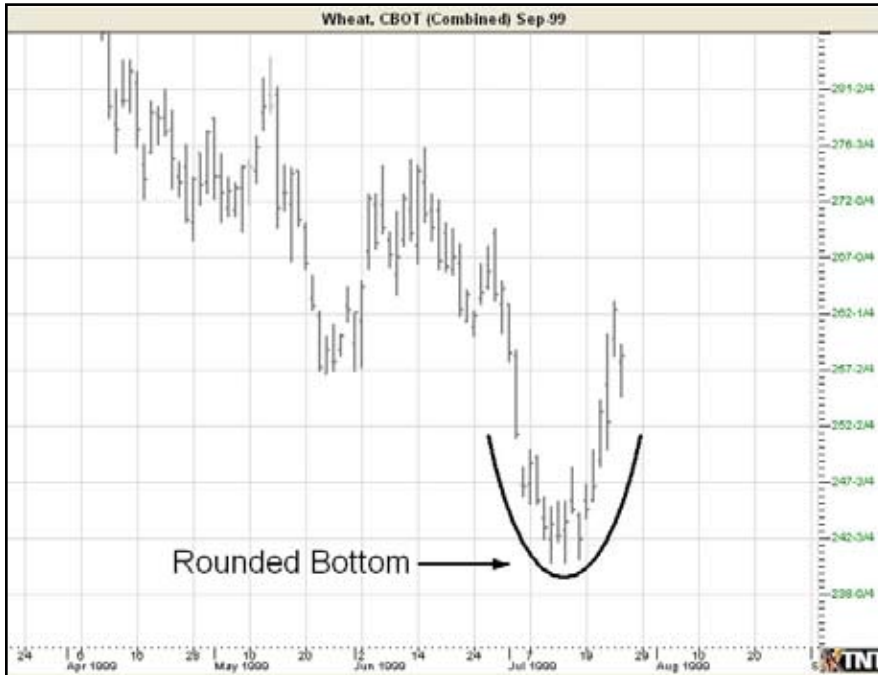
Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.



Arc Tool: You can choose the color, line style, and line thickness of your line.

Select **Snap** to have your lines snap to price bars when moved.

Example of the Arc Tool



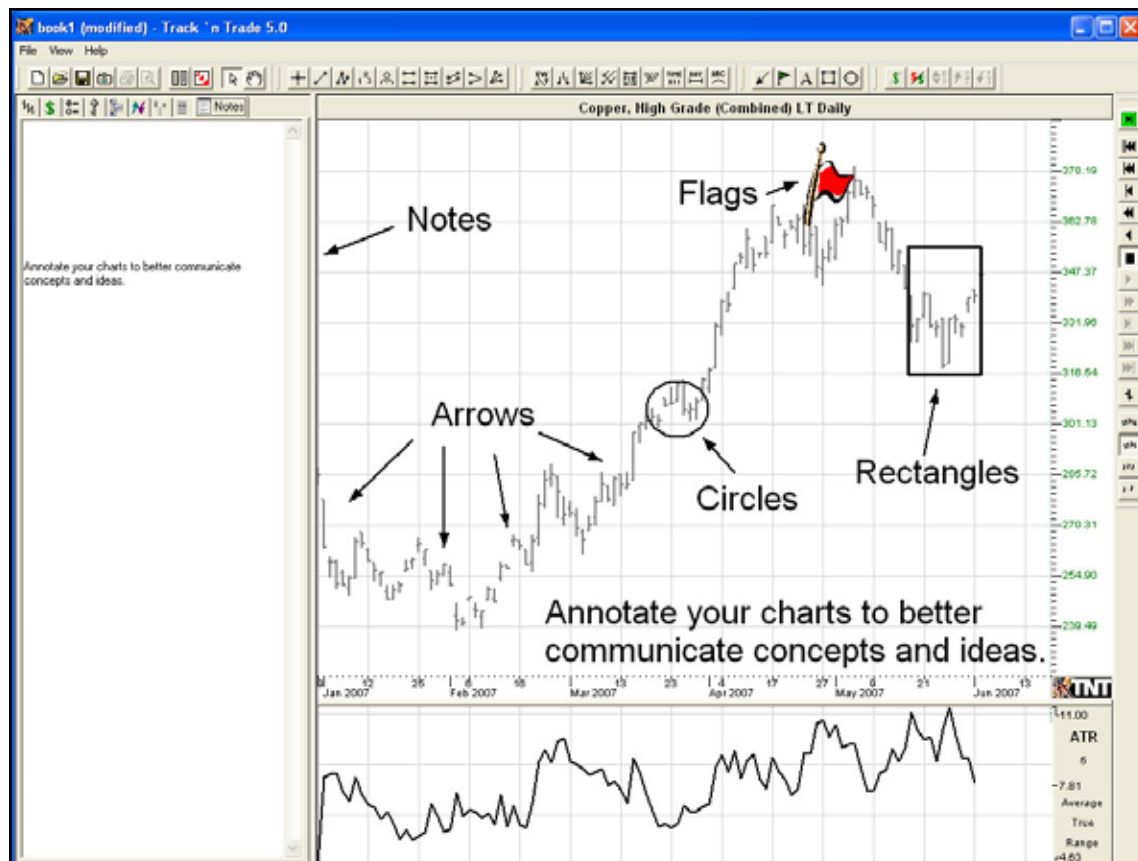
Notation Tools

Personalizing Your Charts with Notation Tools

Introduction

In Track 'n Trade 5.0, you have a variety of tools available to you to help personalize, notate and analyze your futures charts. Type text, make drawings, import flags, and keep notes on each chart. The Notation tools, as well as the Notes tab in the Control Panel, enable you to record and remember what you learn from others' tips and tricks. In this section you will learn how to use these features.

Example of Personalizing a Chart

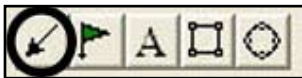


Notes Window



The Notes window is the last tab in the Control Panel, after the Data tab. The Notes tab is for you to keep notes on the charts that are saved within your chartbook. Each chart has a new Notes section available to keep notes for that particular chart.

Arrow Tool



The Arrow tool is located in the Notation toolbar. This tool enables you to draw arrows to help point out areas of interest on your chart. Position the mouse pointer where you want to place the point of the arrow and click the mouse button. Drag the mouse pointer to the location you would like to end the arrow. Release the mouse button to place.

Resizing the Arrow

Select the arrow drawing by clicking on it. The arrow is selected when boxes appear at the ends of the line. Click on one of the boxes and drag it to the desired length. Release the mouse button to place the end point of the line.

Moving the Arrow

Select the arrow drawing by clicking on it. Click on the arrow, not an end box, and drag it to the new location. Release the mouse button to place.

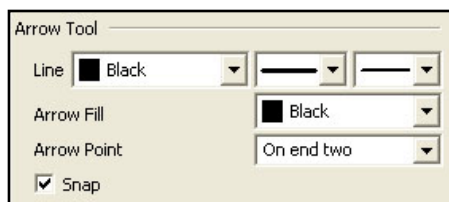
Deleting the Arrow

Select the arrow drawing by clicking on it. Press the Del (Delete) key on your keyboard. You can also right-click the drawing and select “Delete” from the dropdown menu.

Preferences

Select the drawing by clicking on it. The properties will appear in the preferences section of your control panel. Or, right-click on the drawing and select properties from the dropdown menu.

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.



Line: You can choose the color, line style, and line thickness of your arrow.

Arrow Fill: Select what color you want the point of your arrow to be. You can also choose which end you want the **Arrow Point** or if you want it on both ends.

Select **Snap** to have your line snap to price bars when moved.

Flag Tool



The Flag tool enables you to place a flag or a graphic on your chart. There is a basic set of flags available to choose from or you can import custom flags. Select the Flag tool from the Notation toolbar. Click on the chart where you would like the top of the Flag. The default flag will be placed in this location.

Resizing the Flag

Select the flag drawing by clicking on it. The flag is selected when boxes appear at the corners of the graphic. Click on one of the boxes and drag it to the desired length. Release the mouse button to place.



Moving the Flag

Select the flag drawing by clicking on it. Click on the flag, not an end box, and drag it to the new location. Release the mouse button to place.

Deleting the Flag

Select the flag drawing by clicking on it. Press the Del (Delete) key on your keyboard. You can also right-click the drawing and select “Delete” from the dropdown menu.

Preferences

Select the flag drawing by clicking on it. The properties will appear in the preferences section of your control panel. Or, right-click on the drawing and select properties from the dropdown menu.

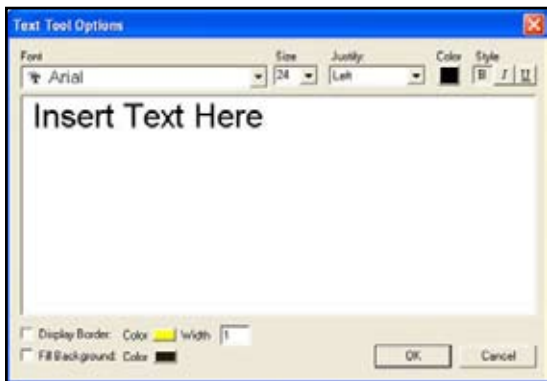
Restore Settings: TNT Default will change your settings back to the original software settings. **My Default** will change current settings to your personalized default settings. **Apply To All Charts** will apply your selected settings on all open charts. **Save As My Default** will save your current personal settings.

Flag Tool: You can select a different flag and change or import a custom flag (Importable formats: .wmf, .jpeg, and .gif).

Text Tool



The Text tool enables you to type text on the Chart. Select the Text toll in the Notation toolbar. Click on the chart where you would like to place the upper left corner of the text box. Drag the text box to the lower right corner of your desired text box. Release the mouse button to place.



Once the box is drawn, the Text Tool Options window will open. Enter the text, set the font, size, position, color, and style of the text. Select a border and background if you would like. Click “OK” when finished and text will be place on your chart.

Moving the Text

Select the text box by clicking on it. Continue holding down the mouse button to drag text to the new location. Release mouse button to place.

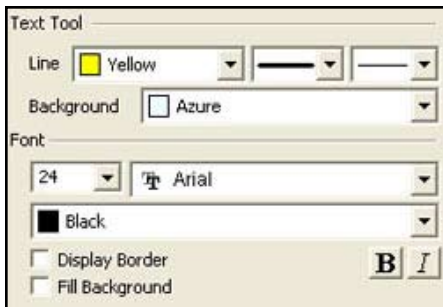
Deleting the Text

Select the text box by clicking on it. Press the Del (Delete) key on your keyboard. You can also right-click the text box and select “Delete” from the dropdown menu.

Preferences

Select the text box by clicking on it. The properties will appear in the preferences section of your control panel. Or, right-click on the drawing and select properties from the dropdown menu.

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.



Text Tool: You can choose the color, line style, and line thickness of your text frame. You can also determine the color of your background. (To make your background or line transparent, deselect **Display Border** or **Fill Background** at the bottom of your preferences.)

Font: Select the font, size, and color of the text.

Rectangle Tool



The Box tool enables you to draw square or rectangle shaped drawings on the chart. Select the Box tool in the Notation toolbar. Click where you would like to place the top-left corner of the box, hold down the mouse button and drag to the location of the bottom-right corner of the box. Release the mouse button to place.

Resizing the Rectangle

Select the rectangle drawing by clicking on it. The drawing is selected when boxes appear at the corners of the graphic. Click on one of the boxes and drag it to the desired length. Release the mouse button to place.

Moving the Rectangle

Select the rectangle drawing by clicking on it. Click on the drawing, not an end box, and drag it to the new location. Release the mouse button to place.

Deleting the Rectangle

Select the rectangle drawing by clicking on it. Press the Del (Delete) key on your keyboard. You can also right-click the drawing and select “Delete” from the dropdown menu.

Preferences

Select the drawing by clicking on it. The properties will appear in the preferences section of your control panel. Or, right-click on the drawing and select properties from the dropdown menu.

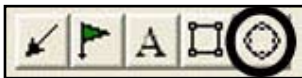
Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.



Rectangle Tool: You can choose the color, line style, and line thickness of your box frame. You can also determine the color of your background. (To make your background transparent, deselect **Fill Background** at the bottom of your preferences.)

Select **Snap** to have your lines snap to price bars when moved.

Circle Tool



The Circle tool enables you to draw circle shaped drawings on the chart. Select the Circle tool in the Notation toolbar. Click on the chart where you would like the circle to start. Continue holding down the mouse button and drag the tool until it has formed a circle. Release the mouse button to place.

Resizing the Circle

Select the circle drawing by clicking on it. The circle is selected when boxes appear at the corners of the graphic. Click on one of the boxes and drag it to the desired length. Release the mouse button to place.

Moving the Circle

Select the circle drawing by clicking on it. Click on the box, not an end box, and drag it to the new location. Release the mouse button to place.

Deleting the Circle

Select the circle drawing by clicking on it. Press the Del (Delete) key on your keyboard. You can also right-click the drawing and select “Delete” from the dropdown menu.

Preferences

Select the circle drawing by clicking on it. The properties will appear in the preferences section of your control panel. Or, right-click on the drawing and select properties from the dropdown menu.

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.



Circle Tool: You can choose the color, line style, and line thickness of your circle outline. You can also determine the color of the background. (To make your background transparent, deselect **Fill Background** at the bottom of your preferences.)

Select **Snap** to have your lines snap to price bars when moved.

Calculator Tools

Calculators Made Easy

Introduction

Track 'n Trade 5.0 has included the Dollar calculator and the Risk/Reward calculator to help simplify the trading process. With both the Dollar calculator and the Risk/Reward calculator, simply click and drag between two locations on the chart to instantly know the \$ value between the two points.

Dollar Calculator



Use the Dollar calculator to find the dollar value between two points on the chart. Select the Dollar calculator tool from your Calculators toolbar. Click on your chart where you want the calculator to start and drag to where you want the calculation to be completed. Release the mouse button to place. The dollar amount of the chart movement will be calculated from the beginning and end point values and will be displayed in the center of the line.

Example of the Dollar Calculator



Resizing the Dollar Calculator

Select the drawing by clicking on it. You will know the drawing is selected when boxes appear at the corners. Click on a box and drag it to your desired location. Release the mouse button to place.

Moving the Dollar Calculator

Select the drawing by clicking on it. Hold down the mouse button and drag to the new location. Release the mouse button to place.

Deleting the Dollar Calculator

Select the drawing by clicking on it. Press the Del (Delete) key on your keyboard. You can also right-click the drawing and select “Delete” from the drop-down menu.

Preferences

Select the drawing by clicking on it. The properties will appear in the preferences section of your control panel. Or, right-click on the drawing and select properties from the dropdown menu.

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.

Dollar Calculator Tool

Line Black Solid 1

Quantity 1

Font 12 Arial Black

☒ Show Text B I

☒ \$ Value ☐ % ROR ☐ % ROI ☐ Points

☒ Snap

Details

Point 1 Price 85.64

Point 2 Price 90.26

Dollar Calculator Tool: Choose the color, line style, and line thickness of your line.

Quantity: By default, the dollar calculate the price between two points as if you were buying one contract. Default is set to 1, with the calculation between the two prices standing for 1 contract. By changing the number next to Quantity in your preferences, the middle price will be calculated to show the value of multiple contracts.

Font: Select the font, size, and color of the text. Select **Show Text** to hide or show your text on the chart.

Select how you would like to view the values on your dollar calculator. **\$ Value** will show you the size of the move in dollars (points x point value). **%ROI** stands for Return on Investment and calculates the return on your investment against the grand total of your account at the time you run the calculator. **Points** will show you the size of the move in points. Select **Snap** to have your lines snap to price bars when moved.

Risk/Reward Calculator



The Risk/Reward calculator is used to find the difference between two points of the risk and reward zone. Select the Risk/Reward tool on your Calculators Toolbar. Click on your chart where you want your technical formation to begin and drag to cover the area between your initial order and your risking stop loss order.

The calculator will create an equal-sized reward area that can be stretched to the proper distance you expect the graph to retrace. The numbers in the tool indicate the dollar amount of risk and reward.

When the chart is trading within the risk area (negative number), you are risking your own money. When the chart is trading within the reward area (positive number), you are risking OPM or “Other People’s Money.” Use the Risk/Reward calculator on all trades to calculate where your order entries and exits should be placed.

Example of the Risk/Reward Calculator



Resizing the Risk/Reward Calculator

Select the drawing by clicking on it. You will know the drawing is selected when boxes appear at the corners. Click on a box and drag it to your desired location. Release the mouse button to place.

Moving the Risk/Reward Calculator

Select the drawing by clicking on it. Hold down the mouse button and drag to the new location. Release the mouse button to place.

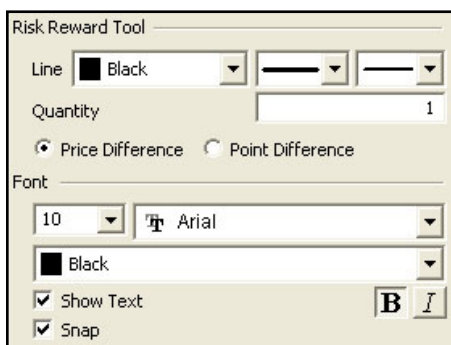
Deleting the Risk/Reward Calculator

Select the drawing by clicking on it. Press the Del (Delete) key on your keyboard. You can also right-click the drawing and select “Delete” from the drop-down menu.

Preferences

Select the drawing by clicking on it. The properties will appear in the preferences section of your control panel. Or, right-click on the drawing and select properties from the dropdown menu.

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.



Risk Reward Tool: Choose the color, line style, and line thickness of your line.

Quantity: Select how many contracts you would like to be calculated.

Price/Point Difference: Select whether you want the tool to calculate between price or points.

Font: Select the font, size, and color of the text. Select **Show Text** to hide or show your text on the chart.

Select **Snap** to have your lines snap to price bars when moved.

Long Term Charts

Generating and Customizing Long Term Charts

Introduction

Track ‘n Trade 5.0 generates weekly and monthly long-term charts from more than 30 years of historical data. Open the chart you would like to view as a long term chart. The chart is automatically set to open as a daily chart for the month you specified. Click on the appropriate button to the right of the chart window to view a Daily, Weekly, or Monthly Long Term chart.



Center Chart: Centers the chart in your chart window how it is right now. Clicking on this button will not autoscale your chart if you play forward or backward.

Daily Chart: Sets your current chart so each price interval represents one day.

Long Term Daily: Sets your current chart as daily, but includes all available data.

Long Term Weekly: Sets each price interval as one week.

Long Term Monthly: Sets each price interval as one month.

Comparison of Chart Ticks

Chart	Price Interval Represents	Open	High	Low	Close
Daily	One Day	Day’s Open	Day’s High	Day’s Low	Day’s Close
Weekly	One Week	1st Day’s Open	High for the Week	Low for the Week	Last Day’s Close
Monthly	One Month	1st Day’s Open	High for the Month	Low for the Month	Last Day’s Close

Active Charts	Symbol
Cotton #2 (Open Outcry) LT Daily	CT\$LD
Cotton #2 (Open Outcry) Oct LT W...	CT\$VLW
Cotton #2 (Open Outcry) Oct LT M...	CT\$VLM
Cotton #2 (Open Outcry) Oct-07	CT2007V

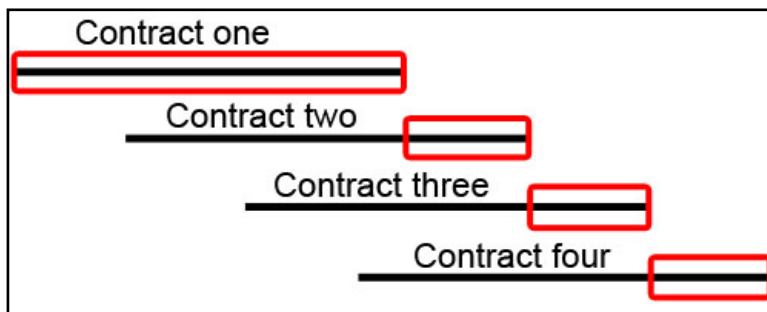
When you click on the Daily Long Term button, the new chart will open in the chart window. The chart will also be listed as a new chart in your control panel under Active Charts. The symbol will be generated by using the commodity symbol followed by a dollar sign and LD for Long term Daily (Example: Cotton #2 would be CT\$LD). Weekly Long Term and Monthly Long Term symbols will be generated the same way with commodity symbol, a dollar sign, and the month letter followed by LW for weekly or LM for monthly (Example: Cotton #2 for Long Term Monthly would look like CT\$VLM).

Examples of Long Term Charts in the Chart Window



Creating Long Term Charts

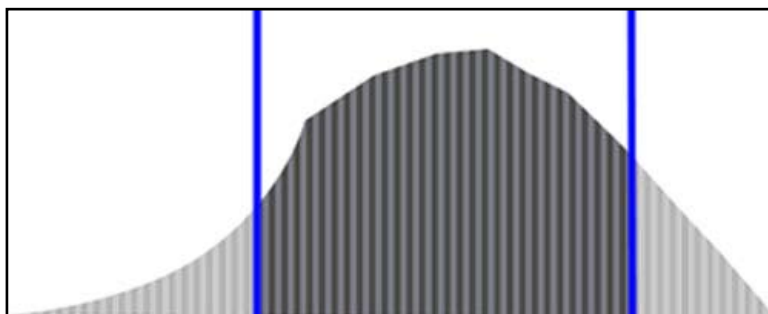
Because commodity contracts overlap over each other, Track 'n Trade 5.0 creates Long Term charts by placing together the data from the front month contracts. This method only shows the data for the section of the contract that is actively being traded and excludes the excess, giving the contract higher volume and open interest.



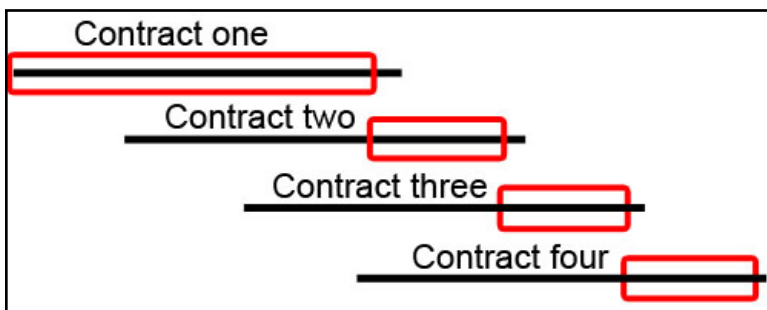
The boxes represent the portion of the contract that Track 'n Trade 5.0 uses to create the long term chart.

Long Term Chart Options

Another way to create a long-term chart is to take only the “fat” portion of each front month contract and paste them together. With this method, you are cutting off both the beginning of the chart, where there is typically less volume and open interest, and the end of the chart, where it is “cooling down” from traders who are transferring their orders to the next month’s contract.



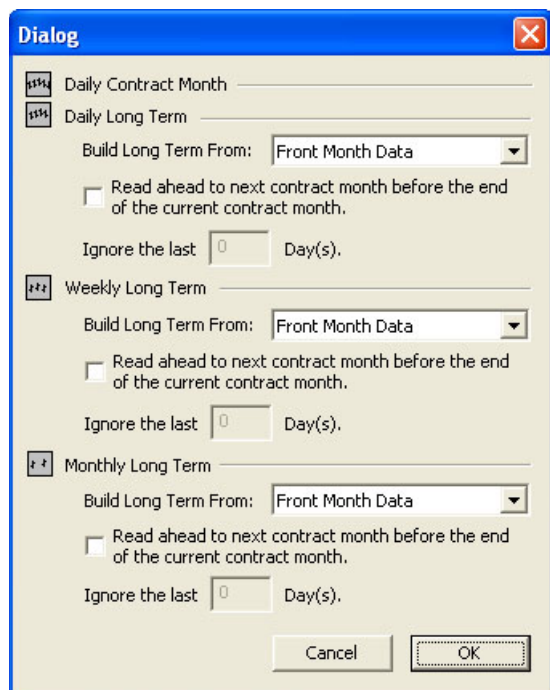
Contracts tend to have more activity during the middle of the contract and less toward the end. Track 'n Trade 5.0 can cut out the middle of each contract and paste the contracts together as a long term chart.



Using options available in Track 'n Trade 5.0, traders are able to specify the number of days at the end of a contract that they would like excluded from a long term chart.

Long Term Settings

You can find the settings for Long Term charts in the View menu from the top of your screen. When you click on **Long Term Settings** the Dialog window will appear.



The window is divided into Daily, Weekly, and Monthly options. Modify the Long Term Settings for the type of chart you want to use.

Select from the dropdown menu if you would like to build long term charts from front month data or contract month data. Selecting **Front Month Data** will use data from one contract month to the next in chronological order (Jan 2006, Mar 2006, May 2006). Selecting **Contract Month Data** will use data from a contract month from each successive year (Jan 2003, Jan 2004, Jan 2005). Charts opened with the Contract Month Data setting will have the letter month as part of the chart symbol in the Active Charts window.

To cut off the end of the contract used in your long term chart, click on the empty check box in front of “Read ahead to next contract month before the end of the current contract month.” Specify the number of days in the box that you would like to exclude. This option is best used for historical data. If you are looking at a long term chart that includes current data and you set this option to exclude 10 days, the chart will roll over to the next contract 10 days early.

Using Indicators

Implementing Indicators into Your Trading Strategy

Introduction

Track 'n Trade 5.0 includes twenty-five indicators that are displayed in a window below the Chart Window. This window is referred to as the Indicator Window. (There are also eleven Overlay Indicators that are displayed directly on your chart in the Chart Window that are explained in the next chapter.)

Many of the indicators included in Track 'n Trade 5.0 have buy/sell signals. You will be able to select the indicator to view these signals on the chart. The indicators that have buy/sell signals are indicated by an asterisk (*) in the following list of indicators included in your program.

- AD: Williams Accumulation/Distribution*
- ATR: Average True Range
- BW: Bollinger Bandwidth
- CCI: Commodity Channel Index*
- CMF: Chaikin Money Flow*
- DMI: Directional Movement Index*
- FSTO: Fast Stochastics*
- GTR: Gator
- HVOL: Historic Volatility
- KST: Know Sure Thing*
- MACD: Moving Average Convergence/Divergence*
- MFI: Money Flow Index*
- MOM: Momentum*
- OBV: On Balance Volume
- PPO: Percent Price Oscillator*
- %R: Williams Percent R*
- %B: Percent Bollinger Bands*
- PVO: Price Volume Oscillator*
- ROC: Rate of Change
- RSI: Relative Strength Index*
- SRSI: Stochastic Relative Strength Index*
- SSTO: Slow Stochastics*
- TRIX: Triple Exponential Average*
- ULT: Ultimate Oscillator*
- V/OI: Volume/Open Interest

Displaying Indicators in the Indicator Window

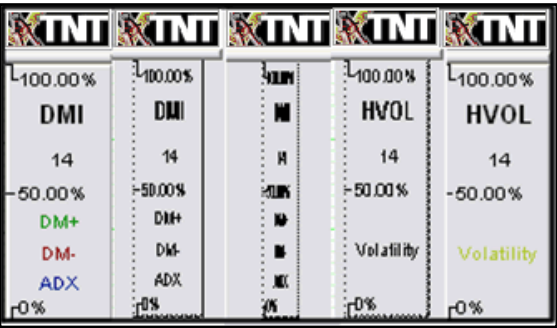
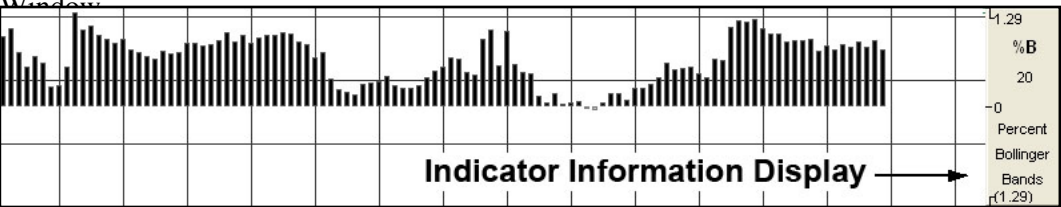
The Indicator Buttons are found on the bottom of your screen below the chart window. The Indicator toolbar can be closed or opened by selecting View on the Menu bar and clicking on “Indicator Buttons.” Display an indicator by clicking on its corresponding button.



You can also display an indicator by right-clicking in the Indicator Window and selecting the indicator you would like to view. Select “Show All” to view all selected indicators in the Indicator Window at the same time. Selecting “Properties” will open the current indicator preferences in the Preferences tab of your Control Panel.

One Button

The One Button on the left end of your Indicator toolbar allows you to have as many indicators selected as you like, but only view them one at a time in the indicator window. To switch between each selected indicator click the Indicator Information Display to the right of the Indicator



When you click on the Indicator Information Display window the indicator information will rotate to the next indicator you have selected (as simulated above).

All Button

The All Button will display all the indicators you have selected on the Indicator toolbar in the Indicator Window. You will still be able to rotate the information for each indicator to the right of the Indicator Window.

Note: The One and All buttons can be specified for each chart you have open.

Williams Accumulation/Distribution (AD)

Larry Williams created this indicator in an attempt to measure market pressures. It specifically looks for a difference in price and measures it through market sentiment and strength. The key is to look for strong differences between what the market does and what the indicator does. Looking for substantial divergence from the AD index versus the underlying chart is the key to future price direction.

The main thing to look for is a difference between the AD and the market trend. If a market were to make a matching or lower low, or a matching or higher high and the AD fails to follow the market trend, this is divergence. Divergence implies that a reversal in the dominant trend may be near.

A series of lower lows would read as a decreasing AD. The pattern created by the AD and the differences in the chart are what the trader looks for. Divergence, or a difference from the pattern, is what you want to see. For example, if the market continues to march to higher territory and the AD follows by doing the same, then there is no divergence. However, if the market makes several new highs but the AD fails to make new highs, it is a warning signal of a market about to reverse direction.

Calculation

The AD index is computed several different ways. Some computations normalize the index, while others add extra smoothing factors through the use of moving averages.

The first comparison checks for accumulation. (Is the current close higher than the previous close?) If the market is accumulating, subtract the difference between current close and low. Add the difference to the Accumulation/Distribution Index. Traders perceive an undervalued market and they buy.

If $Closet > Closet-1$ then $ADt = ADt-1 + (Closet - Lowt)$

The second comparison checks for no change in price. If correct, the AD index does not change.

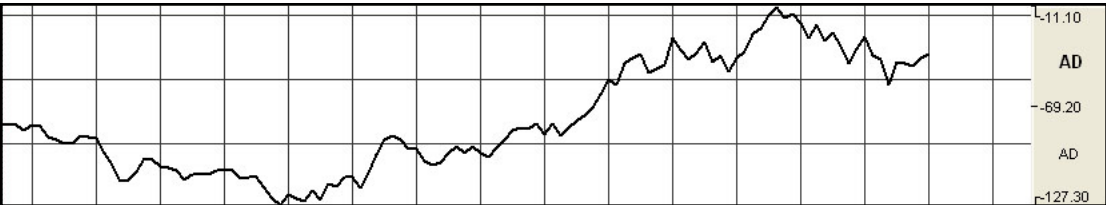
If $Closet = Closet-1$ then $ADt = ADt-1$

The last and final comparison checks for a down market. It looks for the current close below previous close. If it's correct, the market is distributing. The software first computes the difference between current high and close. Then it subtracts that difference from the AD index. This measures market distribution. Traders perceive an overvalued market and are selling.

If $Closet < Closet-1$ then $ADt = ADt-1 - (Hight - Closet)$

- ADt*: The accumulation/distribution index for the current period.
- ADt-1*: The accumulation/distribution index for the previous period.
- Closet*: The closing price for the current interval.
- Closet-1*: The closing price for the previous interval.
- Hight*: The true high price for the current interval (current high or previous close).
- Lowt*: The true low price for the current interval (current low or previous close).

Example of the Williams AD in the Indicator Window



Preferences

Right-click on the AD button in your Indicator toolbar and select AD Settings. The Preferences Tab will open in the Control Panel and the AD preferences will be displayed. (Once you click on the chart, the Preference tab will go back to chart settings.)

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.

Williams Accumulation / Distribution Index

Line

Black

MA Line

Aquamarine

Show MA

28

Use Williams AD

Thresholds

1

0.00

%

Yellow

2

0.00

%

Yellow

3

0.00

%

Yellow

4

0.00

%

Yellow

Buy/Sell Arrows

Show Arrow

When Indicator is Visible

Arrow Color

Cyan

Line: Choose the color, line style, and line thickness of your line and MA line. You can also choose to show/hide the MA line and use Williams AD.

View up to four **Thresholds** at values and colors of your choice. Choose when you want **Buy/Sell Arrows** to show and what color.

Average True Range (ATR)

The Average True Range Indicator was developed by Welles Wilder to work with the commodity industry. The purpose of the ATR is to recognize the level of volatility in a market. Volatility is a measurement of the change in price over a given period. It is often expressed as a percentage and computed as the annualized standard deviation of the percentage change in daily price.

When a market is going sideways, it typically exhibits low volatility and is difficult to trade. A market with higher volatility is typically trending better which would produce more opportunities to get into a trade. If a market's volatility is too high, traders find that the market is too erratic, and it becomes difficult to trade. In using the ATR, traders hope to measure the level of volatility to help them interpret the different markets they are watching. It is important to remember to consult other indicators or analysis so that you are not relying on only one indicator to determine market entry or exit.

The ATR's value is a measurement of the market volatility. When a market is increasing in volatility the ATR will have a higher value, and when the market is decreasing in volatility the ATR will have a lower value.

Calculation

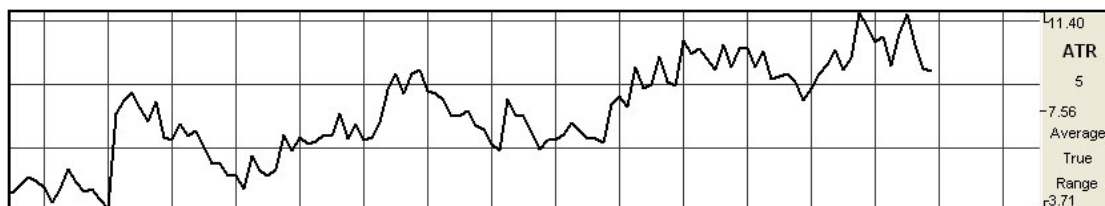
The ATR is a moving average of the True Ranges defined below. The default period interval in Track 'n Trade 5.0 is 5 days. The ATR is calculated based on the largest of the three distances from the following:

Today's HIGH to today's LOW

Yesterday's CLOSE to today's HIGH

Yesterday's CLOSE to today's LOW

Example of the ATR in the Indicator Window



Preferences

Right-click on the ATR button in your Indicator toolbar and select ATR Settings. The Preferences Tab will open in the Control Panel and the ATR preferences will be displayed. (Once you click on the chart, the Preference tab will go back to chart settings.)

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.

Average True Range

Period

5

Line

☐ HoneyDew

—

—

Thresholds

<input type="checkbox"/> 1	0.00	%	<div><div>Yellow</div></div>
<input type="checkbox"/> 2	0.00	%	<div><div>Yellow</div></div>
<input type="checkbox"/> 3	0.00	%	<div><div>Yellow</div></div>
<input type="checkbox"/> 4	0.00	%	<div><div>Yellow</div></div>

Period: Specify the number of days to be used in calculating the ATR.

Line: Choose the color, line style, and line thickness of your line.

View up to four **Thresholds** at values and colors of your choice.

Bollinger Bandwidth (BW)

Bollinger Bands measure volatility by placing bands on either side of a moving average. These bands are charted two standard deviations away from the average. As the average changes, the values of the two standard deviations also change. The Bollinger Bandwidth, developed by John Bollinger, represents the expanding and contracting of the bands based on recent volatility.

During a period of rising price volatility, the distance between the two bands will widen (BW will increase). Conversely, during a period of low market volatility, the distance between the two bands will contract (BW will decrease).

The tendency is for the bands to alternate between expansion and contraction. When the bands are unusually far apart, it is often a sign that the current trend may be ending. When the distance between the two bands has narrowed, it is often a sign that a market may be about to begin a new trend.

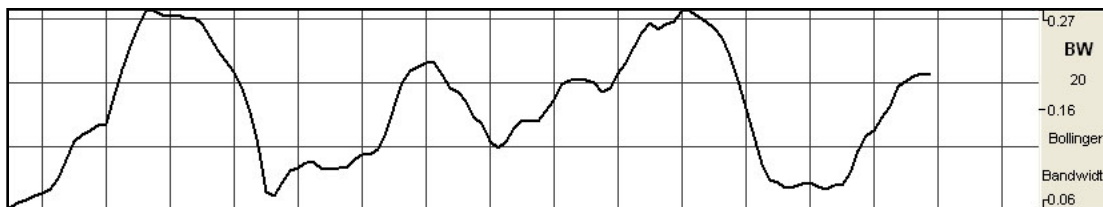
The BW gives an indication of how wide the Bollinger Bands are as a function of the middle band. It is used to identify the squeeze at low values and the end of trends at high values.

Calculation

The calculation of the BW is here:

$$\text{Bollinger Bandwidth} = \frac{[\text{Top Bollinger Band (x periods)}] - [\text{Bottom Bollinger Band (x periods)}]}{\text{Simple Moving Average Close (x periods)}}$$

Example of the BW in the Indicator Window



Preferences

Right-click on the BW button in your Indicator toolbar and select BW Settings. The Preferences Tab will open in the Control Panel and the BW preferences will be displayed. (Once you click on the chart, the Preference tab will go back to chart settings.)

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.

Period: Specify the number of days to be used in calculating the BW.

% Deviation: Define the displacement between the bands.

Type: Choose from Simple, Linear Weight, or Exponential.

Data: Choose from either Open, High, Low, or Close.

Line: Choose the color, line style, and line thickness of your line.

View up to four **Thresholds** at values and colors of your choice.

Commodity Channel Index (CCI)

The Commodity Channel Index (CCI) is designed to detect beginning and ending market trends. The formula standardizes market prices to help spot market trend deviations.

Donald Lambert, the creator of this indicator, says that 70% to 80% of all price fluctuations fall within +100 and -100 as measured by the index. The calculation for CCI measures the average daily price's distance from a moving average of average daily prices.

There are basic trading rules for the CCI: buy when the CCI exceeds -100 and sell when the CCI drops below +100. In other words, a buy signal is generated when the indicator enters the channel, or exceeds -100, coming up from the bottom. A sell signal is generated when the indicator enters the channel from the top, or drops below +100.

Followers of the CCI generally look to establish long positions when the CCI exceeds the -100 level, indicating that prices are in a strong up trend. Most users of this indicator also try to look for patterns within the indicator, such as higher highs, and look for CCI movements to be confirmed by general price readings as well.

The purpose of the CCI index is to keep you out of the market during consolidation, or weak trending periods. By measuring the difference between average prices and mean average prices, this indicator attempts to isolate only strongly trending markets, similar to momentum and MACD.

When CCI is viewed in the Indicator window of Track 'n Trade 5.0, -100 is 33% of the window and +100 is 66% of the window. Guides could be set at these two points for ease in tracking CCI. You could also say that -85 would be roughly 36% and +85 would be roughly 64% of the window.

Calculation

The proper calculation of the CCI requires several steps in the proper sequence. You must first compute the typical price using the high, low, and close for the interval. Simply, take the average of the three values.

$$TP = (Hight + Lowt + Closet) / 3$$

TPt: Represents the typical price.

Hight: The highest price for this interval.

Lowt: The lowest price for this interval.

Closet: The closing price for this interval.

Next, calculate a simple moving average of the typical price for the number of periods specified.

$$TPAVG_t = (TP_1 + TP_2 + \dots + TP_n) / n$$

TPAVG_t: The moving average of the typical price.

TP_n: The typical price for the *n*th interval.

N: Number of intervals for the average.

Compute the mean deviation.

$$MDT = (|TPAVG_1 - TP_1| + \dots + |TPAVG_1 - TP_n|) / n$$

MDT: The mean deviation for this interval.

TP_n: The typical price for the *n*th interval.

N: Number of intervals.

Note: The symbol $||$ designates absolute value. Negative differences as well as positive differences are treated as positive values.

Final computation:

$$CCI_t = (TP_t - TPAVG_t) / (.015 \times MDT)$$

CCI_t: The Commodity Channel Index for the current period.

TP_t: The typical price for the current period.

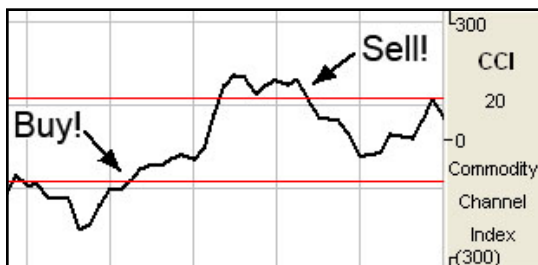
TPAVG_t: The moving average of the typical price.

.015: A constant.

MDT: The mean deviation for this period.

Buy/Sell Signals

For a line drawing, a buy signal occurs when the CCI line crosses from below the lower threshold to above the lower threshold. A sell signal occurs when the CCI line crosses from above the upper threshold to below the upper threshold.



For a histogram drawing, a buy signal occurs when the CCI value crosses from below the 0 line to above the 0 line. A sell signal occurs when the CCI value crosses from above the 0 line to below the 0 line.



Preferences

Right-click on the CCI button in your Indicator toolbar and select CCI Settings. The Preferences Tab will open in the Control Panel and the CCI preferences will be displayed. (Once you click on the chart, the Preference tab will go back to chart settings.)

Restore Settings: TNT Default will change your settings back to the original software settings. **My Default** will change current settings to your personalized default settings. **Apply To All Charts** will apply your selected settings on all open charts. **Save As My Default** will save your current personal settings.

Commodity Channel Index

CCI Period: 20

CCI: Black

Standard (selected) Line

W-CCI (unselected)

Up Color: LightGreen

Down Color: FireBrick

Thresholds:

Threshold	Value	Unit	Color
1	100.00	Value	Yellow
2	-100.00	Value	Yellow
3	0.00	%	Yellow
4	0.00	%	Yellow

Buy/Sell Arrows:

Show Arrow: When Indicator is Visible

Arrow Color: VioletRed

When calculating Buy / Sell arrows for CCI:
Threshold 1 is used as the upper threshold.
Threshold 2 is used as the lower threshold.

CCI Period: The number of bars, or interval, used to calculate the study. Default is 20.

CCI: Choose the color, line style, and line thickness of your line. Select **Standard** and choose between a line or a histogram from the dropdown menu. Select **W-CCI** to display a histogram divided in the middle and choose two colors from the dropdown menu.

View up to four **Thresholds** at values and colors of your choice. When calculating buy/sell signals, Threshold 1 is used as the upper threshold and Threshold 2 is used as the lower threshold (default values set at 100 and -100).

Choose when you want **Buy/Sell Arrows** to show and what color.

Chaikin Money Flow (CMF)

The Chaikin Money Flow Indicator is an oscillator developed by Marc Chaikin. An oscillator is an indicator that is used as a counter trend showing when the market is overbought or oversold. These indicators are momentum based. The CMF is based largely on the Accumulation Distribution Line; it compares the close value with the high and the low for that same day.

By comparing the close to the high and low, the CMF is determining if the market has pressure to sell or buy. In doing this, the CMF is giving an indication of overbought and oversold by using these comparisons. If the market is consistently closing in the top region of the price bar and there is an increase in volume (showing an increase in the number of trades) then CMF exhibits a positive value. If the market is consistently closing in the bottom region of the price bar and there's an increase in volume, CMF exhibits a negative value.

When the CMF indicator crosses the zero line either up or down, this is an indication of a change in trend. Traders use this indicator to help confirm breakout signals from either support or resistance trend lines.

Calculation

The calculation of the CMF is here:

$$CMF = SUM(AD, n) / SUM(VOL, n)$$

where $n = \text{Period}$

$$AD = VOL \times (CL - OP) / (HI - LO)$$

AD stands for Accumulation Distribution

Buy/Sell Signals

A buy signal occurs when the CMF value crosses from below the 0 line to above the 0 line. A sell signal occurs when the CMF value crosses from above the 0 line to below the 0 line.



Preferences

Right-click on the CMF button in your Indicator toolbar and select CMF Settings. The Preferences Tab will open in the Control Panel and the CMF preferences will be displayed. (Once you click on the chart, the Preference tab will go back to chart settings.)

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.

Period: Specify the number of days to be used in calculating the CMF.

CMF+/CMF-: Choose the color, line style, and line thickness of your lines.

Display as: Choose between displaying CMF as a histogram or a line.

View up to four **Thresholds** at values and colors of your choice. Choose when you want **Buy/Sell Arrows** to show and what color.

Directional Movement Index (DMI)

Wilder's DMI is similar to the historic volatility indicator because it shows market tendencies. The main use of this tool is to show the strength of a trend. This could direct the trader to use a trend following system or a counter trend system in their trading. It also indicates possible price reversals.

Directional Moving Index is plotted as three lines on a scale of 0 to 100. This scale is a measure of market trend. The two lines of DMI show the amount of positive and negative movement. The positive line is called D+ and the negative D-. The direction of these lines and the use of crossovers can show the changes in the current market. The key to this indicator is the ADX, or average of the difference of these two lines. The ADX is the main factor in using this indicator. During periods of extreme price variation the two lines can become very volatile, and the ADX is used to compensate for this.

The best application of DMI is present when used with another indicator. DMI should either confirm or contradict the indicator being used. It is also best to use DMI in long-term trade situations. Because the study is not as sensitive as other indicators it is appropriate to use it as a confirmation tool. When the DMI is advancing, the average is higher on the 0 to 100 scale, trend following systems are best employed. Likewise, with a decreasing DMI average, the line is lower on the scale, closer to 0, so a counter trend system might be best. These traits represent the fact that as the average line goes higher in the scale the strength of the trend is gaining, and as the ADX goes lower the trend is losing strength. It is also important to look at the individual lines for changes in price movement.

The other application for DMI is to look at the D+ and D- lines themselves. When the D+ line crosses above the D- line a buy signal is initiated. This indicates that the positive price direction is greater than the negative. Conversely, once the D+ line crosses below the D- line, a sell trigger is present. The negative price movement is overtaking the positive.

Welles Wilder himself said that he was not comfortable using these two lines by themselves. When looking at reversals, the ADX should be above both lines, and once it turns lower we should see a change in market direction. You should also look to ADX for confirmation.

This application is much the same as momentum, showing a change in the market sentiment. Wilder also says that a trend following system should not be used when the ADX line is below both D lines, as this means that the market has no discernible direction.

When using the D+ and D- crossover method, Wilder stresses the use of an extreme point. On the day the crossover occurs, the extreme point is the high or low of the day (high for a buy, and low for a sell). The market should be able to take out that price and stay beyond it for several days before the trade is initiated or exited. This use of extreme points should keep the trader from getting into whipsaws or false breakouts.

Calculation

The computations needed to generate the final figures for the DMI are not complex but are numerous and lengthy. The following discussion attempts to unravel the computational mysteries of the DMI. If you need further explanation, please refer to the author's original work. The book titled *New Concepts in Technical Trading Systems* by J. Welles Wilder, Jr., explains this indicator and several others.

You must first compute the directional movement, DM, for the current trading interval. Directional movement can be up, down, or zero. If directional movement is up, it is labeled as +DM, and -DM refers to downward directional movement. Wilder defines directional movement as the largest part of the current trading range that is outside the previous trading range. From a mathematical view, it is the largest value between two equations:

High - High-1 or Low - Low-1

This is only true when the current low is less than the previous low, or the current high exceeds the previous high. Both of these conditions do not have to be met, only one. It is the largest portion of the trading range outside of the previous trading range.

It is possible for the directional movement to be zero. This occurs when the current trading range is inside the previous trading range, or when the trading ranges, current versus previous, are equal.

Directional movement is up, or positive, when the difference between the highs is the greatest. It is down, or negative, when the difference between the lows is the largest value. The up directional movement is +DM and down directional movement is -DM. Do not let the plus and minus sign designation mislead you. They only indicate upward or downward movement, not values. The directional movement value is always a positive number, or absolute value, regardless of upward or downward movement. This concept is crucial to understanding the computations for the indicator. If you are confused, draw some illustrations or work with actual price data to determine the directional movement values.

The next step in determining the DMI is to compute the true range. The true range (TR) is always a positive number. According to the Wilder, the true range is the largest value of three equations:

High - Low

High - Closet-1

Low - Closet-1

Continue this process for the specified trading interval. In this example, use a value of 14. This is the same value Wilder used on daily data. His logic for using this value is that it represents an average half-cycle period. When this task is accomplished for the specified interval, you compute the average value of the +DM, -DM, and TR. Wilder prefers to use an accumulation technique rather than computing a pure moving average. It is a short cut designed to save computational time and effort:

$$\text{Average}_t = (\text{Average}_{t-1} - (\text{Average}_{t-1} / n)) + \text{Value}_t$$

When you substitute the above symbols, you these equations:

$$+DM_t = (+DM_{t-1} - (+DM_{t-1} / n)) + (+DM_t)$$

$$-DM_t = (-DM_{t-1} - (-DM_{t-1} / n)) + (-DM_t)$$

$$TR_t = (TR_{t-1} - (TR_{t-1} / n)) + (TR_t)$$

It is a timesaving convention. This indicator was developed before microcomputers were invented. The only tool available was the desktop calculator or adding machine. You could spend a great deal of time and effort calculating averages.

You now have the average values. The next step is to compute the directional indicator. It can be either up or down, depending upon the directional movement. On up intervals use this calculation:

$$+DI = (+DM / TR) \times 100$$

On a down interval use this formula:

$$-DI = (-DM / TR) \times 100$$

The plus and minus directional indicator values are computed as percentage figures. You are expressing the percentage of the average true range for both up and down trading intervals.

If you have followed this process so far, the last few steps are relatively simple. You compute the difference between the +DI and the -DI. Remember to use the absolute value of this difference (Convert any negative value into a positive number).

$$DI_{diff} = | ((+DI) - (-DI)) |$$

Compute the sum of the directional indicator values using this formula:

$$DI_{sum} = ((+DI) + (-DI))$$

Once you compute the DI_{diff} and the DI_{sum} , you can calculate the DX or directional movement index. This value is always a percentage:

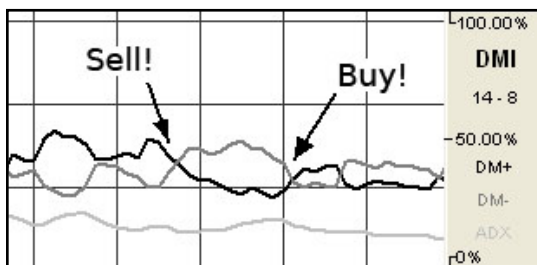
$$DX = (DI_{diff} / DI_{sum}) \times 100$$

The DX is always a value between 0 and 100. If your calculations exceed this range, you have made an error. Wilder was not comfortable using just the directional movement index. It could become very volatile during periods of extreme price movement, especially markets that rise and fall quickly. He implements his accumulated moving average technique to smooth the DX. The result is the ADX or average directional movement index. This is the computational procedure:

$$ADX_t = ((ADX_{t-1} \times (n - 1)) + DX_t) / n$$

Buy/Sell Signals

A buy signal occurs when the $DMI+$ line crosses from below the $DMI-$ line to above the $DMI-$ line. A sell signal occurs when the $DMI+$ line crosses from above the $DMI-$ line to below the $DMI-$ line.



Filters to Adjust Buy/Sell Signals

Extreme Point Validation: This filter delays the buy/sell arrows at least a day by requiring that the market move higher or lower than the high or low on the day the $DM+$, $DM-$ crossover happened. If a new high or low is not obtained before the next $DM+$, $DM-$ crossover, the buy/sell arrow is suppressed completely for that previous period. The filter does not require the use of DX/ADX , although it does stack with the other filters if they are used.

Trend Strength: The DX or ADX line must be above the target number before a $DM+$, $DM-$ cross will give a buy/sell arrow. The theory is the DX/ADX lines indicate trend strength (not direction) and if it is below 20 there is practically no trend. Values above 40 indicate a strong trend. Different articles would use values between 20 and 40 as targets to look for. This box must be selected for this rule to be available.

Turning Point Validation: The directional index line (DX or ADX) must be above the point where DM+,- crossed. This is like a variable trend strength filter. The directional index can indicate any trend strengths as long as the trend strength is greater than the value of the DM+,- crossing point. This indicator also requires that the directional index line be on.

Preferences

Right-click on the DMI button in your Indicator toolbar and select DMI Settings. The Preferences Tab will open in the Control Panel and the DMI preferences will be displayed. (Once you click on the chart, the Preference tab will go back to chart settings.)

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.

Directional Movement Index

DMI Period

14

ADX Period

8

DMI+

Black

DMI-

Gray

DM

Silver

Use Relative Scaling

Thresholds

1

40.00

%

Yellow

2

0.00

%

Yellow

3

0.00

%

Yellow

4

0.00

%

Yellow

Buy/Sell Arrows

Show Arrow

When Indicator is Visible

Arrow Color

LightBlue

Threshold 1 is used for Trend Strength

Trend Strength

Extreme Point Validation

Turning Point Validation

DMI Period: The number of bars, or interval, used to calculate the study. Default is 14.

ADX Period: Specify the number of price bars used in calculating ADX.

DMI+, DMI-, DM: Choose the color, line style, and line thickness of your line. Select **Use Relative Scaling** to change the 100% location to the highest point value in the DMI indicator.

View up to four **Thresholds** at values and colors of your choice. Threshold 1 is used for Trend Strength (default value set at 40).

Choose when you want **Buy/Sell Arrows** to show and what color. Select if you would like to view **Extreme Point Validation, Trend Strength, or Turning Point Validation** filters.

Fast Stochastics (FSTO)

The Stochastic Process was invented by Dr. George C. Lane under the basic premise that during periods of decrease, daily closes tend to accumulate near the extreme low of the day and, conversely, during periods of increase, daily closes tend to accumulate near the extreme highs of the day.

This indicator is designed to show conditions of overbought and oversold markets. Stochastics are divided into two types: Regular Stochastics, often referred to as Fast Stochastics, and Slow Stochastics. Fast Stochastics are more sensitive to price changes and can give a lot in the short-term, hence the need for Slow Stochastics.

Stochastics display two lines that move in a vertical scale between 0 and 100, representing percentiles from 0% to 100%. Think of the level of Stochastics as where the most current close is within a specific range. If Stochastics are reading 50%, the current close is in the middle of the price range for a specified period of time. If Stochastics are reading 100%, the close is at the high of the range, and 0% represents the current close price being at the low of the range. This will help you to understand why Stochastics are a counter trend indicator, in that the underlying principle behind Stochastics is that prices will move back to the center of the trading range, or the opposite extreme.

When both lines move to an area below 20 on this scale they are said to be in an oversold zone. Conversely, when both %K and %D move to above 80 on this same scale they are indicating an overbought zone. It is this indication of market sentiment that makes this counter trend indicator useful.

George Lane emphasized that the most important signal generated by this method was the difference or divergence between %D and the underlying market price. He said that the divergence is where %D line makes a group of lower highs while the market makes a series of higher highs. This would indicate an overbought condition. The reverse would be true of an oversold market, with %D making higher lows and prices making lower lows.

As with a dual moving average system, when the faster reacting indicator crosses the slower moving indicator, a buy or sell is signaled. Because Stochastics give an indication of either overbought or oversold, you would first want to see both lines in the above 80 or below 20 range, and sloping out of that range back to the middle before looking for these trade triggers.

Calculation

The first step in computing the stochastic indicator is to determine the n period high and low. Suppose you specified twenty periods for the stochastic. Determine the highest high and lowest low during the last twenty trading intervals. It determines the trading range for that time period. The trading range changes on a continuous basis. The calculations for the %K is here:

$$\%K_t = ((Close_t - Low_n) / (High_n - Low_n)) \times 100$$

%K_t: The value for the first %K for the current time period.

Close_t: The closing price for the current period.

Low_n: The lowest low during the n periods.

High_n: The highest high during the n time periods.

n: The value you specify.

Once you obtain the %K value, you start computing the %D value which is an accumulative moving average. Since the %D is a moving average of a moving average, it requires several trading intervals before the values are calculated properly. If you specify a 20 period stochastic, the software system requires 26 trading intervals before it can calculate valid %K and %D values. The formula for the %D is here:

$$\%DT = ((\%DT-1 \times 2) + \%K_t) / 3$$

%DT: The value for %D in the current period.

%DT-1: The value for %D in the previous period.

%K_t: The value for %K in the current period.

The values 2 and 3 are constants. You specify the constants and the length of the time period to examine for the trading range.

Buy/Sell Signals

A buy signal occurs when both lines are below the lower threshold and the %K line crosses from below the %D line to above the %D line. A sell signal occurs when both lines are above the upper threshold and the %K line crosses from above the %D line to below the %D line.



Preferences

Right-click on the FSTO button in your Indicator toolbar and select FSTO Settings. The Preferences Tab will open in the Control Panel and the FSTO preferences will be displayed. (Once you click on the chart, the Preference tab will go back to chart settings.)

Restore Settings: TNT Default will change your settings back to the original software settings. **My Default** will change current settings to your personalized default settings. **Apply To All Charts** will apply your selected settings on all open charts. **Save As My Default** will save your current personal settings.

Fast Stochastics

FSTO Period: 14

FSTO Smoothing: 3

%K: Black, Solid line

%D: Silver, Solid line

Calculation: Exponential

Thresholds:

Threshold	Value	Color
1	80.00	Yellow
2	20.00	Yellow
3	0.00	Yellow
4	0.00	Yellow

Buy/Sell Arrows:

Show Arrow: When Indicator is Visible

Arrow Color: Red

When calculating Buy / Sell arrows for FSTO:
Threshold 1 is used as the upper threshold.
Threshold 2 is used as the lower threshold.

FSTO Period: The number of periods to be used to determine the highest high and lowest low. Default is 14.

FSTO Smoothing: The number of periods to be used to determine the moving average for the %D value.

%K/%D: Choose the color, line style, and line thickness of your %K and %D lines.

Calculation: Choose between Exponential, Simple, and Wilder's Smoothing calculations.

View up to four **Thresholds** at values and colors of your choice. When calculating buy/sell signals, Threshold 1 is used as the upper threshold and Threshold 2 is used as the lower threshold (default values set at 80 and 20).

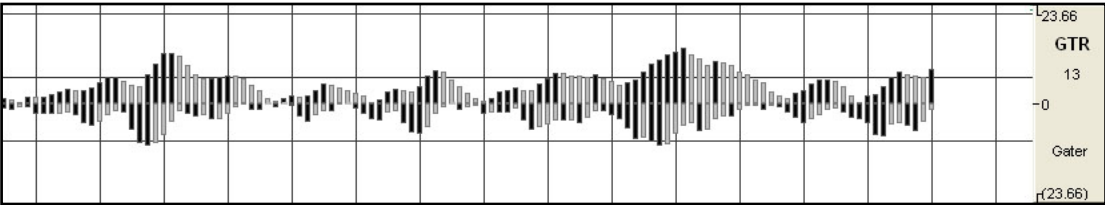
Choose when you want **Buy/Sell Arrows** to show and what color.

Gator (GTR)

Fractal geometry and nonlinear dynamics is used to create the method of calculations for the Gator Indicator. Used in combination with the Alligator, an Overlay Indicator, the Gator has proved to be effective at pinpointing large market trends.

The Gator was created on a relative scale; what seems to be a large move in the market today may well be just a small move on the historical scale, since the Gator graphically represents itself only against its own historical price line. As the market trends, the Gator will also trend, causing historical representations of market momentum and movement to pale in comparison.

Example of the GTR in the Indicator Window



Preferences

Right-click on the GTR button in your Indicator toolbar and select GTR Settings. The Preferences Tab will open in the Control Panel and the GTR preferences will be displayed. (Once you click on the chart, the Preference tab will go back to chart settings.)

Gator

PeriodShift

Jaws

13

8

Teeth

8

5

Lips

5

3

Type

Exponential

Data

Close

Up

Lime

Down

Red

Thresholds

1

0.00

%

Yellow

2

0.00

%

Yellow

3

0.00

%

Yellow

4

0.00

%

Yellow

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.

Jaws, Teeth, Lips: Specify your periods and shift specifications.

Type: Select Simple, Linear Weight, or Exponential.

Data: Choose the data you would like to be calculated.

Up/Down: Select the color of the histogram when the value is up or down.

View up to four **Thresholds** at values and colors of your choice.

Historic Volatility (HVOL)

The Historic Volatility indicator is used mainly as an option evaluation tool. It does not give trading signals like those given with other technical indicators. It gives the trader an idea of how volatile the market has been for a previous period of time.

Changing the period of time the study observes allows the trader to finetune options prices. If a market has been extremely volatile for the past 3 months, for example, near term options should be more expensive. If the market has been calm for an extended period of time, longer term options should be reasonable. In futures, we use it for observation. It tells us if prices are calming down or becoming more erratic.

The key to using historic volatility is determining the correct period of time for each market. The market you are looking at may show a history of volatility years ago, but has been relatively calm the last few months. Getting an idea of the markets behavior recently may be of no use to the trader that is looking at distant options.

For the futures trader, this tool is useful as a guide for order placement. Changing market volatility may indicate that it is time to move stops closer or farther away. If the trader is profitable with the trend and volatility is changing, it might be a time to move stops closer to protect profits. If a trader is trading against the trend, he might want to move stops further away to avoid getting bumped out prematurely.

Options traders could use this study to help them purchase profitable options. The basic idea is to buy options when volatility is decreasing to take advantage of a change in that volatility. Any rise in volatility will translate to an increase in option values. Look at options strategies that take advantage of low volatility, such as straddles or ratio spreads. When volatility is high, selling options would be better because any decrease in volatility will translate to a loss of option value. Option strategies that take advantage of a decrease in volatility are strangles and regular short option positions.

Obviously, historic volatility is only one component of option pricing. Any changes in the underlying futures market could negate the changes in option prices due to volatility. For example, if you were to buy a low volatility Put option and prices go higher, that option will lose value but not as quickly as a higher volatility option.

For the futures trader, the basic concept is to expect market changes during periods of increased volatility. George Soros, the trading legend, said “Short term volatility is greatest at a turn around and diminishes as a trend becomes established.”

This indicator is commonly viewed as very mean regressive. What this term means is that the historic volatility indicator tends to return to the opposite end of the spectrum and therefore return to an average. If volatility is great it will eventually cool off and return to that place. If volatility is low it will not stay quiet forever. What this means to traders is that a market that is erratic will sooner or later calm down and a market that is quiet will eventually get loud again.

Calculation

The calculation for the historical volatility is rather involved. The number of periods per year vary depending on the type of price chart used for the study. The following table lists the number of periods for each type of chart:

Chart Type	Trading Periods Per Year
Perpetual	262
Daily	262
Weekly	52
Monthly	12
Variable	Based on chart period (see below)
Tick	Not available for this study

When using variable charts, you must first calculate the number of trading periods per year. To do this, you must determine the trading time of the selected commodity. The formula is as follows:

$$TP = (Tt / Pn) \times 262$$

TP: The total number of trading periods per year.

Tt: The total trading time in a day.

Pn: The length of the period.

262: The number of weekdays per year.

Example: The S&P 500 trades from 8:30 a.m. to 3:15 p.m. That is a total trading time of 6 hours and 45 minutes. On a variable chart using 5 minute bars, the number of periods for the day is 81:

6 hours x 60 minutes = 360 minutes + 45 minutes

Total minutes of trading = 405 minutes

405 / 5 minute bars = 81 trading periods per day

Now that you have calculated the trading periods per day, you now must calculate the number of periods for the year. Since historical volatility considers every weekday of the year when calculating total periods for the year, the multiplier is 262:

$$TP = (405/5) \times 262$$

$$TP = 81 \times 262$$

$$TP = 21,222$$

Note: This formula applies only to historical volatility on a variable chart. It does not apply to other chart types.

Now that you have the total number of periods per year, continue with the calculation of the historical volatility, by calculating the logarithm of the price change for each price in the specified time span of n periods:

$$LOGSi = LOG(Pi / Pi-1)$$

LOG: The logarithm function.

Pi: The current price.

Pi-1: The previous price.

Now that you have the logarithms of the price changes, calculate the total logarithms for the time span you are reviewing:

$$T_{logs} = \sum_{i=1}^n (LOGS_i)$$

Tlogs: The total of the logarithm price ratio for the time span.

S: Indicates to sum all n logarithms.

LOGSi: The logarithm of the price change for period i.

N: The number of periods for the specified time span.

The next step is to calculate the average of the logs by dividing the total logarithm by the number of periods:

$$ALOGS = Tlogs / n$$

ALOGS: The average of the logarithms.

Tlogs: The total of the logarithm for the time span.

N: The number of periods for the specified time span.

The last calculation is to sum the squares of the difference between the individual logarithms for each period and the average logarithm:

$$SSD = \sum_{i=1}^n (LOGSi - ALOGS)^2$$

SSD: The sum of the squared differences.

S: Indicates to total the squares of all *n* differences.

LOGSi: The logarithm of the price change for period *i*.

ALOGS: The average of the logarithms.

Now that the elements of the final formula are complete, the following formula calculates the historical volatility for a given period over a specified time span:

$$HV = \sqrt{\frac{SSD}{n-1}} * \sqrt{TP}$$

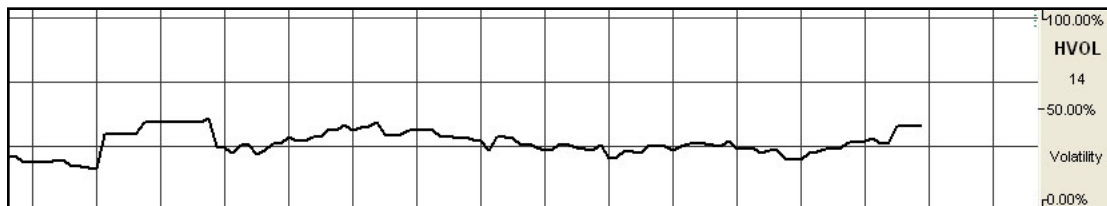
SSD: The sum of the squared differences.

n: The number of periods for the specified time span.

TP: The total number of trading periods for the year.

Due to the complexity of the formula, it is preferable to use a scientific calculator when attempting to manually calculate the historical volatility of a futures instrument.

Example of Historical Velocity in the Indicator Window



Preferences

Right-click on the HVOL button in your Indicator toolbar and select HVOL Settings. The Preferences Tab will open in the Control Panel and the HVOL preferences will be displayed. (Once you click on the chart, the Preference tab will go back to chart settings.)

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.

HVOL Period: The number of bars, or period, used to calculate the study. Default is 20. You may use any number greater than 1 for the close.

HVOL: Choose the color, line style, and line thickness of your line. Click to **Show Relative Scaling** if you want the 100% location to be changed to the highest point value in the indicator.

View up to four **Thresholds** at values and colors of your choice.

Know Sure Thing (KST)

The Know Sure Thing (KST) Indicator is an oscillator developed by Martin J. Ping that gives bullish and bearish momentum signals. The difference between this indicator and other oscillators is that it takes into consideration four time periods instead of only one. Each time period is smoothed using a moving average. Also, each time period is weighted differently depending on length, so a longer time period would have greater weight. Because of the consideration of the various time periods, the KST is able to react quicker to price moves.

Watch for bullish and bearish momentum signals in the KST indicator. When the KST turns upward, this is a bullish signal, and when the KST turns down, this is a bearish signal. More confirmation is given when the trigger line crosses the KST line as a result of the change in direction.

There are two lines: the trigger line and the KST line. The KST line is a result of the four moving averages smoothed as well as the Rate of Change or ROC. The trigger line is a moving average of the KST.

Buy/Sell Signals

A buy signal occurs when the KST line is below the 0 line and crosses from below the trigger line to above the trigger line. A sell signal occurs when the KST line is above the 0 line and crosses from above the trigger line to below the trigger line.



Preferences

Right-click on the KST button in your Indicator toolbar and select KST Settings. The Preferences Tab will open in the Control Panel and the KST preferences will be displayed. (Once you click on the chart, the Preference tab will go back to chart settings.)

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.

Know Sure Thing

	Period	Roc Period
MA 1	10	5
MA 2	10	20
MA 3	10	25
MA 4	15	30

Trigger Period: 9

Type: Line

Calculation: Exponential

KST: ■ Lime

Trigger: ■ Red

Thresholds

	Value	Unit	Color
1	0.00	%	Yellow
2	0.00	%	Yellow
3	0.00	%	Yellow
4	0.00	%	Yellow

Buy/Sell Arrows

Show Arrow: When Indicator is Visible

Arrow Color: ■ Lime

MA: Specify the number of days used in calculating the period and ROC period of the 1, 2, 3, and 4 moving average lines.

Trigger Period: Specify the number of days used in calculating the trigger period. Choose between a histogram or line.

Type: Choose if you would like to see KST as a histogram or line.

Calculation: Choose between Simple, Linear Weight, and Exponential.

KST/Trigger: Choose the color, line style, and line thickness of your KST and trigger lines.

View up to four **Thresholds** at values and colors of your choice. Choose when you want **Buy/Sell Arrows** to show and what color.

Moving Average Convergence/Divergence (MACD)

MACD was created in an attempt to determine the strength of a trend along with the direction of that trend. Gerald Appel created a system that looked at two exponential moving averages and the difference between those two averages. Looking at these moving averages of the market we are able to see clear buy and sell signals. We are also able to get a more accurate signal by averaging the difference in the two moving averages.

Computing this indicator requires the use of exponential moving averages. Exponential moving averages are different than simple moving averages; instead of looking at only the last few days and averaging them, the exponential averages look at all the prices and puts more weight on the most recent data. This type of weighted average gives a smoother average price that reacts quickly to market moves. The two averages of MACD move above and below a base line, which gives indication of the strength of the current move. This placement of the two averages in relationship to the base line is calculated by looking at the exponential moving average of the difference between the two averages. Even though the two averages may cross, the divergence, or true indication of the signal, is not shown until both averages cross the base line.

Keeping this in mind, an ideal buy signal is seen on a move where the shorter-term average moves above the other average and both averages cross above the base line of zero. A sell signal would be the opposite of this.

The histogram method of MACD is read as a straight line above or below the zero base line. This line represents the difference between the Moving Averages. When the moving averages move above the base line they are indicating a buy, and as the difference between the averages increases the lines will get taller.

The opposite is true of a sell signal. Track 'n Trade 5.0's ability to display MACD in this fashion is vital because it allows you to read the strength of the current trend along with the signal to buy or sell.

When MACD is plotted as a histogram, the values used to plot the histogram are the differences between the two moving averages on each day. The "trigger" line that appears on this chart is an average of the histogram data, or a smoothed view of the histogram.

Using the MACD as a histogram will allow the trader to spot divergences between the indicator and the market price. A divergence is present when the market makes a higher high than the previous high, but the MACD histogram fails to make a corresponding higher high. This is considered to be a sign of weakness and a sell signal when the MACD breaks below the lowest point in between the divergent highs.

Bullish divergence is seen in an exact opposite fashion. Assume a market has been trending downward. The market has been consistently making lower lows, as has been the MACD histogram indicator. However, eventually the MACD fails to make a lower low, corresponding to the lower low in price. If the MACD histogram line crosses above the highest high in between the divergent lows, then technical lore says higher prices should follow. You also have the choice to view the MACD indicator in a simple line style, instead of the histogram. In this view there is no trigger line. The line style MACD gives buy and sell signals based off of the crossing of the two moving averages.

Calculation

In this study, the oscillator is the simple difference between the first two exponential moving averages:

$$OSC_t = (EMA1 - EMA2)$$

OSC_t: The oscillator for the current period.

EMA1: The first exponential moving average.

EMA2: The second exponential moving average.

The second part of the study computes an exponential moving average of the oscillator:

$$EMAosct = EMAosct-1 + (k \times (OSC_t - EMAosct-1))$$

EMAosct: The exponential moving average of the oscillator.

OSC_t: The oscillator for the current interval.

EMAosct-1: The exponential moving average of the oscillator for the previous interval.

k: The exponential smoothing constant.

Since the second value, *EMAosct*, is an exponential moving average, it rises and falls slower than the oscillator, and the two lines generate crossover points. These crossover points are the buy/sell signals.

If the study is displayed as a histogram, each value for the lines is calculated:

$$DIFF_t = OSC_t - EMAosct$$

DIFF_t: The difference between the oscillator for the current interval and the exponential moving average of the oscillator.

OSC_t: The oscillator for the current interval.

EMAosct: The exponential moving average of the oscillator.

Buy/Sell Signals

For a line drawing, a buy signal occurs when the MACD crosses from below the trigger line to above the trigger line, and the trigger line is less than 0. A sell signal occurs when the MACD line crosses from above the trigger line to below the trigger line, and the trigger line is greater than 0. (A histogram drawing with the trigger line works similarly.)



For a histogram drawing, a buy signal occurs when the MACD value crosses from below the 0 line to above the 0 line. A sell signal occurs when the MACD value crosses from above the 0 line to below the 0 line.



Preferences

Right-click on the MACD button in your Indicator toolbar and select MACD Settings. The Preferences Tab will open in the Control Panel and the MACD preferences will be displayed. (Once you click on the chart, the Preference tab will go back to chart settings.)

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.

EMA Periods: The first box is used to specify the first EMA with a default of 12. The second box is for the second EMA with a default of 26.

Bearish/Bullish: Choose the color, line style, and line thickness of your line.

Trigger Period: Specify the number of days.

Trigger: Check this box to hide the Trigger line. You can also change the color and line style of the Trigger.

Display as: The MACD indicator can be displayed differently. From the dropdown menu, choose either to view it as a line or as a histogram.

Calculation: Select “Standard” or “Extra Smoothing” to choose how you would like your chart to be calculated. (Extra Smoothing is a proprietary formula developed by

Lan H. Turner, president and CEO of Gecko Software, Inc. This method increases the movement in the MACD indicator and has shown to be more accurate [in Gecko Software’s market testing] than the standard calculation. Its relationship to the MACD is similar to the relationship between the Fast and Slow Stochastics, think of this indicator as the “Fast MACD.”)

View up to four **Thresholds** at values and colors of your choice. Choose when you want **Buy/Sell Arrows** to show and what color.

Money Flow Index (MFI)

The MFI is a momentum based indicator, similar to the RSI, %R, and CCI. The MFI incorporates a more rigid calculation, giving the tell tale signs of a more rigid line and a better indication of money flowing in or out of any given security.

The theory says that as money flows into the equity, or volume increases, the MFI will increase its rate of climb. As money flows out of the equity, volume decreases, and the MFI will decrease its rate of climb. The MFI is a classic overbought/oversold indicator based on a 0-100 scale. When the MFI reaches up above the top threshold, which is traditionally set at 75-80%, the equity is considered overbought and a retracement is anticipated. When the MFI line reaches below the 20-25% threshold, the underlying equity is considered oversold and a reversal is anticipated once again.

Calculation

The calculation of MFI is here:

$$\text{Money Flow} = (\text{Typical Price}) \times (\text{Volume})$$

Buy/Sell Signals

A buy signal occurs when the MFI line crosses from below the lower threshold to above the lower threshold. A sell signal occurs when the MFI line crosses from above the upper threshold to below the upper threshold.



Preferences

Right-click on the MFI button in your Indicator toolbar and select MFI Settings. The Preferences Tab will open in the Control Panel and the MFI preferences will be displayed. (Once you click on the chart, the Preference tab will go back to chart settings.)

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.

Money Flow Index

Period: 14

Line: Black, solid, 1

Thresholds:

Threshold	Value	%	Color
1	75.00	%	Yellow
2	25.00	%	Yellow
3	0.00	%	Yellow
4	0.00	%	Yellow

Buy/Sell Arrows:

Show Arrow: When Indicator is Visible

Arrow Color: ForestGreen

When calculating Buy / Sell arrows for MFI:
Threshold 1 is used as the upper threshold.
Threshold 2 is used as the lower threshold.

Period: Specify the number of days to be used in calculating the MFI.

Line: Choose the color, line style, and line thickness of your line.

View up to four **Thresholds** at values and colors of your choice. When calculating buy/sell signals, Threshold 1 is used as the upper threshold and Threshold 2 is used at the lower threshold (default values set at 75 and 25).

Choose when you want **Buy/Sell Arrows** to show and what color.

Momentum (MOM)

The momentum indicator describes how price changes occur. It is a measure of the price change and shows if prices are increasing or decreasing at a continuous rate. Momentum can help gauge the current market trend. This indicator will sometimes shift ahead of a price change. It is both an indicator of trend as well as an indicator of a changing trend. The main thing to look for when using it is a divergence or difference between price behavior and the indicators behavior.

Momentum measures the rate of change in prices rather than actual price levels themselves.

By measuring this rate of incline or decline, momentum tells whether the current trend is strengthening or weakening. If prices are rising and the momentum indicator is above the zero line, then the trend is gaining strength. If prices were rising but the indicator was sagging or went below the zero line, then we would interpret this as a sign of a coming change in trend. This is true because, although prices were still increasing, they are doing so at a decreasing rate.

The reverse would be true during a declining market. For example, think of a race car gaining 20 miles an hour each lap, until it starts to only gain 15 miles an hour, then 10 mph, then 5 mph until eventually it reaches its top speed. Like a race car, a market can not sustain growing momentum forever, and in many occurrences momentum slows before prices change direction.

Typically, the trade signals are to buy when the momentum indicator crosses from below the zero line to above it. This indicates that a new upward trend has begun, as the market is able to violate resistance levels and continue higher with increasing speed.

The sell signal would be to sell when the line crosses from above the zero line to below it. This indicates that the market is picking up speed to the downside and should be able to violate support areas. It is in this way that this unique indicator is a trend following tool.

Another way to use momentum is to establish regions of overbought or oversold. For example, in a declining market, the prices continue downward and the momentum indicator moves toward more negative but begins to level out. We would be looking for a buy signal when the indicator turned upward and out of that oversold region. It is in this way that momentum can sometimes shift ahead of the price movement. This use of the momentum indicator is a counter trend usage.

In either implementation of this indicator, the key is divergence. Seeing momentum make lower highs while prices are making higher highs, or momentum making higher lows while prices are making lower lows. Being aware of a difference in price movement and the momentum level can help the trader make informed trading decisions.

Calculation

The general formula to calculate momentum is here:

$$MOM_t = P_i - P_{i-n}$$

MOM_t: The momentum indicator for the current period.

P_i: The price of the *i* interval.

P_{i-n}: The price *n* intervals ago.

n: The number of intervals or length specified.

Example: Assume the current price is 7470. This example examines a momentum study using a length of ten trading intervals. The price ten intervals ago is 7400:

$$MOM = 7470 - 7400 = +70$$

The momentum value can have a very broad range. It is a function of the length you select for the momentum and the volatility of the underlying futures contract. Thus, it could swing very wide and wildly about the zero line.

Buy/Sell Signals

If we draw MOM with the MOMMA line, a buy signal occurs when the MOM value crosses from below the MOMMA line to above the MOMMA line, and the MOMMA line is greater than 0.

A sell signal occurs when the MOM value crosses from above the MOMMA line to below the MOMMA line, and the MOMMA line is greater than 0.



If we draw MOM without the MOMMA line, a buy signal occurs when the MOM value crosses from below the 0 line to above the 0 line. A sell signal occurs when the MOM value crosses from above the 0 line to below the 0 line.



Preferences

Right-click on the MOM button in your Indicator toolbar and select MOM Settings. The Preferences Tab will open in the Control Panel and the MOM preferences will be displayed. (Once you click on the chart, the Preference tab will go back to chart settings.)

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.

MOM Period: The number of bars, or period, to be used to calculate the study. You must determine a value suitable to your trading needs and methods. Some technicians argue that the length of the momentum indicator should equal the normal price cycle. The best method is to experiment with different lengths until you find the length that works best for that particular commodity you are trading.

MOM/MA: Choose the color, line style, and line thickness of your line. Uncheck the **Show MOMMA** box if you would like to hide the Momentum Moving Average line. You can also specify the number of days used in calculating the MOMMA line.

Display as: The MOM indicator can be displayed differently. From the dropdown menu, choose either to view it as a line or as a histogram.

View up to four **Thresholds** at values and colors of your choice. Choose when you want **Buy/Sell Arrows** to show and what color.

On Balance Volume (OBV)

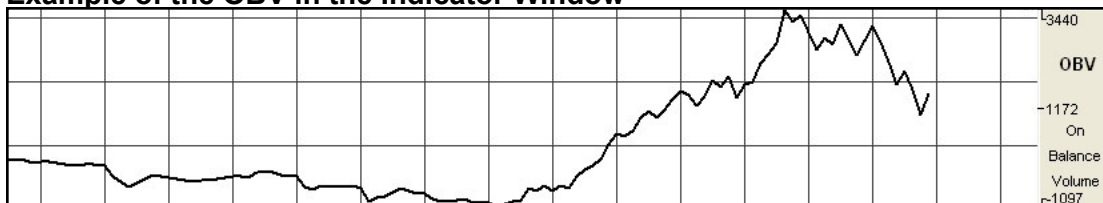
The OBV indicator adds a period volume when the close is up and then subtracts the period's volume when the indicator closes down. An accumulated volume total forms the OBV line. When comparing this calculated price line, with the underlying security, we look for areas of convergence and divergence to confirm our market's directional movement.

The concept behind the OBV is that changes will be reflected in the OBV prior to the markets change. A rise in volume is meant to indicate a rise in money inflows to the security. Once the public continues to add money, the price of the equity should continue to rise.

Directional movement in the indicator gives foresight into the market direction. A rise in the OBV indicator gives the trader the indication that markets are on the rise; a dropping OBV is an indication of a weakening market and lower prices are soon to follow.

When market divergence is seen within the OBV indicator, one must take heed that the market is either weakening in a bullish trend, or strengthening in a bearish trend, and a market reversal is about to occur. The actual calculated value of the line itself is of little use, but the visual movement of the line is what's important to the trader. An inclining line is the indication of a strengthening market, and a declining line is representative of declining market strength.

Example of the OBV in the Indicator Window



Preferences

Right-click on the OBV button in your Indicator toolbar and select OBV Settings. The Preferences Tab will open in the Control Panel and the OBV preferences will be displayed. (Once you click on the chart, the Preference tab will go back to chart settings.)

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.

On Balance Volume

Line

Crimson

Thresholds

1

0.00

%

Yellow

2

0.00

%

Yellow

3

0.00

%

Yellow

4

0.00

%

Yellow

Line: Choose the color, line style, and line thickness of your line.

View up to four **Thresholds** at values and colors of your choice.

Using Indicators

170

Gecko Software, Inc.

Percent Price Oscillator (PPO)

The PPO indicator shows the relationship between two moving averages. The PPO indicator is a modification of the highly regarded and effective MACD indicator. This enhancement provides us the ability to receive the differences between the two moving averages as a percentage. This allows the trader to easily compare stocks with different prices. For example, a PPO result of 20 means that the short term average is 20% above the long term average.

Calculation

To calculate the PPO, subtract the 26-day exponential moving average (EMA) from the nine-day EMA and divide this difference by the 26-day EMA. The end result is a percentage that tells the trader where the short-term average is relative to the longer-term average.

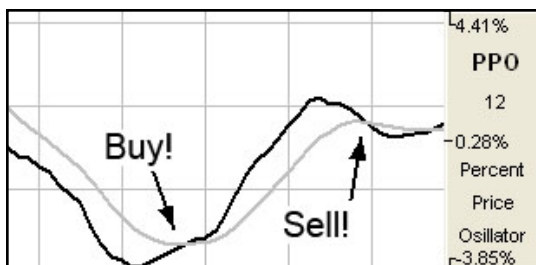
$$PPO = (Fast_EMA - Slow_EMA) / Fast_EMA$$

Additionally, the PPO histogram can be calculated by using the MA of a PPO itself:

$$PPO_Histogram = PPO - EMA_PPO$$

Buy/Sell Signals

A buy signal occurs when the PPO line crosses from below the trigger line to above the trigger line. A sell signal occurs when the PPO line crosses from above the trigger line to below the trigger line.



Preferences

Right-click on the PPO button in your Indicator toolbar and select PPO Settings. The Preferences Tab will open in the Control Panel and the PPO preferences will be displayed. (Once you click on the chart, the Preference tab will go back to chart settings.)

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.

Percent Price Oscillator

PPO Periods

PPO

Trigger

Line

Build With

Thresholds

<input type="checkbox"/> 1	<input type="text" value="0.00"/>	<input data-bbox="288 390 315 425" type="text" value="%"/>	<input type="text" value="Yellow"/>
<input type="checkbox"/> 2	<input type="text" value="0.00"/>	<input data-bbox="288 425 315 460" type="text" value="%"/>	<input type="text" value="Yellow"/>
<input type="checkbox"/> 3	<input type="text" value="0.00"/>	<input data-bbox="288 460 315 494" type="text" value="%"/>	<input type="text" value="Yellow"/>
<input type="checkbox"/> 4	<input type="text" value="0.00"/>	<input data-bbox="288 494 315 529" type="text" value="%"/>	<input type="text" value="Yellow"/>

Buy/Sell Arrows

Show Arrow

Arrow Color

PPO Periods: Specify the number of days to be used in calculating the PPO.

PPO: Choose the color, line style, and line thickness of your PPO line.

Trigger: Specify the number of days used in calculating the Trigger.

Line: Choose the color, line style, and line thickness of your Trigger line.

Build With: Choose either Close, Open, High, or Low to build with.

View up to four **Thresholds** at values and colors of your choice. Choose when you want **Buy/Sell Arrows** to show and what color.

Williams Percent R (%R)

Larry Williams used a ten-day period and plotted where the current price was compared to that period. He used it to measure conditions of overbought and oversold; the overbought region being the area below 20% and the oversold region the area above 80%. With the ability to invert the values, it can be looked at in the same manner as other overbought/oversold indicators. **Note:** We will use the traditional method, not the inverted, in our discussions. Choosing the time period which the indicator looks at the interval is crucial to finding the optimal sensitivity.

Williams's basic rule is simple: when the %R is lower than 20% and becomes greater than 20%, it is interpreted as a buy signal. Conversely, when the %R is higher than 80% and becomes lower than 80%, a sell signal is activated.

Changing the sensitivity of the indicator to work for you is essential to making the study a better tool. The longer the period for the %R, the less sensitive it will be. The indicator will move less but will be more smoothed. A number of technical traders use a value that is less volatile, or in other words, a larger value. Many traders find it better to use a strategy where the market leaves the areas of overbought/ oversold before entering a trade position. In either case, using solid exit strategies is important with this indicator.

Calculation

You must first determine the highest high and lowest low for the length of the interval. This is the trading range for the specified interval:

$$\%R_t = ((High_n - Close_t) / (High_n - Low_n)) \times 100$$

%R_t: The percent of the range for the current period.

High_n: The highest price during the past n trading periods.

Close_t: The closing price for the current period.

Low_n: The lowest price during the past n trading periods.

n: The length of the interval.

Example: Assume the market is Treasury Bills. The high for the past ten trading intervals is 9275, and the low is 9125. The closing price in the current period is 9267.

This is what you get if you substitute those values in the equation:

$$\begin{aligned} \%R &= ((9275 - 9267) / (9275 - 9125)) \times 100 \\ &= (8 / 150) \times 100 \\ &= 5.33 \end{aligned}$$

$$\%R_t = ((Close_t - Low_n) / (High_n - Low_n)) \times 100$$

Buy/Sell Signal

A buy signal occurs when the %R line crosses from below the lower threshold to above the lower threshold. A sell signal occurs when the %R line crosses from below the upper threshold to below the upper threshold.



Preferences

Right-click on the %R button in your Indicator toolbar and select %R Settings. The Preferences Tab will open in the Control Panel and the %R preferences will be displayed. (Once you click on the chart, the Preference tab will go back to chart settings.)

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.

%R Period: The number of price bars, or the interval, used to calculate the study. Default is 10.

%R: Choose the color, line style, and line thickness of your line.

Calculation: Choose between common or updated calculations.

View up to four **Thresholds** at values and colors of your choice. When calculating buy/sell signals, Threshold 1 is used as the upper threshold and Threshold 2 is used as the lower threshold (default values set at 80 and 20).

Choose when you want **Buy/Sell Arrows** to show and what color.

Percent Bollinger Bands (%B)

Bollinger Bands are calculated as a simple moving average shifted up and down by a number of standard deviations. Percent Bollinger Bands relate the underlying price of an instrument to the range of these Bollinger Bands. This gives the user an adaptive measure of volatility which can be used in the same way as other momentum indicators. Buy when the indicator bottoms below 0.00 and turns up, and sell when the indicator peaks above 100.00 and turns down.

You can also use the indicator by looking for divergence between the indicator and the charts. Sharp price advances and declines usually accompany market tops and bottoms, and as a market climbs or falls toward a bottom, the indicator will tend to initially follow the price trend and then fall off, leading to bullish or bearish divergences with the chart.

Buy Sell Signals

A buy signal occurs when %B value crosses from below the 0 line to above the 0 line. A sell signal occurs when %B value crosses from above the 0 line to below the 0 line.



Preferences

Right-click on the %B button in your Indicator toolbar and select %B Settings. The Preferences Tab will open in the Control Panel and the %B preferences will be displayed. (Once you click on the chart, the Preference tab will go back to chart settings.)

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.

☐ Percent Bollinger Bands

Period

% Deviation

Type

Data

Display as

B +

B -

Thresholds

<input type="checkbox"/> 1	<input type="text" value="0.00"/>	<input type="text" value="%"/>	<input type="text" value="Yellow"/>
<input type="checkbox"/> 2	<input type="text" value="0.00"/>	<input type="text" value="%"/>	<input type="text" value="Yellow"/>
<input type="checkbox"/> 3	<input type="text" value="0.00"/>	<input type="text" value="%"/>	<input type="text" value="Yellow"/>
<input type="checkbox"/> 4	<input type="text" value="0.00"/>	<input type="text" value="%"/>	<input type="text" value="Yellow"/>

Buy/Sell Arrows

Show Arrow

Arrow Color

Period: Specify the number of days to be used in calculating the %B.

% Deviation: Define the displacement between the bands.

Type: Choose from Simple, Linear Weight, or Exponential.

Data: Choose from Open, High, Low, or Close.

Display as: Choose to view as a Histogram or Line.

B+/B-: Choose the color, line style, and line thickness of your line.

View up to four **Thresholds** at values and colors of your choice. Choose when you want **Buy/Sell Arrows** to show and what color.

Price Volume Oscillator (PVO)

The PVO is primarily used to identify periods of expanding or contracting volume.

Centerline Crossovers: The PVO oscillates above and below the zero line. A PVO above zero indicates that volume levels are generally above average and relatively heavy. When the PVO is below zero, volume levels are generally below average and light. When PVO is positive, the shorter EMA of volume is greater than the longer EMA of volume. When PVO is negative, the shorter EMA of volume is less than the longer EMA of volume.

Directional Movement: The general overall direction of the PVO gives the trader a visual of market momentum and direction. A rising PVO signals volume levels are increasing, and a falling PVO signals volume levels are decreasing.

Moving Average Crossovers: The last variable in the PVO forms the signal line. For example, PVO (12,26,9) would include a 9-day EMA of PVO as well as a histogram representing the difference between the PVO and its 9-day EMA. When PVO moves above its signal line, volume levels are generally increasing. When PVO moves below its signal line, volume levels are generally decreasing.

Movements in the PVO are completely separate from price movements. Movements in PVO can correlate with price movements to assess the degree of buying or selling pressure.

Calculation

The calculation of PVO is here:

$$\text{Volume Oscillator (\%)} - \text{PVO} = [(Vol\ 12\text{-day EMA} - Vol\ 26\text{-day EMA}) / Vol\ 12\text{-day EMA}] \times 100$$

Increasing and decreasing the exponential moving average variables changes the PVO to reflect a longer or shorter trading time period. The absolute values of the PVO indicator are not as important as the crossovers of the moving averages as well as a crossover above or below the zero line.

There are three additional methods on the next page of acquiring market strength and weakness information from the PVO.

- When the PVO crosses above the zero line, volume is increasing and an increase in price is anticipated.
- When the PVO crosses below the zero line, volume is decreasing and a decrease in price and a weakening market are anticipated.
- Simple directional movement can be one of the greatest strengths of the PVO indicator. When the line is ascending, volume is increasing, so therefore markets should increase. When the line is descending, volume is decreasing, therefore the market should weaken and decrease.

Buy/Sell Signals

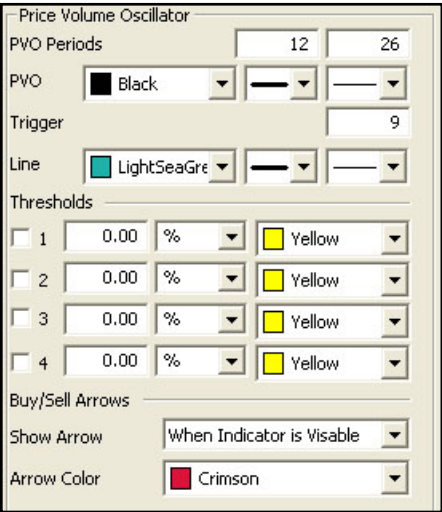
A buy signal occurs when the PVO line crosses from below the trigger line to above the trigger line. A sell signal occurs when the PVO line crosses from above the trigger line to below the trigger line.



Preferences

Right-click on the PVO button in your Indicator toolbar and select PVO Settings. The Preferences Tab will open in the Control Panel and the PVO preferences will be displayed. (Once you click on the chart, the Preference tab will go back to chart settings.)

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.



PVO Periods: Specify the number of days to be used in calculating the PVO.

PVO: Choose the color, line style, and line thickness of your line.

Trigger: Specify the number of days used in calculating the trigger period.

Line: Choose the color, line style, and line thickness of your trigger line.

View up to four **Thresholds** at values and colors of your choice. Choose when you want **Buy/Sell Arrows** to show and what color.

Rate of Change (ROC)

The ROC indicator is used to help a trader determine the rate at which a market is either increasing or decreasing in strength or weakness. A rising rate of change indicates an advancing market, while a decreasing rate of change indicates a declining market. As the rate of change line approaches the centerline, the rate of change is considered to be in equilibrium. This is somewhat of a misnomer, since the ROC is on a relative scale and scales against historical rates. What is equilibrium today will not be the equilibrium line down the road, and what is not equilibrium today will appear to be so from a historical point of view.

Comparing the ROC's of different time-spans improves the accuracy of the analysis. A 12 month period is usually the most reliable for long-term trends, and a 3 or 6 month period works well for intermediate trends. A 10 or 12-day ROC is a good short-term indicator, oscillating in a fairly regular cycle.

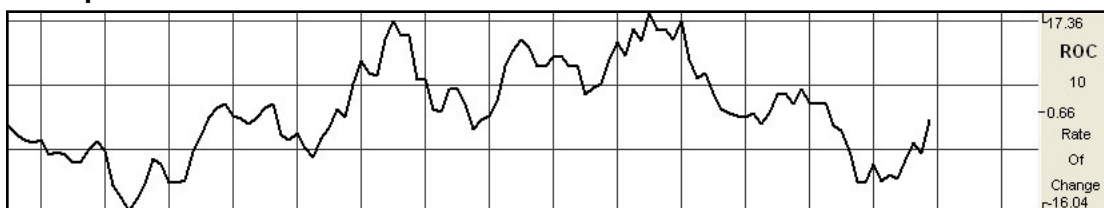
The lower the ROC, the more undersold the market and the more likely a recovery. Although the opposite may hold true in that the higher the ROC, the more overbought the market, both extremes can indicate the formation of a sideways channel.

Calculations

The calculation for the ROC is here:

$$ROC = 100 \times (Today's\ close - Close\ 10\ periods\ ago) / (Close\ 10\ periods\ ago)$$

Example of the ROC in the Indicator Window



Preferences

Right-click on the ROC button in your Indicator toolbar and select ROC Settings. The Preferences Tab will open in the Control Panel and the ROC preferences will be displayed. (Once you click on the chart, the Preference tab will go back to chart settings.)

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.

Period: Specify the number of days to be used in calculating the SRSI.

Line: Choose the color, line style, and line thickness of your line.

View up to four **Thresholds** at values and colors of your choice.

Relative Strength Index (RSI)

The RSI was developed by J. Welles Wilder, Jr., as a measure of the market's strength or weakness. The principle idea of this study is that it will indicate a general zone that the market is in, either the buy zone or the sell zone. This indicator is similar to Stochastics in that it shows regions of overbought and oversold. This indicator should be incorporated into a system rather than using it by itself. Wilder's popular indicator is known for its accuracy and its ability to compensate for erratic price movement.

RSI computes the difference in recent prices as a solid line and plots this line on a scale similar to the scale used by Stochastics. The area above 70 is generally considered to be the overbought region, and the region below 30 is referred to as the oversold region. Simply selling in the overbought region and buying when the RSI is in the oversold region is not a consistent method of trade. Trade signals are not generated until the RSI leaves these regions. A sell signal would not be present until the RSI has begun sloping down and leaves the 70 region.

A buy signal, in the simple methodology associated with this pattern, is derived when RSI leaves the oversold region, crosses from below 30 to above it. Just like sell signals, RSI buy signals are present when the market begins to turn and the indicator leaves the oversold region.

Another use of the RSI is to look for a divergence in prices, in the case of a market making higher highs or lower lows and the RSI failing to follow suit. This difference in the indicator and the market could be a signal that the market lacks the momentum to continue its current price direction. So, you may be able to take a position sooner using this strategy, than you would with the previous way. Wilder says that this divergence is "the single most indicative characteristic of the RSI."

In its calculation the RSI indicator uses a moving average of price changes over the period. You can select which type of moving average is used to produce the desired amount of smoothing on the RSI indicator.

Calculation

The RSI computations are not difficult, but they are tedious. You first calculate the difference between the current closing price and the previous closing price:

$$DIF_t = Close_t - Close_{t-1}$$

If that difference is a positive value, then it is an up period, which means the current close is higher than the previous close. If the difference is negative, then it is a down period, which means the current close is below the previous close. The DOWN value is always a positive number for all computations. It is the absolute value of a negative DIF. The worksheet on the next page shows the calculations needed to create a 9 period RSI.

Day	Current Close	Previous Close	Dif	Up	Down
1	7450	7430	+20	20	0
2	7460	7450	+10	10	0
3	7470	7460	+10	10	0
4	7480	7470	+10	10	0
5	7485	7480	+5	5	0
6	7490	7485	+5	6	0
7	7480	7490	-10	0	10
8	7470	7480	-10	0	10
9	7455	7470	-15	0	15
			Totals	60	35

You now compute the up and down averages:

$$U_t = (UP_1 + \dots + UP_n) / n$$

$$D_t = (DOWN_1 + \dots + DOWN_n) / n$$

U_T: The up average for the current period.

D_T: The down average for the current period.

UP_n: The UP value for the nth period.

DOWN_n: The DOWN value for the nth period.

n: The number of periods for the RSI.

Use the values from the worksheet to find the up average:

$$U = 60 / 9$$

$$= 6.67$$

Use the same values to find the down average:

$$D = 35 / 9$$

$$= 3.89$$

The general formula for the RSI:

$$RSI_t = (U_T / (U_T + D_T)) \times 100$$

Use the general formula with the above values:

$$RSI = (6.67 / (6.67 + 3.89)) \times 100$$

$$= 63.16$$

Assume the market continues the downward trend. The next DIF value is -15, which sets the UP value to 0 and the DOWN value to 15. Calculate the next up and down average by using Wilder's accumulative moving average technique:

$$UT = ((UT-1 \times (n-1)) + UP_t) / n$$

$$= ((6.67 \times (9 - 1)) + 0) / 9$$

$$= 5.93$$

$$DT = ((DT-1 \times (n-1)) + DOWN_t) / n$$

$$= ((3.89 \times (9 - 1)) + 15) / 9$$

$$= 5.12$$

The value for the new RSI equals 53.67:

$$RSI = ((5.93) / (5.93 + 5.12)) \times 100$$

$$= 53.67$$

Buy/Sell Signals

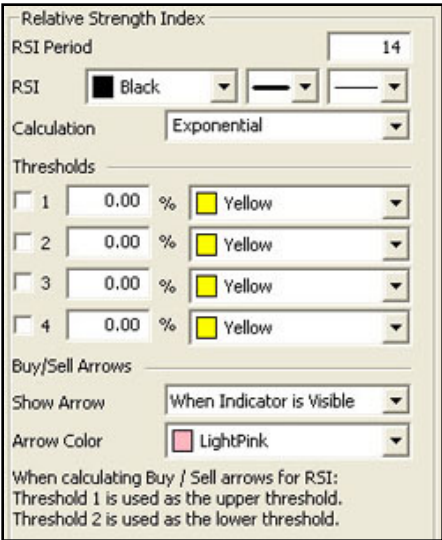
A buy signal occurs when the RSI line crosses from below the lower threshold to above the lower threshold. A sell signal occurs when the RSI line crosses from above the upper threshold to below the upper threshold.



Preferences

Right-click on the RSI button in your Indicator toolbar and select RSI Settings. The Preferences Tab will open in the Control Panel and the RSI preferences will be displayed. (Once you click on the chart, the Preference tab will go back to chart settings.)

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.



RSI Period: The number of bars, or period, used to calculate the study. Default is 14.

RSI: Choose the color, line style, and line thickness of your line.

Calculation: Choose between Exponential, Simple, and Wilder’s Smoothing calculations.

View up to four **Thresholds** at values and colors of your choice. When calculating buy/sell signals, Threshold 1 is used as the upper threshold and Threshold 2 is used as the lower threshold (default values set at 70 and 30).

Choose when you want **Buy/Sell Arrows** to show and what color.

Stochastic Relative Strength Index (SRSI)

The Stochastics indicator is an oscillator that compares a securities closing price in relationship to its price range over a given period of time. The RSI indicator is also an oscillator which represents the internal strength of the equities price. Both these indicators work on an overbought and oversold formula.

The Stochastics RSI is a combination of these two indicators, where the %K within the Stochastics formula is replaced by the RSI. The formula is then set on a 0 to 100 scale for both the Stochastics indicator as well as the RSI is read in much the same manner as the traditional RSI. When the SRSI reaches up into the upper region above the upper threshold line, the market is considered overbought and anticipate a reversal of the trend. When the SRSI reaches down into the lower region below the lower threshold, the market is considered oversold and a reversal is anticipated. Traditionally, the upper threshold marker is set at 70% and the lower marker is set at 30%.

Calculation

The calculation for the SRSI is here:

$$\text{StochRSI} = (\text{RSI} - \text{LowRSIn}) / (\text{HighRSIn} - \text{LowRSIn})$$

RSI: The current level of the RSI indicator.

LowRSIn: The lowest level the RSI reached over the last n periods.

HighRSIn: The highest level the RSI reached over the last n periods.

Buy/Sell Signals

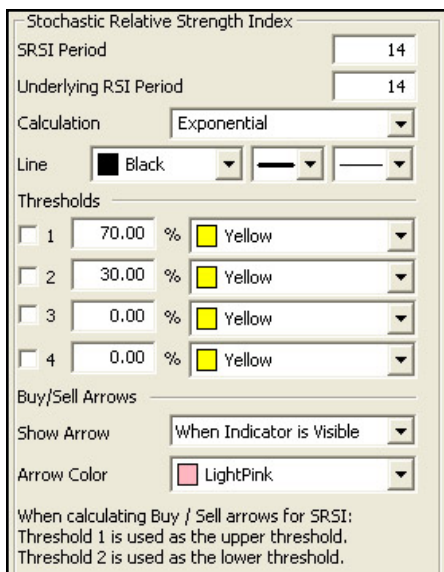
A buy signal occurs when the SRSI line crosses from below the lower threshold to above the lower threshold into the channel. A sell signal occurs when the SRSI line crosses from above the upper threshold to below the upper threshold into the channel.



Preferences

Right-click on the SRSI button in your Indicator toolbar and select SRSI Settings. The Preferences Tab will open in the Control Panel and the SRSI preferences will be displayed. (Once you click on the chart, the Preference tab will go back to chart settings.)

Restore Settings: TNT Default will change your settings back to the original software settings. **My Default** will change current settings to your personalized default settings. **Apply To All Charts** will apply your selected settings on all open charts. **Save As My Default** will save your current personal settings.



SRSI Period: Specify the number of days to be used in calculating the SRSI.

Underlying RSI Period: Specify the number of days used in calculating the Underlying RSI.

Calculation: Choose from Exponential, Simple, or Wilder's Smoothing.

Line: Choose the color, line style, and line thickness of your line.

View up to four **Thresholds** at values and colors of your choice. When calculating buy/sell signals, Threshold 1 is used as the upper threshold and Threshold 2 is used as the lower threshold (default values set at 70 and 30).

Choose when you want **Buy/Sell Arrows** to show and what color.

Slow Stochastics (SSTO)

The slower version of Stochastics is commonly believed to be a more reliable indicator. In this version of Stochastics, the more sensitive %K line is dropped. The original %D now becomes the slower line %K. The new %D is a 3-day moving average of the %K. This basically gives you a smoothed version of the original indicator. This modified counter trend indicator is less reactive but considered to be more accurate.

Slow Stochastics are interpreted the same as Fast Stochastics. Quite often the faster of the two indicators moves in and out of the overbought/oversold regions quickly.

Calculation

The calculations for the slow stochastic are similar to the normal stochastic. The first step in computing the stochastic indicator is to determine the n period high and low. Suppose you specified twenty periods for the stochastic. Determine the highest high and lowest low during the last twenty trading intervals. It determines the trading range for that time period. The trading range changes on a continuous basis.

The calculations for the %K is here:

$$\%K_t = ((Close_t - Low_n) / (High_n - Low_n)) \times 100$$

%K_t: The value for the first %K for the current time period.

Close_t: The closing price for the current period.

Low_n: The lowest low during the n periods.

High_n: The highest high during the n time periods.

n: The value you specify.

Once you obtain the %K value, you start computing the %D value, which is an accumulative moving average. Since the %D is a moving average of a moving average, it requires several trading intervals before the values are calculated properly. If you specify a 20 period stochastic, the software system requires 26 trading intervals before it can calculate valid %K and %D values. The formula for the %D is here:

$$\%DT = ((\%DT-1 \times 2) + \%K_t) / 3$$

%DT: The value for %D in the current period.

%DT-1: The value for %D in the previous time period.

%K_t: The value for %K in the current period.

The values 2 and 3 are constants. You specify the constants and the length of the time period to examine for the trading range.

Once the %K and %D values for the normal stochastic are derived, the slow stochastic can be computed. The formula for the slow stochastic is here:

$$\%KSLOW = \%DNORMAL$$

$$\%DSLOW_t = ((\%D\ SLOW_{t-1} \times 2) + \%K\ SLOW_{t-1}) / 3$$

%KSLOW: The %D for the normal stochastic.

%DSLOW_t: Slow %D value for the current period.

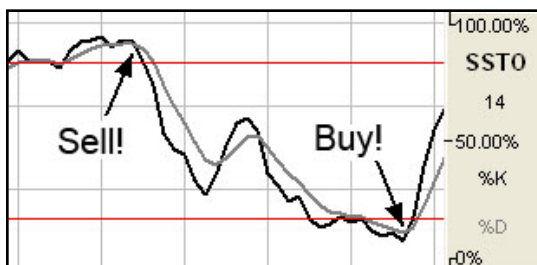
%DSLOW_{t-1}: The slow %D for the previous period.

%KSLOW_{t-1}: The slow %K for the previous period.

The values 2 and 3 are the smoothing constants. You may select different values.

Buy/Sell Signals

A buy signal occurs when the %K line crosses from below %D to above %D and both lines are less than the lower threshold. A sell signal occurs when the %K line crosses from above the %D line to below the %D line and both lines are greater than the upper threshold.



Preferences

Right-click on the SSTO button in your Indicator toolbar and select SSTO Settings. The Preferences Tab will open in the Control Panel and the SSTO preferences will be displayed. (Once you click on the chart, the Preference tab will go back to chart settings.)

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.

Slow Stochastics

SSTO Period

Smoothing %K %D

%K

%D

Calculation

Thresholds

<input type="checkbox"/> 1	<input type="text" value="80.00"/>	%	<input type="text" value="Yellow"/>
<input type="checkbox"/> 2	<input type="text" value="20.00"/>	%	<input type="text" value="Yellow"/>
<input type="checkbox"/> 3	<input type="text" value="0.00"/>	%	<input type="text" value="Yellow"/>
<input type="checkbox"/> 4	<input type="text" value="0.00"/>	%	<input type="text" value="Yellow"/>

Buy/Sell Arrows

Show Arrow

Arrow Color

When calculating Buy / Sell arrows for SSTO:
 Threshold 1 is used as the upper threshold.
 Threshold 2 is used as the lower threshold.

SSTO Period: The number of periods used to determine the highest high and lowest low. Default is 14.

Smoothing: The number of periods used to determine the moving average for the %K and %D values.

%K/%D: Choose the color, line style, and line thickness of your %K and %D lines.

Calculation: Choose between Exponential, Simple, and Wilder's Smoothing calculations.

View up to four **Thresholds** at values and colors of your choice. When calculating buy/sell signals, Threshold 1 is used as the upper threshold and Threshold 2 is used as the lower threshold (default values set at 80 and 20).

Choose when you want **Buy/Sell Arrows** to show and what color.

Triple Exponential Average (TRIX)

The TRIX indicator is a momentum indicator designed to calculate the percent rate of change of a triple exponentially smoothed moving average. It is very similar in the way the MACD indicator works. Both indicators provide basically the same methodology behind generating market momentum and directional movement.

TRIX was designed to filter out the minor, less significant moves within a market trend. This is done, just as other traditional indicators have done in the past, by utilizing multiple moving averages.

Convergence and Divergence are common uses of the TRIX indicator. Adding the trigger line crossover provides the trader with a Buy/Sell Signal generated from the crossing of the two moving averages.

Calculation

To calculate TRIX, first pick a period with which to create an exponential moving average of the closing prices. For a 15-day period the calculations would look like this:

Calculate the 15-day exponential moving average of the closing price.

Calculate the 15-day exponential moving average of the moving average calculated in step #1.

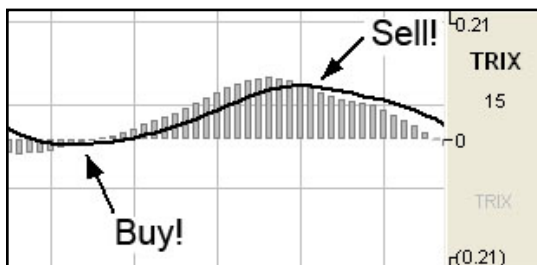
Calculate the 15-day exponential moving average of the moving average calculated in step #2.

The result is triple exponentially smoothing the moving average of closing prices, greatly reducing volatility.

Finally, calculate the 1-day percent change of the moving average calculated in step #3.

Buy/Sell Signals

A buy signal occurs when the TRIX value crosses from below the trigger line to above the trigger line. A sell signal occurs when the TRIX value crosses from above the trigger line to below the trigger line.



Preferences

Right-click on the TRIX button in your Indicator toolbar and select TRIX Settings. The Preferences Tab will open in the Control Panel and the TRIX preferences will be displayed. (Once you click on the chart, the Preference tab will go back to chart settings.)

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.

Period: Specify the number of days to be used in calculating the SRSI.

Line: Choose the color, line style, and line thickness of your line.

Trigger Period: Specify the number of days used in calculating the Underlying RSI.

Line: Choose the color, line style, and line thickness of your trigger line.

Display as: Choose if you want to see a histogram or line.

View up to four **Thresholds** at values and colors of your choice. Choose when you want **Buy/Sell Arrows** to show and what color.

Ultimate Oscillator (ULT)

This is another indicator introduced by Mr. Larry Williams. It seems to be another modification of the RSI indicator, as is his %R indicator. If you lay the three indicators on your chart, you'll see many similarities. The advantage of the ULT indicator is that the trader is given two additional variables in the formula to modify and finetune the action and reaction to the market price.

This indicator, as with the RSI indicator, works on an overbought and oversold region. Mr. Williams states that the upper threshold should start at 70% and the lower threshold at 30%, but depending on the market, the volatility, and the settings, you may need to adjust the thresholds to either higher or lower settings to obtain signals.

Once the ULT line crosses above the upper threshold into the overbought region, it is time to anticipate a reversal in price and lower prices to ensue. When the ULT line crosses below the lower threshold, it is time to anticipate a reversal in price and anticipate prices to rise once again. Many traders like to use a 50% line to reconfirm price action. Crossing the 50% line is a confirmation of the overall trend.

Calculation

The True Low (TL) is the lower of today's low or yesterday's close. Calculate today's Buying Pressure (BP) like this:

$$BP = \text{Today's close} - \text{Today's TL}$$

Calculate today's True Range (TR) by finding the largest outcome of one of the following equations:

$$\begin{aligned} TR = & \text{Today's High} - \text{Today's Low} \\ & \text{Today's High} - \text{Yesterday's Close} \\ & \text{Today's Close} - \text{Today's Low} \end{aligned}$$

Calculate *BPSum1*, *BPSum2*, and *BPSum3* by adding up all of the BPs for each of the three specified time frames. Calculate *TRSum1*, *TRSum2*, and *TRSum3* the same way with the TR's.

The Raw Ultimate Oscillator (RawUO) is calculated here:

$$\text{RawUO} = 4 \times (\text{BPSum1} / \text{TRSum1}) + 2 \times (\text{BPSum2} / \text{TRSum2}) + (\text{BPSum3} / \text{TRSum3})$$

The Final Ultimate Oscillator is calculated here:

$$\text{FUO} = [\text{RawUO} / (4 + 2 + 1)] \times 100$$

Buy/Sell Signals

A buy signal occurs when the ULT line crosses from below the lower threshold to above the lower threshold. A sell signal occurs when the ULT line crosses from above the upper threshold to below the upper threshold.



Preferences

Right-click on the ULT button in your Indicator toolbar and select ULT Settings. The Preferences Tab will open in the Control Panel and the ULT preferences will be displayed. (Once you click on the chart, the Preference tab will go back to chart settings.)

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.

Ultimate Oscillator

ULT Periods: 7, 14, 28

Line: Black

Thresholds:

Threshold	Value	Unit	Color
1	70.00	%	Yellow
2	30.00	%	Yellow
3	0.00	%	Yellow
4	0.00	%	Yellow

Buy/Sell Arrows:

Show Arrow: When Indicator is Visible

Arrow Color: HoneyDew

When calculating Buy / Sell arrows for ULT:
Threshold 1 is used as the upper threshold.
Threshold 2 is used as the lower threshold.

ULT Periods: Specify the number of days to be used in calculating the SRSI.

Line: Choose the color, line style, and line thickness of your line.

View up to four **Thresholds** at values and colors of your choice. When calculating buy/sell signals, Threshold 1 is used as the upper threshold and Threshold 2 is used as the lower threshold (default values set at 70 and 30).

Choose when you want **Buy/Sell Arrows** to show and what color.

Volume/Open Interest (V/OI)

Volume is a measurement of the number of contracts traded in a day. It is a sign of market activity. Open Interest is the number of contracts outstanding or those held overnight. This is a measure of market participation. In liquid markets, these numbers will be consistently higher than in a thin or illiquid market. These numbers are always a day behind, because it takes the exchange that long to tabulate these figures. When displayed, Track 'n Trade 5.0 offsets these values to put them beneath their respective data in the chart, consequently there is not a value for either volume or open interest for the most recent day of any contract. Volume and Open Interest indicate participation and urgency. This tells the trader which market is the correct one to be in based on its participation.

Volume measures the number of contracts that changed hands during that trading session. This indicator of market activity can show whether trade was heavy or light, giving you an idea of the possible volatility present in that market. Contracts that have not been settled at the end of the day are represented by open interest. New buyers and sellers entering or exiting the market change open interest.

The key to this indicator is to look at volume as a percentage of open interest. V/OI does not give straight buy or sell signals or have set trading rules. Rather it shows the cyclical tendencies of the market. The flow of the underlying market can be represented. Looking at V/OI shows whether new buyers or sellers are entering the market or if they are liquidating positions.

There are basic common sense rules for this indicator. If the prices are up and V/OI is increasing, the market is strong. If the prices are up and V/OI is declining, the market is getting weaker. If the prices are down and V/OI is rising, the market is getting stronger. If the prices are down and V/OI is declining, the market is getting weaker.

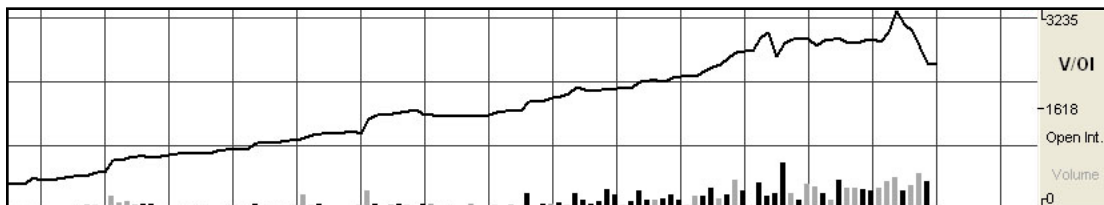
In bull markets, volume tends to increase during rallies, and tends to decrease on reactions. In bear markets, volume tends to increase on declines and decrease during rallies. Trading volume usually increases dramatically at tops and bottoms.

Looking at the volume and open interest will show you which contract month to be in. When looking at trading a specific commodity, it is important to know which contract month to be in. Commodities expire or are delivered several times a year. This creates a situation where traders are constantly “rolling over” from one contract month to the next. This means that traders need to know which month to be in. V/OI is the tool that shows us which contract month to be in. The months that have the highest open interest are usually the best to be in because they are the most liquid. The months that have higher volume will afford the trader a better opportunity to enter and exit the market.

Calculation

This study has no computations. The values for the volume and open interest are transmitted from the exchanges. However, the actual volume and open interest figures are always one day behind price information. You will not know Monday's volume and open interest until Tuesday at approximately noon (for U.S. markets - central time). That is due to the exchanges and their reporting requirements.

Example of V/OI in the Indicator Window



Preferences

Right-click on the V/OI button in your Indicator toolbar and select V/OI Settings. The Preferences Tab will open in the Control Panel and the V/OI preferences will be displayed. (Once you click on the chart, the Preference tab will go back to chart settings.)

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.

OI Line: Choose the color, line style, and line thickness of your line.

Volume Bar Colors: Choose the colors for your down and up bars.

Selecting **Same Scale** will make the volume and open interest amounts on the same value scale.

Volume in Status Bar: Choose if you would like to see the volume amount in the status bar at the bottom of your screen. By deselecting, the Open Interest value will appear in its place.

View up to four **Thresholds** at values and colors of your choice.

Overlay Indicators

Learn to Analyze the Signs and Signals

Introduction

To display the Overlay Indicators, right-click on the Chart Window to view the dropdown menu. Select the name of the Overlay Indicator that you would like to view. A checkmark will appear next to any indicators you have selected and all selected indicators will show directly on your chart, not in the indicator window. To remove an overlay indicator from your chart, click on the indicator in the dropdown menu again and the checkmark will disappear.

Play To: 2/26/2007	
Tick Style	▶
✓ Proportional Width	
✓ Autoscale Charts	
✓ Show Buy/Sell Arrows	
Chart Properties	
Overlay Properties	▶
On Screen Text	▶
Advantage Lines	
Bulls 'n Bears	
Zig Zag	
✓ Alligator	
Bollinger Bands	
Donchian Channels	
Historical Averages	
Keltner Bands	
Moving Averages	
Parabolic SAR	
Pivot Points	▶
10 x 8 MAC	
Apply Settings To All Charts	
Save Settings As My Defaults	
Help	

Right-click Menu

Tick Style, Proportional Width, Autoscale Charts, and Show Buy/Sell Arrows are explained in the Chartbooks section of the Getting Started chapter.

If you select **Chart Properties**, the chart preferences will open in the Control Panel. You can use this to change how your chart, price bars, and rulers look. (See the Charting Preferences section of the Getting Started chapter.)

To view the preferences for one of your indicators, highlight **Overlay Properties**. Any overlay indicators you have selected will appear in the menu to the side. Select the indicator you would like to modify, and the preferences will open in the Control Panel. The Overlay Properties option will only appear in your right-click menu if you have an indicator selected.

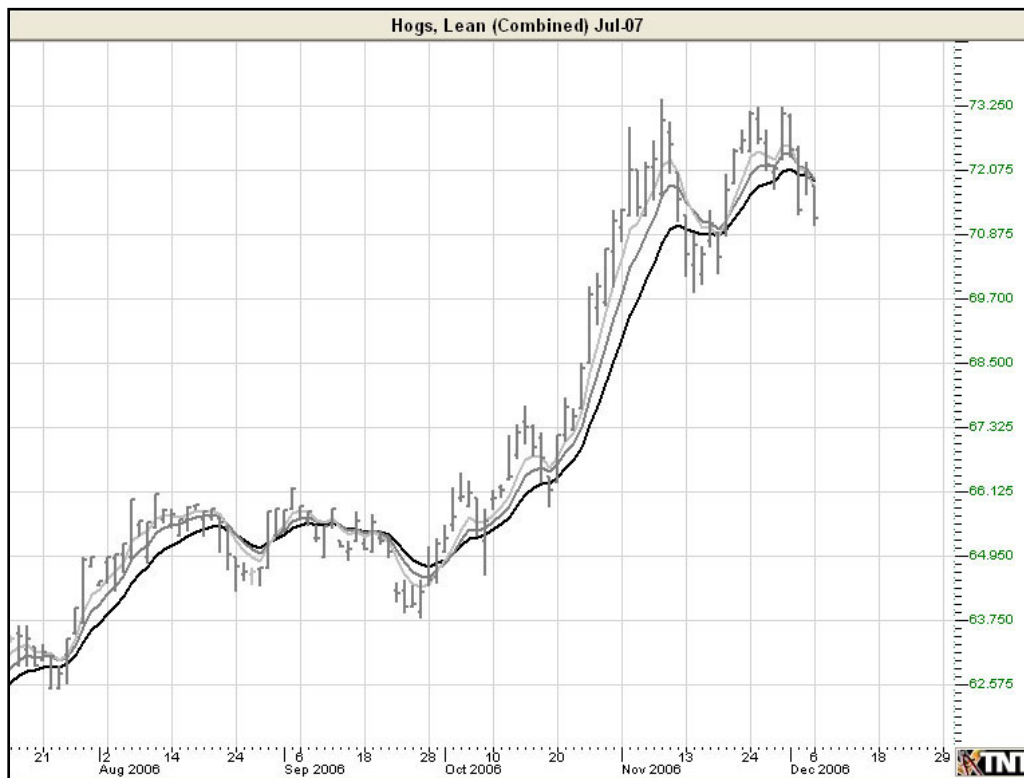
Highlight **On Screen Text** and select if you would like to view indicator values on the chart window and where you would like them to be located on your chart.

The Apply Settings To All Charts and Save Settings As My Defaults options work just like the similar buttons in the Preferences section of your control panel. **Apply Settings To All Charts** will apply your selected settings on all open charts. **Save Settings As My Defaults** will save your current personal settings.

Alligator

A unique use of fractal geometry and nonlinear dynamics is used to create the method of calculations for the Alligator Indicator. Used in combination with the Gator Indicator, the Alligator has proved to be effective at pinpointing large market trends.

Example of the Alligator



Components

Alligator's Jaw (blue line): The Balance Line for the timeframe that was used to build the chart (13 period Smoothed Moving Average, moved into the future by 8 bars).

Alligator's Teeth (red line): The Balance Line for the value timeframe of one level lower (8 period Smoothed Moving Average, moved by 5 bars into the future).

Alligator's Lips (green line): The Balance Line for the value timeframe, one more level lower (5 period Smoothed Moving Average, moved by 3 bars into the future).

The Lips, Teeth, and Jaw of the Alligator show the interaction of different time periods. As clear trends can be seen only 15 to 30 percent of the time, it is essential to follow them and refrain from working on markets that fluctuate only within certain price periods.

When the Jaw, Teeth and Lips are closed or intertwined, the Alligator is going to sleep or is asleep already. As it sleeps, it gets hungrier and hungrier: the longer it sleeps, the hungrier it will be when it wakes up. The first thing it does after it wakes up is to open its mouth and yawn. Then the smell of food comes to its nostrils: flesh of a bull or flesh of a bear, and the Alligator starts to hunt it. Having eaten enough to feel quite full, the Alligator starts to lose interest in the food/price (Balance Lines join together), and this is the time to fix the profit.

Preferences

Open the Preference tab from the Control Panel on the left of your screen. Select the Alligator line on your screen. The preferences will appear in the Control Panel. (Once you click on the chart, the Preference tab will go back to chart settings.)

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.

Alligator

	Period	Shift
Jaws	13	8
Teeth	8	5
Lips	5	3

TypeExponential

DataClose

Jaws	Blue		
Teeth	Red		
Lips	Lime		

- Jaws, Teeth, Lips:** Specify your periods and shift specifications.
- Type:** Select Simple, Linear Weight, or Exponential.
- Data:** Select Open, High, Low, or Close.
- Jaws, Teeth, Lips:** Choose the color, line style, and line thickness of your indicator line.

Bollinger Bands

Bollinger Bands are a type of trading envelope. They are lines at an interval around the moving average. They consist of a moving average and two different standard deviations represented as a line above the MA (Moving Average) and a line below the MA. The line above is the MA plus two standard deviations; the line below is the MA minus two standard deviations. Bollinger Bands are used to determine overbought and oversold conditions and to project price targets.

John Bollinger created Bollinger Bands in an effort to gauge the volatility and condition of a market. These bands are used to determine the trading range and give an indication of when to buy and when to sell. Bollinger Bands are also used to indicate market volatility, the wider the bands the greater the volatility. Inversely, the narrower the bands, the lesser the volatility. By plotting two lines at an interval around a moving average, Bollinger bands give a good indication of market conditions and price relation. The moving average which the band is based on works as an indicator to confirm trade signals.

Calculation

Calculate the moving average with this formula:

$$MA = \frac{(P_1 + \dots + P_n)}{n}$$

Subtract the moving average from each of the individual data points used in the moving average calculation. This gives you a list of deviations from the average. Square each deviation and add them all together. Divide this sum by the number of periods you selected.

$$d = \frac{(P_1 - MA)^2 + (P_2 - MA)^2 + \dots + (P_n - MA)^2}{n}$$

Take the square root of d . This gives you the standard deviation.

$$\delta = \sqrt{d}$$

Compute the bands by using the following formulas:

$$\text{Upper Band} = MA + 2\delta$$

$$\text{Middle Band} = MA$$

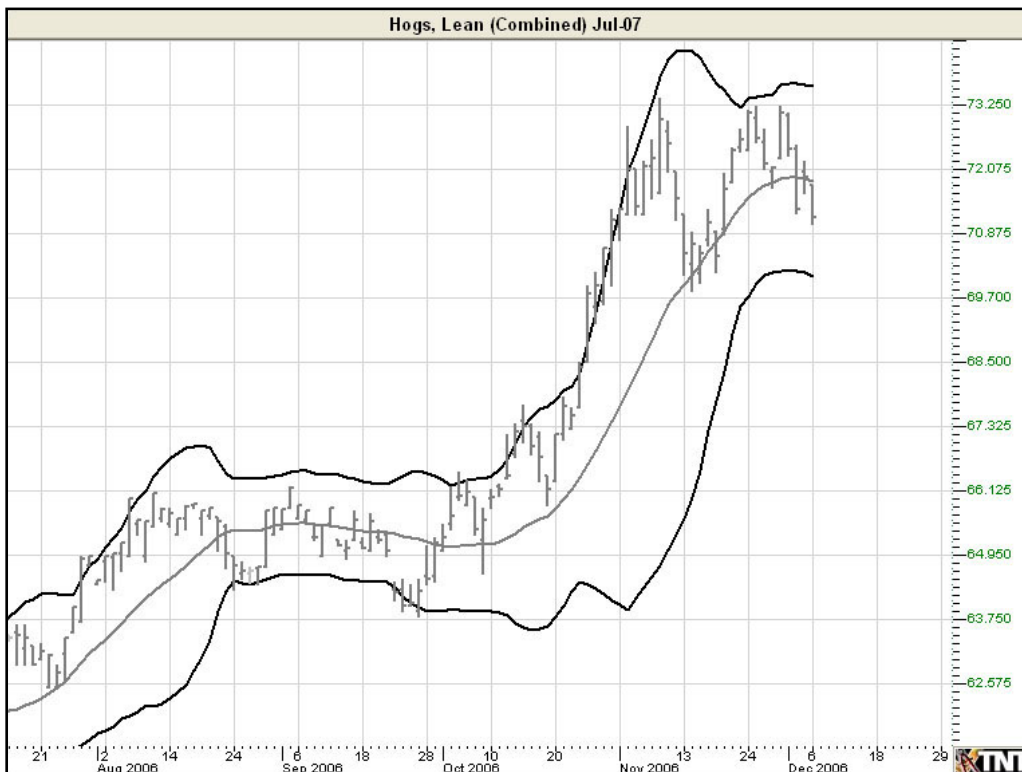
$$\text{Lower Band} = MA - 2\delta$$

P_n : The price you pay for the n th interval.

n : The number of periods you select.

Buy/Sell Signals

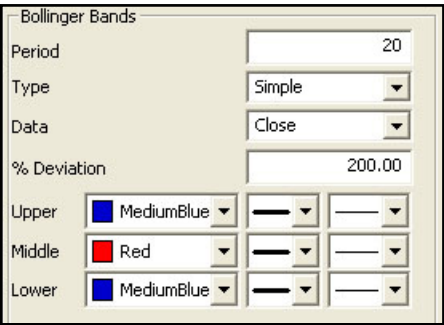
A buy signal occurs when a chart bottom is below the lower band followed by a bottom above the lower band. A sell signal occurs when a chart top is above the uppermost band followed by another top that is below the upper band.



Preferences

Open the Preference tab from the Control Panel on the left of your screen. Select the Bollinger Bands line on your screen. The preferences will appear in the Control Panel. (Once you click on the chart, the Preference tab will go back to chart settings.)

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.



Period: The number of bars used to calculate the study. John Bollinger, the creator of this study, states that those periods of less than ten days do not seem to work well for Bollinger Bands. He says the optimal period for most applications is 20 or 21. Default is 20.

Type: Select Simple, Linear Weight, or Exponential.

Data: Select Open, High, Low, or Close.

% Deviation: The percent of one standard deviation. John Bollinger suggests that if you reduce the number of days used to calculate the bands, you should also reduce the number of deviations and vise versa. For example, 200 percent of a standard deviation means two deviations above and two deviations below the moving average. If you use a period of 50, you may want to use 250 percent of a standard deviation. For a period of 10, you may want to use 150 or 100 percent.

Upper, Middle, Lower: Choose the color, line style, and line thickness of your indicator line.

Donchian Channels (DON)

Donchian Channels were created by Richard Donchian, an expert in trends. The DON is a simple trend breakout system. The channel works well in trending markets, but not as well in sideways moving markets.

Donchian Channels measure volatility by placing bands at a specified period deviation. These bands are charted two standard deviations from the market price. As the market price changes, the value of two standard deviations also changes. This value is what comprises the Donchian Channel's band width, representing the expanding and contracting of the bands based on recent price volatility.

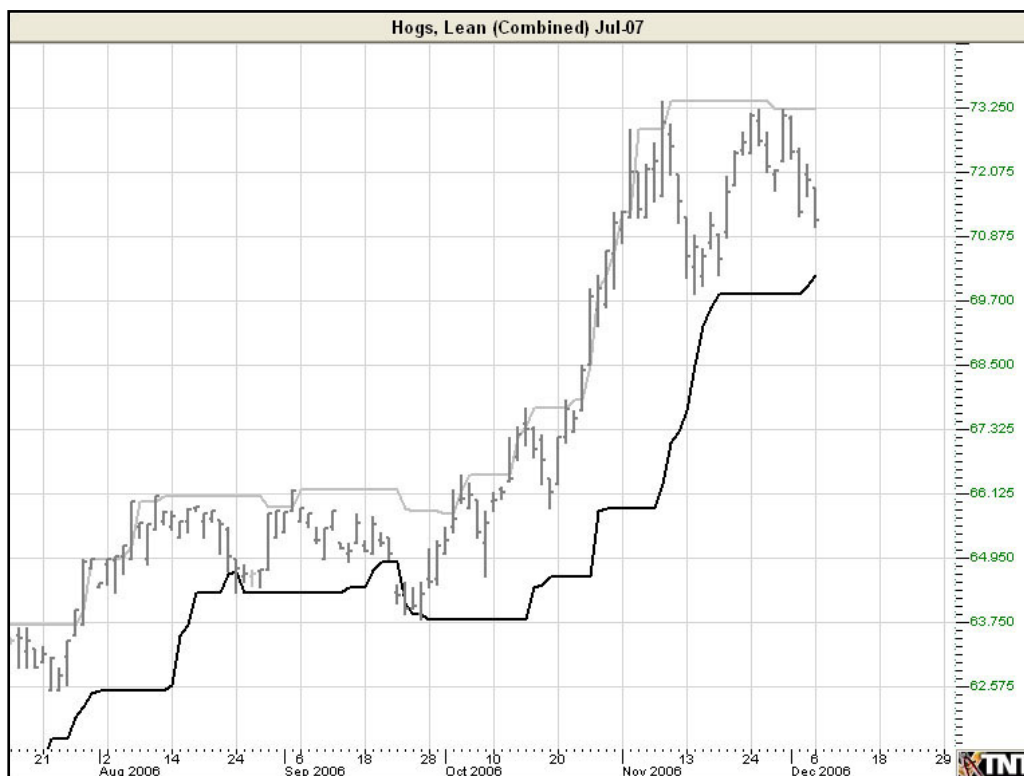
Calculation

The calculation of the DON is here:

Donchian Channel High = $MAX(HI, n)$

Donchian Channel Low = $MAX(LO, n)$

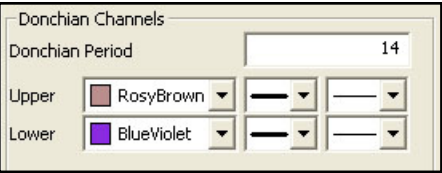
Example of Donchian Channels



Preferences

Open the Preference tab from the Control Panel on the left of your screen. Select the Donchian Channels line on your screen. The preferences will appear in the Control Panel. (Once you click on the chart, the Preference tab will go back to chart settings.)

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.



Donchian Period: Specify the number of days in a period.

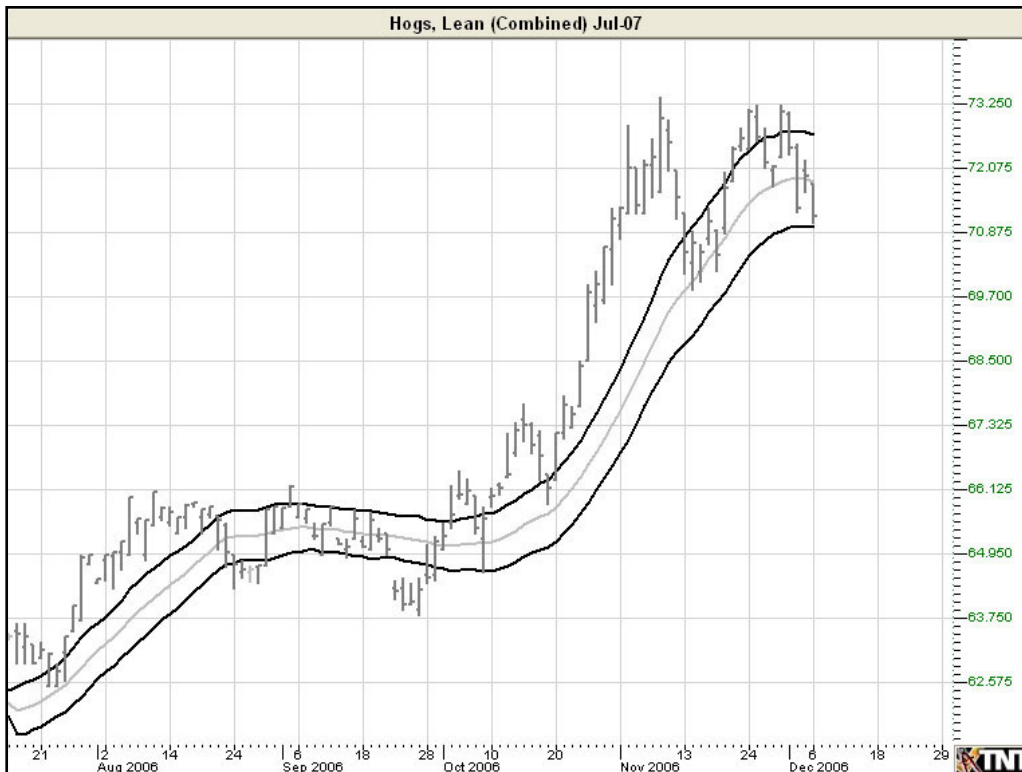
Upper, Lower: Choose the color, line style, and line thickness of your indicator line.

Keltner Bands

Kelter Bands were developed by Chester Keltner and Modified by Linda Raschke. They are traditional moving average envelopes based on Exponential Moving Averages. The probability is that prices will remain within the channel, as with all band-type indicators. A break above the channel is an anticipation of higher prices. When prices close below the lower band, we anticipate lower prices.

The middle line (20 period EMA) in a rising market should provide support. In a falling market, the middle line should provide resistance. Keltner Bands, as with any moving average indicator, seem to work great in strongly trending markets, but not so well in sideways markets. Just like all trend-following systems, the Keltner Bands are not meant to spot tops or bottoms. Use the Keltner Bands in conjunction with other indicators such as RSI or MACD. Using it in combination with either of these will help provide verification of the strength of a market.

Example of Keltner Bands



Calculation

The calculation for the top, or Plus Band, is here:

$2 \text{ (ATR over 10 periods)} + (20 \text{ period exponential moving average})$

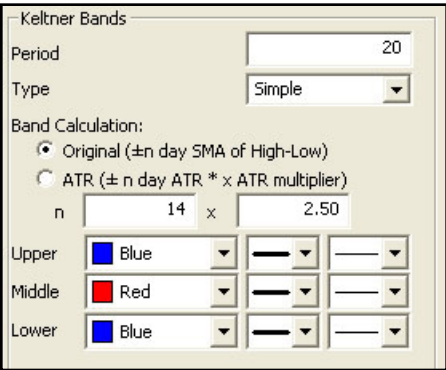
The calculation for the bottom, or Minus Band, is here:

$2 \text{ (ATR over 10 periods)} - (20 \text{ period exponential moving average})$

Preferences

Open the Preference tab from the Control Panel on the left of your screen. Select the Keltner Bands line on your screen. The preferences will appear in the Control Panel. (Once you click on the chart, the Preference tab will go back to chart settings.)

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.



Period: Specify the number of days used.

Type: Select Simple, Linear Weight, or Exponential.

Band Calculation: Select Original or ATR and enter values of your own.

Upper, Middle, Lower: Choose the color, line style, and line thickness of your indicator line.

Moving Average Lines

The moving average, or simple moving average, represents the average of the last several closing prices. The moving average is simple to compute, easy to understand, and reliable under tests. This simplicity is the strength of the moving average.

The basic moving average is computed the same as any other mathematical average. The most common way of determining the moving average of a market is to take the closing price over a certain number of days, add them together, and divide by the select number of days.

Moving averages are generally thought to be indicators of trend. For example, conventional interpretation is that once prices cross from below the moving average to above it, the trend is considered up. On the other hand, if prices go from above the moving average to below it, the trend of the market is considered down.

The purpose of the simple moving average is to track the progress of the trend. Moving averages can potentially keep you in the trend for a long time. The moving average gives you an indication of the trend being up (prices above the moving average) or down (below the moving average). However, the moving average gives you no indication of the length or duration of the trend.

Double Moving Average

Double moving averages use two different averages in tandem. The first average is generally a faster reacting average using a shorter period of time, usually 10 days. The second average is a slower reacting average that will indicate longer-term price movement.

Using these two averages together helps to alleviate whipsaws by giving a basis of comparison. The faster average breaking above the slower average is a buy signal, the faster average breaking below the slower average is a sell signal.

When using two different moving averages the trader gets a clearer picture of price indications. By combining a slower moving 20-day average, with a quicker reacting 10-day average, you can see where the long-term indications are going.

You would sell once the faster moving average crosses below the slower trend because that's an indication of change in trend. Near-term prices should be rising at a greater rate than longer-term prices in a good upward trending market, and vice versa for a down trend.

Triple Moving Average

The system of triple moving averages is employed by plotting three different moving averages together. The first of these averages is a faster average that only looks at the short-term price direction. The second average is a medium average that reacts to a longer period of time, but not as long as the final average. The third average is the slowest to react, because it takes an average of the longest period of time.

A 10, 20, and 40 day moving average system would be considered a triple moving average. The first average, the 10-day, is the quickest to move when prices show a change. The second average, the 20-day, is the medium average that does not show change until the prices have moved for a longer period of time. Finally the slowest moving of the averages is the 40-day. This slow average will not indicate a difference until prices have made a significant move. Shorter-term moving averages, being more sensitive to changes in price, are said to follow the trend more closely. The middle or medium average would follow less closely and the slowest or least sensitive average would lag the most.

The use of the triple moving average is to buy when all three averages move to be in an upward trend or to sell when these averages are in a downtrend. The upward trend appears when the fastest average is higher than both of the other averages, the medium is above the slowest, and the longer term moving average is on the bottom.

This look would be reversed for a strong down trend with slow average on top, followed by the medium average, and the fastest on bottom.

Calculation

The calculation for the moving average is here:

$$Mat = (P1 + \dots + Pn) / n$$

Mat: The moving average for the current period.

Pn: The price for the *n*th interval.

n: The length of the moving average.

Compute the average of the past *n* intervals using the price specified for that period. Now use real values to compute a five interval moving average. If you assume the following prices, the calculations are here:

$$\begin{aligned} MA &= (7380 + 7375 + 7385 + 7390 + 7395) / 5 \\ &= 36925 / 5 \\ &= 7385 \end{aligned}$$

The calculation for the Linearly Weighted is here:

$$Mat = [(P1 \times (n - 1))] + \dots + [Pn \times (n - n)]$$

$$Denom = n + n-1 + n-2 + \dots + 1$$

$$MA = Mat / Denom$$

n : The length of the moving average.

Pn : The price for the n th interval.

MA : The moving average for the current period.

The calculation for the Exponential is here:

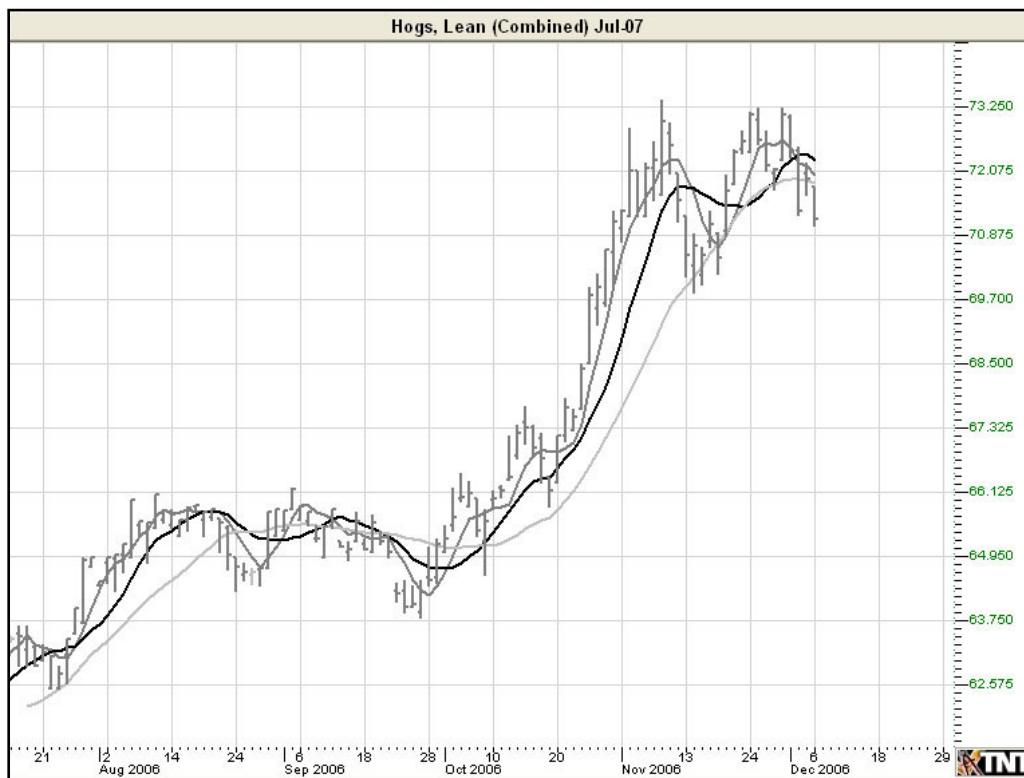
$$fPerc = 2 / (n + 1)$$

$$MA_t = (P \times fPerc) + [MA(t-1) \times (1 - fPerc)]$$

MA : The moving average for the current period.

t : The current time period.

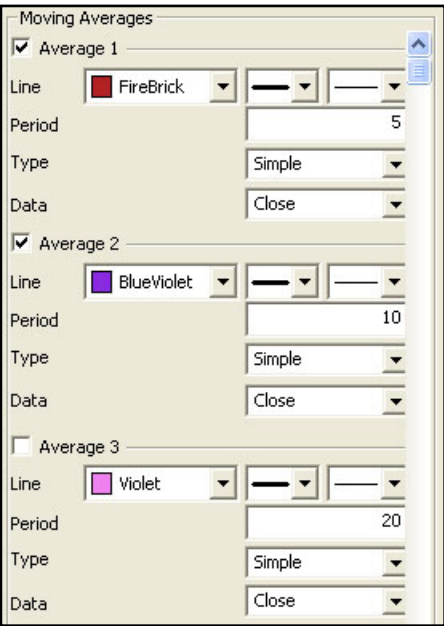
Example of Moving Averages



Preferences

Open the Preference tab from the Control Panel on the left of your screen. Select the moving average line on your screen. The preferences will appear in the Control Panel. (Once you click on the chart, the Preference tab will go back to chart settings.)

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.



Line: Choose the color, line style, and line thickness of your indicator line.

Period: The number of bars, or interval, used to calculate the moving averages.

Type: Select Simple, Linear Weight, or Exponential.

Data: Select Open, High, Low, Close, Mean, Median, or Mode.

Parabolic Stop and Reversal (PSAR)

The Parabolic SAR, developed by Welles Wilder, creator of RSI and DMI, sets trailing price stops for either long or short positions. Also referred to as the stop-and-reversal indicator, Parabolic SAR is more popular for setting stops than for establishing direction or trend. Wilder recommended establishing the trend first, and then trading with Parabolic SAR in the direction of the trend. If the trend is up, but the underlying price drops back below the trailing PSAR indicator, then sell or liquidate your long position. If the trend is down, and the underlying price rises above the trailing PSAR indicator then buy or liquidate your short position.

Calculation

Once the market establishes a direction, the initial SAR becomes the extreme price for the two intervals. The extreme price is either the lowest price or highest price for the two trading intervals. The short position uses the high, and the long position uses the low.

The calculation for the PSAR is here:

$$SAR_t = SAR_{t-1} + [a \times (EP_{trade} - SAR_{t-1})]$$

SAR_t: The stop and reverse price for the current interval.

SAR_{t-1}: The stop and reverse price for the previous interval.

a: The acceleration factor.

EP_{trade}: The extreme price for the trade.

The SAR is always the “stop and reverse” price point. This is the point you would want to liquidate your current position and establish the opposite position.

The acceleration factor, *a*, is a weighting factor. In Wilder’s work, the initial value for the acceleration factor is .02. The acceleration factor increases by a value of .02 each time the extreme price changes for the trade. You do not increment the acceleration factor if the extreme price fails to change. The value for *a*, the acceleration factor, never exceeds .20 in Wilder’s methodology.

The extreme price (*EP*) for the trade is the highest or lowest price achieved during the trade. If you have a long position, use the new highs as the extreme price. When you have a short position, use the new lows as the extreme price. The extreme price concept allows for normal market corrections without immediately triggering the *SAR* price. It keeps the *SAR* price moving in the direction of the market.

Example of PSAR



Preferences

Open the Preference tab from the Control Panel on the left of your screen. Select the PSAR on your screen. The preferences will appear in the Control Panel. (Once you click on the chart, the Preference tab will go back to chart settings.)

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.

Wilder's Parabolic Time/Price	
Initial Acceleration	<input type="text" value="20"/>
Additional Acceleration	<input type="text" value="20"/>
Acceleration Limit	<input type="text" value="200"/>
Style	<input type="text" value="Squares"/>
Color	<input type="text" value="Red"/>

Initial, Additional, Limit: Specify the calculation number you would like each section of the indicator.

Style: Choose how you would like the indicator displayed. Select squares, crosses, dots, or lines.

Color: Select the color of the indicator.

Pivot Points

Pivot points used to be referred to as “traders numbers” because of the popularity of these points amongst floor traders. The theory behind them is that markets tend to have overlap from one period to another. On most days, the daily high or low is within the previous day’s range, as with the previous week’s extremes, and previous month’s extremes. In this sense, pivot points are a counter trend indicator.

However, many traders believe that once one point is violated, the next point will be tested, making a violation of these support and resistance levels a clue in trend following. Though we cannot vouch for the truth of this statement, the popularity of pivot points amongst floor traders tends to make these points worth watching.

The popularity of these numbers can be seen on any day when the exchanges are cleaned-up. The trading floor is literally piled high with folded pieces of paper that contain pivot points calculated on them.

The uses of pivot points varies greatly by trader. The most common function of the daily pivot is as a guide. If prices are trading above the pivot point, then the trend is considered up. Traders may wish to take short-term positions on a violation of the daily pivot to the upside with an initial upside objective of the first resistance level. If prices stall or slow at the first resistance level, then aggressive traders may wish to take profits. However, if the first Resistance level is violated to the upside, then the market should go on to test the second resistance level. If prices have violated the 1st resistance level, then this level should act as support on future pullbacks, as should the pivot point.

The opposite is true for support levels. A violation of the daily pivot to the downside indicates that the daily trend is down, with a downside target being the first support level. If the market stalls, then traders may wish to take profits on short positions, or initiate long positions in anticipation of a retracement to the daily pivot. However, if the first support level is violated, the day is said to be a strongly down trending day, and as such should move down further to test the second support level. As with the resistance numbers, the support numbers, once violated, become resistance lines to trade with in the trend.

Though originally used as a means for floor trading, longer-term traders can use pivot points for longer periods. Try plotting the weekly pivot points on the daily chart and using it for shorter term positioning on the daily charts. Pivot points can also be calculated using the monthly pivot points on the daily chart, and used for longer-term positions.

Example of Pivot Points



Calculation

There are several methods used to determine the Pivot Point. We have included the three different formulas in Track 'n Trade 5.0.

Traditional formulas:

$$\text{Pivot Point} = (H + L + C) / 3$$

$$\text{First Support Line} = (2 \times \text{Pivot Point}) - H$$

$$\text{First Resistance Line} = (2 \times \text{Pivot Point}) - L$$

$$\text{Second Support Line} = \text{Pivot Point} - (H - L)$$

$$\text{Second Resistance Line} = \text{Pivot} + (H - L)$$

Variation 1:

This method changes the formula used to derive the Pivot Point. The changes include adding the trading day's open and calculating the average of the four values. With this variation, one takes into account both opening gaps and overnight trading. The calculation is here:

$$\text{Pivot Point} = (H^* + L^* + C^* + O^{**}) / 4$$

*=Yesterday

**=Today

Variation 2:

This method changes the formula used to derive the Pivot Point as well. In this method you substitute yesterday's close with today's open. Variation 2 also takes into account opening gaps and overnight trading. The calculation is here:

$$\text{Pivot Point} = (H^* + L^* + O^{**}) / 3$$

Preferences

Open the Preference tab from the Control Panel on the left of your screen. Select the Pivot Points on your screen. The preferences will appear in the Control Panel. (Once you click on the chart, the Preference tab will go back to chart settings.)

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.

Pivot Points: Check the boxes to view different support and resistance lines. Change the color, style, and thickness of the lines.

Calculation: Select Traditional, Variation 1, or Variation 2.

Display Settings: Check to display Historical, Daily, Weekly, or Monthly pivot points.

Select if you would like to see the **Moving average** line and enter the number of price bars you would like to be used to calculate it.

Font: Select the font, size, and color of the text. You can also choose to bold or italicize your text and change the background color.

10x8 Moving Average Calculation

Just as it is easier to ride a bike downhill than uphill, it seems prices fall faster than they rise. Due to this perceived quirk in pricing, the legendary market analyst, author, and seminar speaker, Jake Bernstein, developed the 10x8 moving average system.

This system uses two simple moving averages, but they are calculated in a slightly different manner than those traditionally used. The first moving average is a moving average of the daily highs, as opposed to that of the daily settlement. The second moving average is calculated using the daily lows.

Though Mr. Bernstein recommends using a 10 period moving average of the daily highs and an 8 period moving average of the daily lows based on his observation that prices tend to fall about 20% faster than they rise, any combination would do the trick. Generally, accepting market lore that prices fall faster than they rise, the moving average of the lows should be of shorter term duration than that of the highs.

The most basic use of the 10x8 Moving Average is to look for a breakout above the upper moving average to initiate a buy signal. When the daily settlement price exceeds the average high of the last 10 days, this indicator flashes a buy signal indicating that the trend of the market should be up.

Example of a 10x8 MAC



Preferences

Open the Preference tab from the Control Panel on the left of your screen. Select the 10x8 MAC line on your screen. The preferences will appear in the Control Panel. (Once you click on the chart, the Preference tab will go back to chart settings.)

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.

10x8 and 3x3 Moving Average Convergence

☒ Display 10x8 Mac

10 x 8 Line 1 (period 10)

Line

Plum

Type

Simple

Data

High

10 x 8 Line 2 (period 8)

Line

Salmon

Type

Simple

Data

Low

☐ Display 3x3 Mac

3 x 3 Line 2 (period 3)

Line

SeaGreen

Type

Simple

Data

High

3 x 3 Line 2 (period 3)

Line

MediumBlue

Type

Simple

Data

Low

Display 10x8 MAC, 3x3 MAC: Check the boxes to display the lines you would like to see.

Line: Choose the color, line style, and line thickness of your indicator line.

Type: Select Simple, Linear Weight, or Exponential.

Data: Select Open, High, Low, Close, Mean, Median, or Mode.

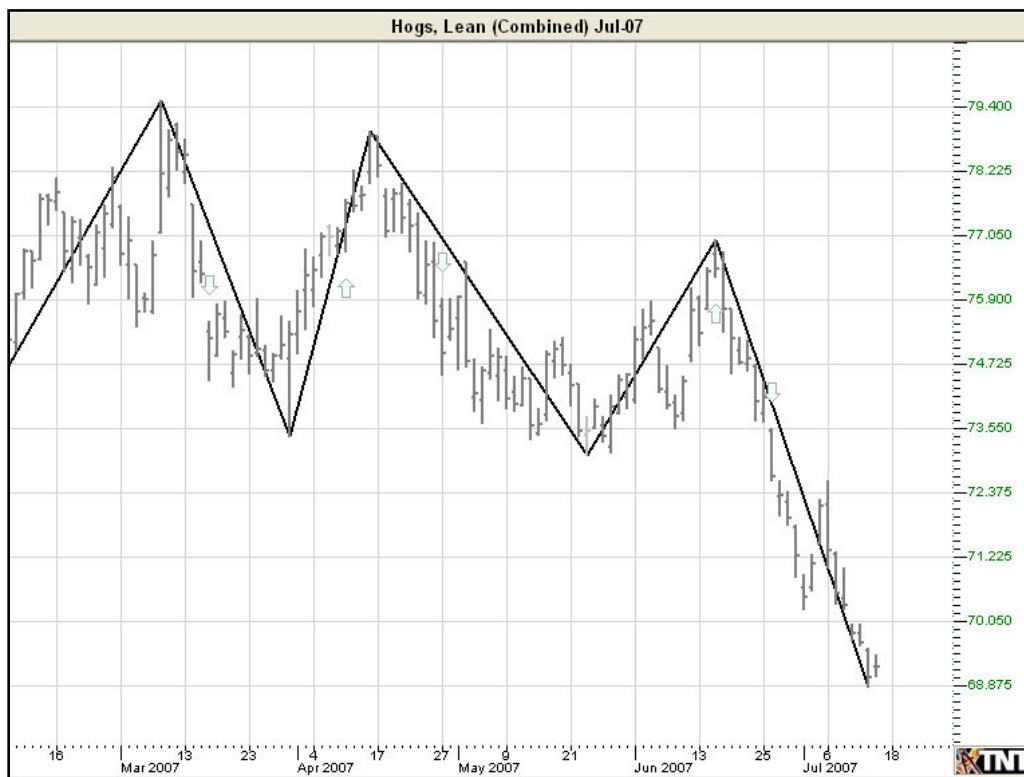
Zig Zag

The Zig Zag Indicator acknowledges minimum price changes and ignores those that do not fit the criteria.

Calculation

A Zig Zag set at 10% with OHLC bars would yield a line that only reverses after a change from high to low of 10% or greater. All movements less than 10% would be ignored. If a commodity traded from a low of 100 to a high of 109, the Zig Zag would not draw a line because the move was less than 10%. If the stock advanced from a low of 100 to a high of 110, then the Zig Zag would draw a line from 100 to 110. If the commodity continued on to a high of 112, this line would be extended to 112 (100 to 112). The Zig Zag would not reverse until the commodity declined 10% or more from its high. From a high of 112, a commodity would have to decline 11.2 points (or to a low of 100.8) for the Zig Zag to reverse and display another line.

Example of a Zig Zag



Preferences

Open the Preference tab from the Control Panel on the left of your screen. Select the Zig Zag line on your screen. The preferences will appear in the Control Panel. (Once you click on the chart, the Preference tab will go back to chart settings.)

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.

% Change Sensitivity: Change the percent of calculation.

Line: Choose the color, line style, and line thickness of your indicator line.

Retracements Line, Alt: Choose the color, line style, and line thickness of the retracement lines.

Select **Show Retracement Target**, **Show as Percent**, **Show Retracements**, or **Show Alternative Retracements** to show percents, retracements, and alternative retracements.

Number of Alternative Lines: Enter the amount of alternative retracement lines you want to show on the chart.

Font: Select the font, size, and color of the text. You can also choose to bold or italicize your text. Select the checkbox next to **Show Text** to hide or show your text on the chart.

Choose when you want **Buy/Sell Arrows** to show and what color.

Accounting & Simulator Plug-in

Tracking Profits and Losses

9

Introduction

The Accounting & Simulator Plug-In enables you to place orders, deposits, and withdrawals using historical and/or current data. Traders will find this Plug-In very helpful in getting to know the markets and testing different trading strategies. This Plug-in also allows you to play charts forward and backward using play buttons. This is called simulation.

Requirements

In order to place futures orders or simulate trading using Track 'n Trade 5.0, you will need to purchase the Accounting and Simulator Plug-In. Call us at 1-800-862-7193 to reach the sales department and order the plug-in today!

Placing a Futures Order

Once you have opened a chart using the Commodity tab in the Control Panel, you are ready to place an order. There are two ways in which an order can be placed in Track 'n Trade 5.0: the Place Order tool on the Account Toolbar or the Order button in the My Account tab of the Control Panel.

Using the Accounting Toolbar



Click on the Place Order tool on your Accounting Toolbar. Click on your chart and drag the cursor until you find your order point. Release the mouse button to place. The Place an Order window will appear.

Fill out the information in the Place an Order window. Specify the brokerage fee (per side), date order placed, buy or sell, quantity of contracts, symbol of contract, order type, and the price on the order. Help options are available to give instructions on the different types of orders.

When you place an order using the Place Order tool on your Accounting toolbar, the Place an Order window will be pre-filled with default settings. You will not be able to change the date or the symbol.

Click OK to place the order or Cancel to dismiss the order screen.

Place an order

Select the details of your order in the form below.

Brokerage Fee This Trade (each): \$

Placement Detail

6/27/2007

Qty. Symbol Order Type Price GTC

☐ Buy

☒ Sell

☒

☐ Trailing Stop

This order has not been placed yet.

Help >>>

OK

Cancel

Using the Accounting Tab

Open the My Account tab in the Control Panel. Click on the Order button and the Place an Order window will appear.

Fill out the information in the Place an Order window. Specify the brokerage fee (per side), date order placed, buy or sell, quantity of contracts, symbol of contract, order type, and the price on the order. Help options are available to give instructions on the different types of orders.

When you place an order using the Order button in the My Account tab of the Control Panel, the Place an Order window will **not** be pre-filled and you **can** change the date and symbol.

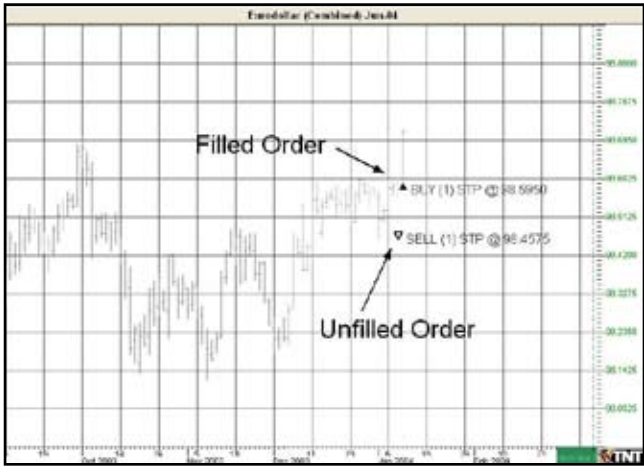
Click OK to place the order or Cancel to dismiss the order screen.

Editing an Unfilled Order

To edit an order on your chart, select the order by clicking on it. and select Settings to view the Place an Order window.

A Filled Order

When your order is filled, the triangle will fill in red on your chart. In the My Account tab, the icon will fill green and an F will appear after the icon.



- Red: Cancelled
- Green: Filled
- Yellow: Placed
- White: Placed in the future
- Faded: Order exists, but was deleted from the chart
- Gray: The chart that this order was placed on was deleted from the Chartbook

- D: Deposit
- B: Buy
- S: Sell
- W: Withdrawal

My Account			
<div> Deposit Withdraw Order Trade Log </div>			
Description	This Contract	Total	
Accounting Date		01/09/2004	
Open Order P/L	337.50	337.50	
Closed Order P/L	0.00	0.00	
Order Commissions	-60.00	-60.00	
Orders Subtotal	277.50	277.50	
Open Option P/L	0.00	0.00	
Closed Option P/L	0.00	0.00	
Option Commissions	0.00	0.00	
Options Subtotal	0.00	0.00	
Total Open P/L	337.50	337.50	
Total Closed P/L	0.00	0.00	
Total Commissions	-60.00	-60.00	
Account SubTotal	277.50	277.50	
Account Balance		755.50	
Margin Requirement	743.00	743.00	
Available Funds		12.50	
Current Position	Long 1	Long 1 Shor...	
Call Options	Buy 0 / Sell 0	Buy 0 / Sell 0	
Put Options	Buy 0 / Sell 0	Buy 0 / Sell 0	
Date	Comm...	Details	Placed On
1/ 9/20...	Deposit	Amount: 478.00	
1/ 9/20...	+ED2...	Buy 1 @ 98.587...	1/ 8/2004
6/ 7/20...	+BP20...	Sell 1 @ 194.23 ...	

Active Charts		Symbol
	British Pound, CME (Combined) Jun...	+BP2007M
	Cattle, Live (Combined) Jun-07	+LC2007M
	Eurodollar (Combined) Jun-04	+ED2004M

From the My Account window users can place orders and make deposits and withdrawals. This window also has overall totals for the trading account and for the current contract that you have open in the Chart Window.

Accounting Date: Date the current chart is played to.

Open Order P/L: Profit/Loss on trades that are open.

Closed Order P/L: Profit/Loss on completed trades.

Order Commissions: Total commissions paid.

Account Balance: All closed Profit/Loss, Commissions, Withdrawals, and Deposits.

Margins: Requirements in placing and maintaining an order.

Current Position: Market position (not in market, long, or short)

Orders are also noted on the commodity tab. A gray ticket shows an open order on the chart. A turquoise ticket shows a filled order with an overall long position. A blue ticket shows a filled order with an overall short position.

Modify an Order

Right-click the entry and select “Settings” from the dropdown menu.

Cancel or Delete an Order

Select the order by clicking on it. Hit the Del (Delete) button on your keyboard. This will hide the order, but not delete it. Orders need to be deleted in the My Account tab of the Control Panel. Also, if you delete a chart in the Commodities window, any orders placed on that chart will not be deleted from your book.

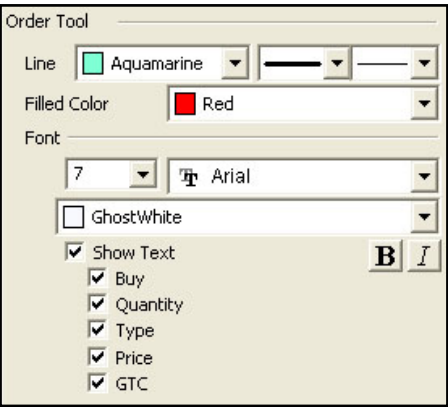
Hide/Show an Order on a Chart

Right-click on the order listed in My Account and select “Hide/Show” from the menu. If you would like to hide/show all orders use the “Hide All/Show All” from the menu.

Preferences

Select the order by clicking on it. The properties will appear in the preferences section of your control panel.

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.

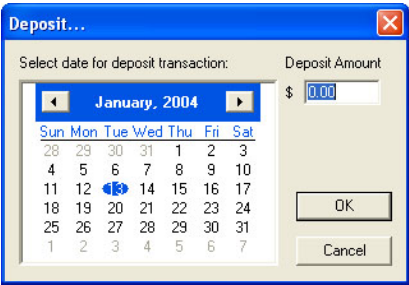


Line: You can choose the color, line style, and line thickness of your order. You may also choose the **Filled Color** for an order that is filled.

Font: Select the font, size, and color of the text. Select **Show Text** to hide or show your text on the chart. You may also choose what components of the text you would like to view: **Buy, Quantity, Type, Price, GTC.**

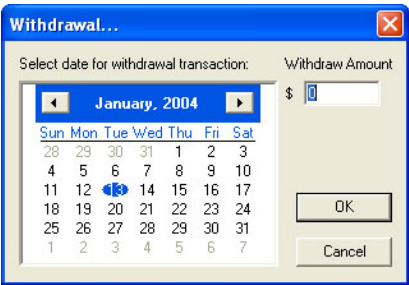
Deposits and Withdrawals

Track 'n Trade 5.0's Accounting systems allows entering deposits and making withdrawals in your trading account, as well as placing orders.



Placing a Deposit

Click on the Deposit button in the My Account tab of your Control Panel. The Deposit... window will appear. Select the day of the deposit and enter the amount. Click OK to enter deposit or Cancel to dismiss the Deposit window.



Making a Withdrawal

Click on the Withdrawal button in the My Account tab of your Control Panel. The Withdrawal... window will appear. Select the day of the withdrawal and enter the amount. Click OK to enter deposit or Cancel to dismiss the Withdrawal window.

Deleting Deposits/Withdrawals

Right-click on the deposit or withdrawal and select “Delete” from the dropdown menu.

Editing a Deposit/Withdrawal

Right-click on the deposit or withdrawal and select “Settings” from the dropdown menu. From here you can change the date, amount, or order type.

Trade Log

The Accounting and Simulator Plug-In also includes a trade log that tracks the changes that you make to orders in a chartbook. This trade log will list new orders placed, orders cancelled, as well as any order that you have moved.



Placement Date	Activity Date	Contract	Activity Detail
Thu Jan 08, 2004	Thu Jan 08, 2004	+ED2004M	BUY 1 @ 98.59 STP
Thu Jan 08, 2004	Fri Jan 09, 2004	+ED2004M	Fill 1 @ 98.59 STP
Fri Jan 09, 2004	Fri Jan 09, 2004	+ED2004M	SELL 1 @ 98.59 STP
Tue Jan 13, 2004	Tue Jan 13, 2004	+ED2004M	BUY 1 @ 98.76 STP

To generate the trade log, click on the Trade Log button in the My Account tab of your Control Panel. Select the date range for the trade log from the dropdown menus. This will give you the changes in the orders placed within that date range. You also can filter the trade log by All Charts or by one of the contracts being traded. You can print and/or save this trade log by clicking on the corresponding button in the upper left corner.

Simulation

The ability to play charts forward and backward, using the Play Controls, gives you the ability to go back in time and simulate the trading experience using historical data.



Play to End: All Charts: Displays all available data on both saved and new charts that are selected.

Beginning: Moves to the first day in the chart.

Reverse Step 28: Moves back 28 price bars and stops.

Reverse Step 1: Moves back 1 price bar and stops.

Rewind: Plays chart backwards quickly.

Play: Plays chart backwards one tick at a time.

Stop: Stops any play buttons.

Play: Plays chart forward one tick at a time.

Fast Forward: Plays chart forward quickly.

Step 1: Moves forward 1 price bar and stops.

Step 28: Moves forward 28 price bars and stops.

End: Moves to the last day in the chart.

Options Plug-in

Implementing Options Strategies

Introduction

The Track 'n Trade 5.0 Options Plug-in gives you the ability to place put/call orders on the futures chart, calculate profit/loss on an option or on an option strategy, calculate the “Greeks,” and use two indicators that display the option as under or overvalued.

Requirements

In order to place options orders or use any of the options tools, you will also need to own the Accounting & Simulator Plug-in. See the Accounting & Simulator Plug-in chapter for more information and call us at 1-800-862-7193 to reach the sales department and order the plug-in today!

Placing an Options Put/Call Order



Option orders can be placed by selecting the Options Call or Options Put order tools in your Accounting Toolbar. Click on your chart and hold down the mouse while you drag the order tool along the futures chart. Release the mouse button when you have reached your desired position. The Options Order window will open.

Commodity/Date: Type in the commodity symbol and date for the chart. The values are pre-filled when placing on chart.

Buy or Sell: Select from the dropdown menu.

Quantity: Enter the value you would like to use. The default is set at 1.

Strike Price: Enter the value of the strike price. The value is pre-filled when placing on chart.

Call or Put: Select the order type from the dropdown menu. The value is pre-filled with type of option order tool chosen.

Brokerage Fee: Enter the value you would like to use. The default is set at \$0.00

Premium: Enter the point value for the strike price.

Value: Enter the dollar amount of the Premium.

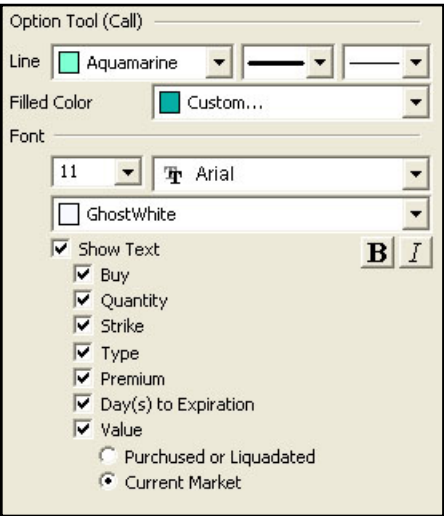
Contingency Order: Check this box if you want the option order executed based on a specific futures price.

Note: Once you place an option order on your chart window, it will be filled on yesterday's close.

Preferences

Options preferences will open in your control panel when you place a put or call. If it is not open, select the order by clicking on it. The properties will appear in the preferences section of your control panel.

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.



Line: You can choose the color, line style, and line thickness of your line. You can also specify the **Filled Color** for when the option is filled.

Font: Select the font, size, and color of the text. Select **Show Text** to hide or show your text on the chart.

Select or deselect **Buy, Quantity, Strike, Type, Premium, Day(s) to Expiration,** and **Value** to show or hide their corresponding value on your chart.

My Account		
Deposit	Withdraw	Order
Trade Log		
Description	This Contract	Total
Accounting Date	06/08/2007	
Open Order P/L	0.00	0.00
Closed Order P/L	0.00	0.00
Order Commissions	0.00	0.00
Orders Subtotal	0.00	0.00
Open Option P/L	0.00	0.00
Closed Option P/L	0.00	0.00
Option Commissions	0.00	0.00
Options Subtotal	0.00	0.00
Total Open P/L	0.00	0.00
Total Closed P/L	0.00	0.00
Total Commissions	0.00	0.00

Options Tab

When you purchase the Options Plug-in, An Options section will be added to your My Account tab in the Control Panel. The options orders that are placed are also listed in the My Account tab.

The Options tab is located in the Control Panel after the Spreads tab. It looks like a green up arrow and purple down arrow. When you first click on the Options tab, it defaults to the “Date View” which contains the options data available.

Export...	Calc.	Date	Strike	Rate
Options Strikes in Cattle, Feeder (Combined) Aug on				
Friday, 08 of June , 2007, Exp 83 days				
Strike	Type	Premium	\$ Value	Change
122.000	Call	0.025	12.50	-0.005

Open the corresponding futures chart in the Commodity tab for the options pricing that you are interested in viewing. You will notice that the Options tab is now populated with values.

Strike	Type	Premium	\$ Value	Change	Diff	IVol	Delta	Gamma	Theta	Vega	Rho
--------	------	---------	----------	--------	------	------	-------	-------	-------	------	-----

Strike: The price at which the futures contract underlying an option is to be bought or sold upon exercise.

Type: Type of options order, Put or Call.

Premium: Value (in points) to purchase the option.

\$Value: Dollar amount for the premium value.

Change: The difference between yesterday's and today's strike.

Diff: Dollar amount for the Change.

IVol: Implied Volatility of the underlying futures contract.

Delta: Measures how much the options price changes when the underlying futures contract changes by one point.

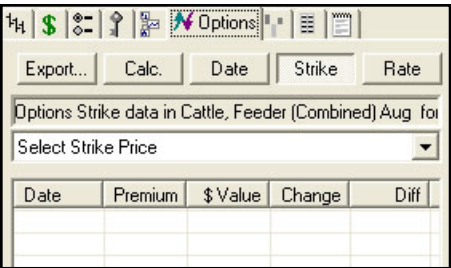
Gamma: Measures how much the delta changes when the underlying futures contract changes by one point.

Theta: Measures time decay of an option.

Vega: Measures how a change in volatility affects the price of an option when all other factors remain the same.

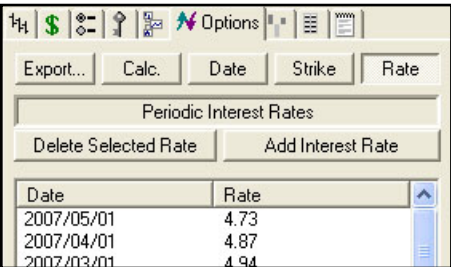
Rho: Measures how a change in a short-term risk free interest rate affects the price of an option.

Note: If you **do not** have a contract open, the only item available in Options Tab is the Interest Rate History.



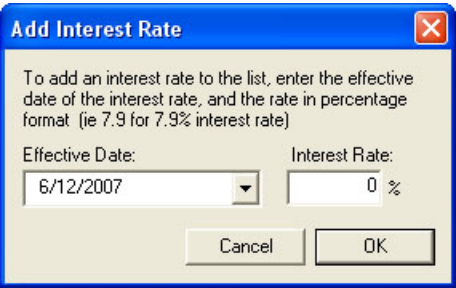
Strike and Rate History

The Options Tab defaults to the Date View, which shows a list of all strike prices available for that day. To view the history for a particular strike price, click on the Strike button and select the specific Put/Call Strike price from the dropdown menu. Once this value is selected, the history for that price is generated.



To view the historical interest rate data, click on the Rate button to the right of the Strike button. The rate displayed is the average monthly interest rate of the three month Treasury Bill secondary market rates. Interest rates are used by the Black & Scholes options formulas to determine the theoretical options price (more information on Black & Scholes at the end of this chapter).

Note: Because most futures contracts expire in under a year, we have not noticed the interest rate to make a large difference on the dollar value of an options price.



Adding an Interest Rate

Interest rates are updated by Gecko Software, Inc., on a regular basis. If you want to add a new interest rate manually, click on the Add Interest Rate button and the Add Interest Rate window will open. Choose the date for the effective date dropdown menu and type the new interest rate in the input box. Click OK to save or Cancel to exit from the window.



Deleting an Existing Interest Rate

To delete an existing interest rate, select the interest rate that you would like to delete by clicking on it. Click the Delete Interest Rate button and a window will open asking you to verify that you would like to delete this interest rate. Click YES to continue or NO to cancel.

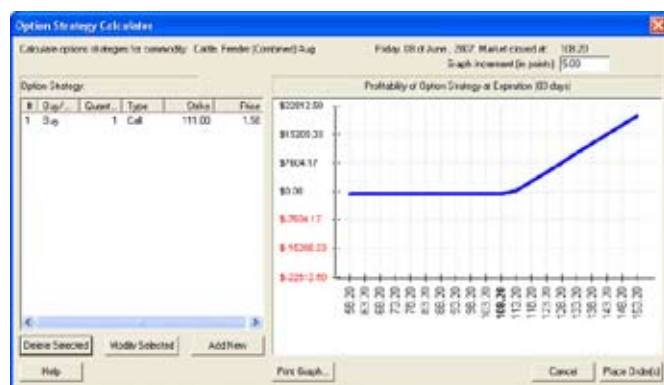
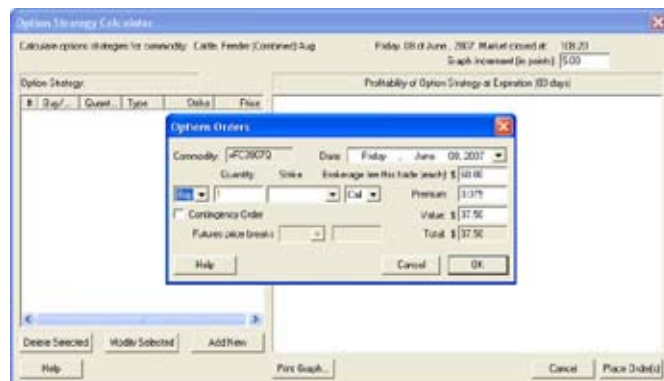
OS Calculator

The OS Calculator determines profit/loss on an option or option strategy. Click on the Calc button to open. Click on the Add New button to add an option order to the calculator and the Option Order window will open. Specify the details of the options order and click OK to add the order to the calculator.

The options order details have now been added to your option strategy list on the left side of the OS Calculator and the Profitability Graph of the Option Expiration is available on the right side.

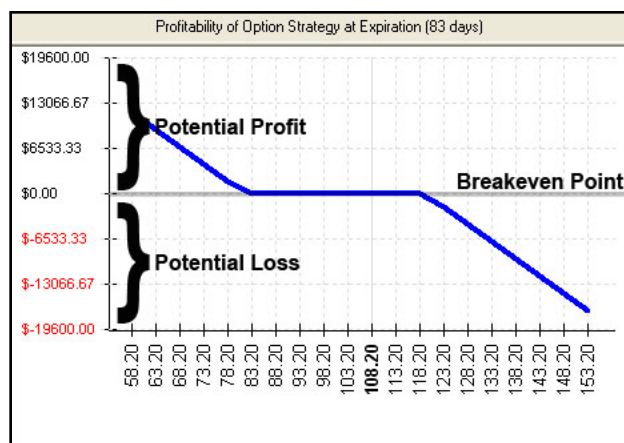
Modify/Delete Orders

Select the order you would like to change and click the Modify Selected button. To delete orders from the calculator, click on the order and click the Delete button.



Place Orders

To place the orders from the calculator on the underlying futures chart, click the Place Order(s) button or Cancel to exit the Options Strategy Calculator.



The Profitability of Option Strategy at Expiration

The OS Calculator enables you to enter an Option Strategy to see the potential profit/loss of that strategy/order.

OSV & STRK Indicators

The Options Plug-in contains two indicators used to determine if an option is over or under valued. The indicators available are Options Strike Value and Strike Price. Select to view these indicators from one of these locations.

The Indicator Toolbar



The OSV and STRK buttons have been added to your Indicator Toolbar at the bottom of your screen. Click on the indicator you would like to view. You can also change the put/call strike that the indicator is based on from the dropdown menu next to the buttons.

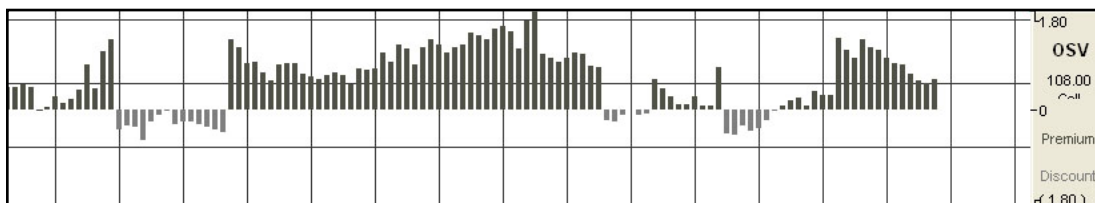
Right-Click Chart

Right-click the Indicator Window to view the dropdown menu. All your indicators are listed in alphabetical order. Highlight and click the indicator you would like to view. Selected indicators will have a checkmark next to their name.

Options Strike Value (OSV)

This indicator displays the theoretical option values versus the actual option price value for a specific put/call strike price as a histogram. The positive values represent over-valued and the negative values represent under-valued options.

Example of the OSV in the Indicator Window



Preferences

Open the Preference tab from the Control Panel on the left of your screen. Click on the Indicator Information Display to scroll through the different Indicators you have open until you get to OSV. The preferences will appear in the Control Panel. (Once you click on the chart, the Preference tab will go back to chart settings.)

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.

Options Strike Value: Choose the color of your **Over Valued** and **Under Valued** lines.

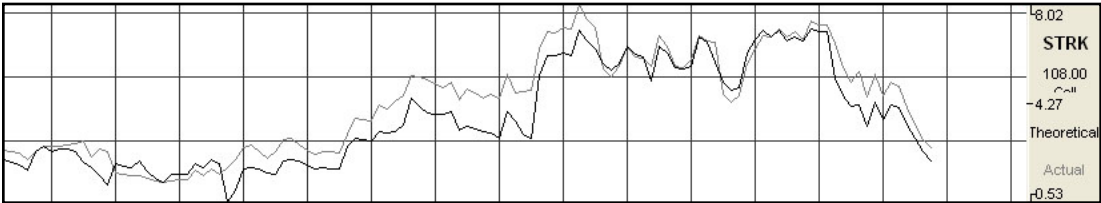
Strike Price: Enter the price you would like to use.

Thresholds: View up to four thresholds at a value that you type in and a color that you choose.

Strike Price (STRK)

This indicator also displays the theoretical option values versus the actual option price value. However; this indicator displays them as two lines. By looking at these two lines you are able to determine if the option price is under or over priced.

Example of the STRK in the Indicator Window



Preferences

Open the Preference tab from the Control Panel on the left of your screen. Click on the Indicator Information Display to scroll through the different Indicators you have open until you get to STRK. The preferences will appear in the Control Panel. (Once you click on the chart, the Preference tab will go back to chart settings.)

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.

Options Plug-in

Strike Price

Black and Scholes Theoretical

Red

Reported Market Value

Lime

Strike Price

109.00 C

Thresholds

☐ 1

0.00

%

Yellow

☐ 2

0.00

%

Yellow

☐ 3

0.00

%

Yellow

☐ 4

0.00

%

Yellow

Strike Price: Choose the color, line style, and line thickness of your **Black and Scholes Theoretical** and **Reported Market Value** lines.

Strike Price: Enter the price you would like to use.

Thresholds: View up to four thresholds at a value that you type in and a color that you choose.

Black and Scholes Calculations

Modern option pricing techniques are often considered among the most mathematically complex of all applied areas of finance. Financial analysis are now able to calculate, with alarming accuracy, the fair market value of a financial option. Gecko Software, Inc., employs the calculations developed in 1973 by Fischer Black and Myron Scholes. This model is known as the “Black and Scholes Options Pricing Model.”

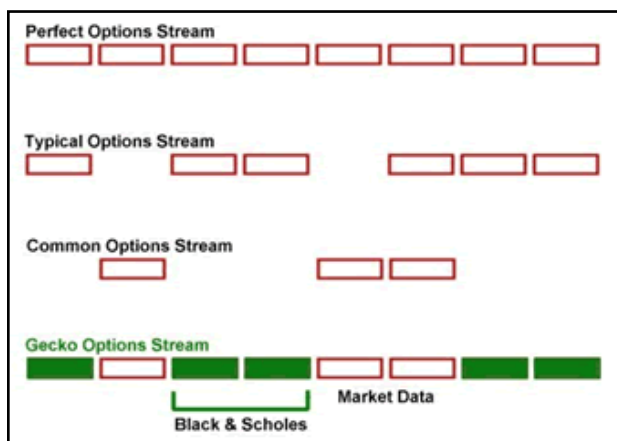
The Black and Scholes pricing model uses a sophisticated mathematical formula to calculate the theoretical value of an option using variables such as market open, high, low, and close values, interest rates, volatility calculations, and other such information to give us these all important values.

Track ‘n Trade 5.0 is, first and foremost, a trading simulation software application where you are able to go back in time nearly 30 years and practice trading forward, one day at a time. In essence, we are giving a trader 30 years of simulated trading experience in a matter of hours, days, or possibly weeks. We allow the trader to use actual historical futures market OHLC (Open, High, Low, Close) data to simulate trading the commodities market. In that regard, it would be nearly impossible for us to assemble a complete set of 30 years of historical options data which would allow users this same historical data training privilege. Also, due to the massive amount of data this would require, and given today’s limits of computer speeds, hard drives, and storage capacity, trying to provide this type of data history to a typical user would simply put this capability out of reach for the common trader.

This is where the Black and Scholes pricing model comes into play. Our skilled computer scientists at Gecko Software have created a way for us to use the data generated by the Black & Scholes data formula to recreate “on the fly” historical options data as needed by the user. This way a trader using our software can recall acutely accurate “simulated” options data from 30 years ago without actually having hundreds of megabytes of options data history stored on their computer. The trader can then simulate trading the financial options market with unparalleled accuracy. This unparalleled capability allows new traders the ability to learn and practice basic trading strategies that can then be taken to the actual markets. It also allows experienced traders the ability to create and back test advanced simulated trading models and systems.

Another way in which Gecko Software computer scientists have implemented the Black & Scholes formulas to help our traders is with two very unique indicators which sit below a chart of the underlying financial asset. As the Black and Scholes formula dictates what the actual “theoretical” value of an option should be on any given day, Track ‘n Trade 5.0 will plot the “actual” value of the option along side the Black & Scholes model. This creates an overvalued or undervalued indicator, which lets our users know, from a simple graphical representation, if the current price of an option is inline with market sentiment and trading at a premium or a discount.

Options data is often times very spotty and full of holes, and due to the enormous amount of data generated by the options exchanges, there is very little done to try and repair these holes or bad data ticks. When options trade, they begin a data stream where they generate an Open, High, Low and Close for each day's trading range, but some options, which are usually further out of the money, don't trade every single day. This causes gaps or holes in the data stream. One way or another, these gaps or holes are either filled, or just left blank. Often times, these gaps are filled by data vendors who simply pull yesterdays values forward to today. They'll do this for weeks on end, which only serves to create a very inaccurate and unreliable value stream, a stream of data that would be difficult to use in any kind of simulated trading environment or to provide much real-market value.



Just like the genetic scientists did in the classic movie Jurassic Park by filling the gaps in the dinosaurs DNA strand with frog DNA allowing them to recreate or clone a dinosaur, our computer scientists here at Gecko Software fill the gaps in the live options market data stream with Black & Scholes “theoretical” prices, giving a more accurate representation of the actual options value. This allows our users the ability to have a more complete and highly accurate representation of what actual market data would have been on any given day.

To differentiate the fictitious theoretical data within the data stream, we tag it with an asterisk (*) so our users will know when they are looking at actual market data reported by the exchange, or a theoretical value inserted into a gap by the Black & Scholes model. In keeping with the Jurassic Park theme, the process that creates and inserts the theoretical data into the actual data stream is code named “Frog Data.”

Seasonals Plug-in

Improve Your Trading by Watching the Seasons

Introduction

The seasonal markets are the commodities that began the futures industry. Wheat was the first commodity traded as a futures contract on the futures market. Commodities like Crude, Corn, Gold, Cattle, etc., have been around longer than financial commodities. Because they have been around longer, the seasonal commodities have more historical data. Being able to analyze that historical data gives you an advantage when you are trading a seasonal commodity.

The Seasonal Plug-In consists of three separate indicators:

- Seasonal Trends
- Historical Averages
- Market Probability

Seasonal Trends

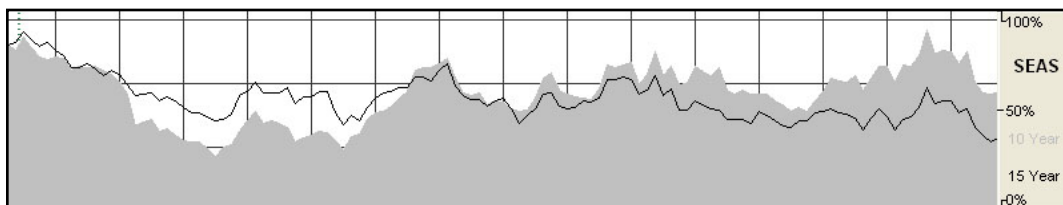
The seasonal trend indicator represents the “normal” historical behavior of the market. The indicator is calculated on the specific contract month, showing you behavior of that specific chart. This is very important in agricultural markets with new and old crop contracts, such as Wheat or Corn.

The charts depict behavior on a relative basis; the actual prices are not forecasted, just the relative position of the market versus its contract high and low. On the seasonal charts, the high is depicted as 1.0, or 100%, while the low is depicted as 0.0, or 0%. All similar trading days are lined up for X number of years (the defaults in Track ‘n Trade 5.0 are 10 years for Trend 1, and 15 years for Trend 2) and are analyzed in terms of where each day falls as a percentage of the highest and lowest price of either the last 12 months or the life of the contract for each specific contract. These prices are then averaged and depicted in the indicator window. When the trend line is at 100% or 1.0, it indicates where the contract has, on average, been at its highest value for a specified time range and scale period.

When the trend line is at 0% or 0.0, it indicates where the contract has, on average, been at its lowest value for the specified time range and scale period. The averages use data from all previous years and are not affected by the current year’s trend.

Displaying the Seasonal Trend Indicator

Click on the SEAS button located in your Indicators toolbar.



Preferences

Right-click on the SEAS button in your Indicator toolbar and select SEAS Settings. The Preferences Tab will open in the Control Panel and the SEAS preferences will be displayed. (Once you click on the chart, the Preference tab will go back to chart settings.)

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.

Seasonals Plug-in

The screenshot shows the 'Seasonals' preferences window. It has a title bar 'Seasonals'. Inside, there are three checked items: 'Trend 1' with a blue color swatch and a 'Years' dropdown set to '10'; 'Trend 2' with a red color swatch and a 'Years' dropdown set to '15'; and 'Fill Background' with a blue color swatch. Below these are radio buttons for 'Trend 1' (selected) and 'Trend 2'. The 'Scale' section has radio buttons for 'Entire Contract' and 'Last 12 Months' (selected). The 'Thresholds' section has four rows, each with a checkbox, a text box containing '0.00', a '%' symbol, and a dropdown menu set to 'Yellow'.

Trend 1,2: Select how many years you would like to view and what color, line thickness, and line style you would like the indicator to be. You can also choose **Fill Background** and choose the color and which trend you would like it to be applied to.

Scale: Decide if you would like the indicator to be based on the Entire Contract or the Last 12 Months.

Thresholds: View up to four thresholds at a value that you type in and a color that you choose.

Market Probability

The historic Market Probability indicator shows the cumulative number of times the market in question has settled higher, lower, or the same on a specific date compared to the previous trading day's settlement price.

For example, if you are looking at a five year market probability indicator with a reading of +1, then the market in question may have historically settled higher three times and lower two times on this trading day than the previous trading day, or settled higher twice, lower once, and the same twice. The +1 reading is derived by subtracting the number of negative settlements from positive settlements, resulting in a net number of positive (+) or (-) settles. In other words, the +1 reading in these examples would be indicative of a market which has settled higher one more time than it has settled lower. If the market settled at the same price as the previous day, the total is not changed.

Displaying the Market Probability Indicator

Click on the PROB button located in your Indicators toolbar.



Preferences

Right-click on the PROB button in your Indicator toolbar and select PROB Settings. The Preferences Tab will open in the Control Panel and the PROB preferences will be displayed. (Once you click on the chart, the Preference tab will go back to chart settings.)

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.

Market Probability: Select how many years you would like to view and what color you would like the indicator to be.

Thresholds: View up to four thresholds at a value that you type in and a color that you choose.

Historical Averages

The Historical Average indicator is very similar to a Moving Average indicator, except that it is based on the average price of the specific contract lined up by date. The charts are made for specific contract months, so that the trader can see the behavior of the specific contract they are looking at. This detail is important in a market with new and old crop contracts, such as the agricultural commodities.

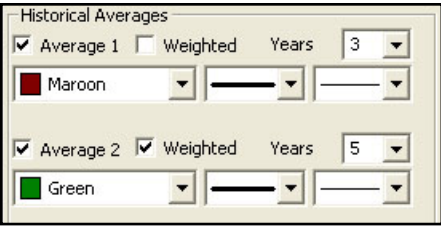
Unlike the seasonal average prices, the Historic Average lines depicted in this feature are based on price, not a relative basis. In essence, what this feature does is give you the average price on a specific day. This chart will have the same basic feel and theme as the seasonal chart, except instead of prices being scaled on a relative basis (0 to 100%) they are the average historical price for that day.

This feature may also help traders divine value in a commodity, in that with a quick look, not only can the trader see how current prices line versus average prices historically, but they can also see seasonal trends. By simply checking the Historical Average check box within the Seasonals tab, it displays the average line in the main chart window. You may also change the number of years, the color, and line style in which the indicator is displayed. The weighted box can be selected to provide more significance to the latter years than the earlier years. The un-weighted is a simple average, giving equal significance to each year included in the study.

Preferences

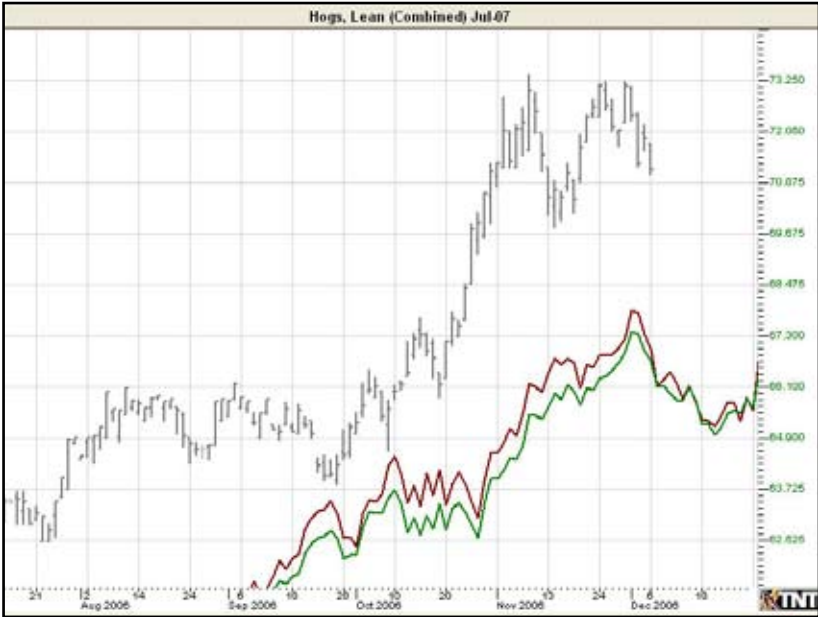
Open the Preference tab from the Control Panel on the left of your screen. Select the Historical Average line on your screen. The preferences will appear in the Control Panel. (Once you click on the chart, the Preference tab will go back to chart settings.)

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.



Historical Averages: Select which averages you would like to view, if you would like them Weighted, and how many years you would like to see. Choose the color, line style, and line thickness of your indicator line.

Example of Historical Averages



Seasonals Plug-in

Spreads Plug-in

Expand Your Trading Options

Introduction

The futures market provides a variety of trading opportunities. In addition to profiting from rising prices by purchasing futures options or from falling prices by selling futures contracts, there is an opportunity to profit from the relationship between different contracts, or **spread**. A spread refers to the simultaneous purchase and sale of two or more different futures contracts.

When establishing, or “putting on,” a spread, a trader looks at the price differential of the spread rather than the absolute contract price levels. The contract that is viewed as “cheap” is purchased (a long position is established). The contract that is viewed as expensive, or “dear,” is sold (a short position is established). If market prices move as expected, meaning the long position gains in value relative to the short position, the trader profits from the change in the relationship between the prices.

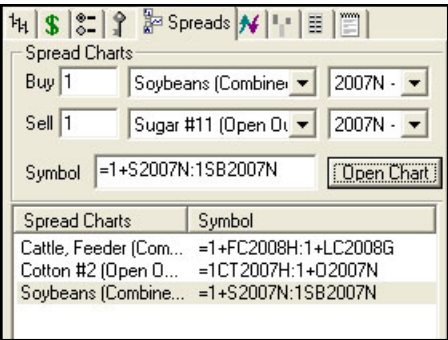
The concern for a spread trader is the change in the relationship between a long contract and a short one, not the absolute price level of the commodity in question. Of course, just because you are trading a spread does not guarantee or eliminate losses. If the long contract decreases in value **relative** to the short position, then the spread trader will incur losses.

The key to spread trading is in the relative performance of one futures contract to another. Though some spreads have a basic market bias, known as bull and bear spreads, the absolute price level of the underlying commodity contracts is not important, only the relative performance of one contract versus the other. In other words, a spread trade is a speculation that one contract will out perform another contract.

Available online: Introduction Video to the Spreads Plug-in. Visit us at: <http://www.trackntrade.com/tour.htm> and select the Spreads video. To view this video you will need a copy of Microsoft's Media Player.

Opening a Spreads Chart

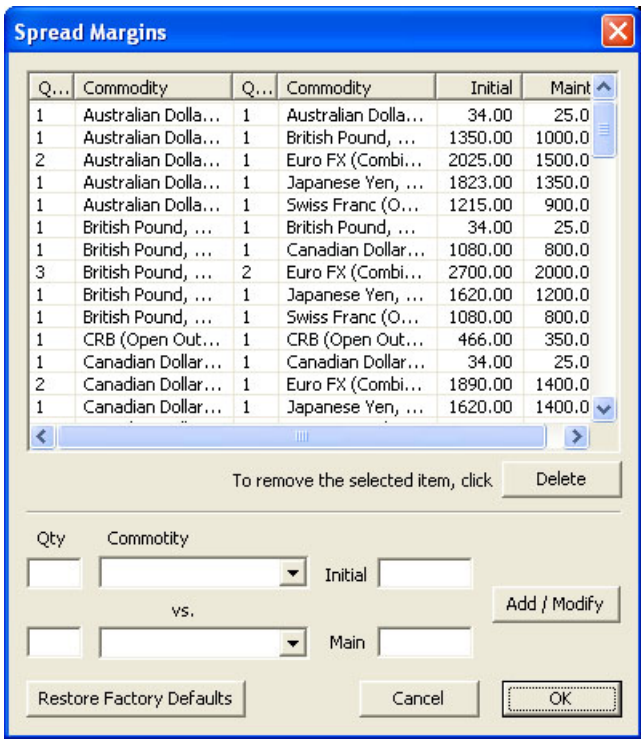
To open a spreads chart, select the Spreads tab in the Control Panel. Select the two futures contracts from the dropdown menu that you would like to use in generating a spreads chart. When you have made your selections, click the Open Chart button and the spreads chart will display.



The spread will be listed in the Spread Chart list and the individual contracts will be listed in the Commodity tab. These spreads that you open will be part of your chartbook when you save and close it.

Spread Margins

In the View menu, select Spread Margins and the Spread Margins window will open.



To modify a margin: Click on the margin in the list, make changes to the margins, and then select the “Add/Modify” button.

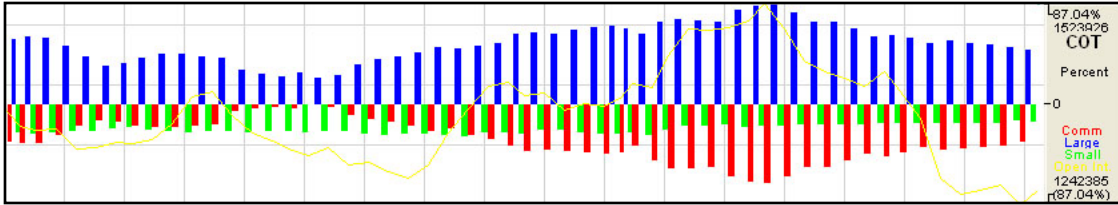
To add a new margin: Select the commodities for the spread and then type in the values for the Initial and Maintenance amounts and then click the “Add/Modify” button.

To restore factory defaults: To restore the margins to software defaults click on the “Restore factory defaults” button.

Commitment of Traders

Know What the Industries are Trading

Introduction



In this graph, the lighter (red) bars, that represent the commercials, are all selling, or going short, while the trend of the market is going up. The commercials are using the futures market to “hedge” either the cash market, or their current inventory, by going short, or selling, during an uptrend.

The darker (blue) lines, that represent the large speculators, are following the trend of the market more closely. That is because they are speculators, not hedgers. When the market goes up, the large speculators go long, or buy the market in an attempt to capture profits from buying low and selling high. But the commercials go short in an attempt to price protect their cash crop or inventory.

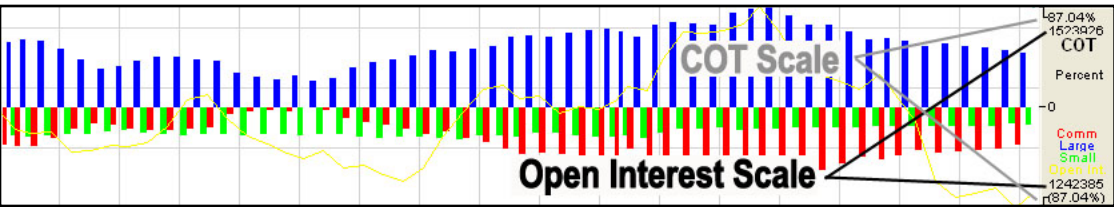
The small (green) bars represent the small speculators. Generally, the large speculators and the professional traders will use the small speculators as a contrarian indicator. If the small speculators are all buying the market (lines extend above the zero line), then the professionals begin to sell. If the small speculators say sell, then the professionals consider being a buyer. (This is not always true, but unfortunately for the small speculator, it is more true than not.)

The best thing about COT is that it is not based on the market’s price. The JBCOT (Jake Bernstein proprietary buy/sell indicator) does not even take the markets price into account. This is strictly an indicator that looks at what the largest industry players are doing, and then simply points out their actions.

The COT reports provide a breakdown of each Tuesday’s open interest for markets in which 20 or more traders hold positions equal to or above the reporting levels established by the CFTC. The weekly reports for Futures-Only Commitments of Traders and for Futures-and-Options-Combined Commitments of Traders are released every Friday at 3:30 p.m. Eastern time.

COT in the Indicator Window

When shown in the Indicator Window, the outer most numbers are the range of the largest of the three commitment of traders (Commercial, Large, and Small). The inner numbers are the range of the Open interest of all of the commitment of traders.



Displaying the Commitment of Traders Indicator

Click on the COT button located in your Indicators Toolbar.

Preferences

Open the Preference tab from the Control Panel on the left of your screen. Select COT from the Indicators Toolbar. The preferences will appear in the Control Panel. (Once you click on the chart, the Preference tab will go back to chart settings.)

Restore Settings: TNT Default will change your settings back to the original software settings. **My Default** will change current settings to your personalized default settings. **Apply To All Charts** will apply your selected settings on all open charts. **Save As My Default** will save your current personal settings.

Commitment of Traders

☒ Commercial
 Red

☒ Non-Commercial (Large Speculators)
 Blue

☒ Non-Reportable (Small Speculators)
 Lime

☒ Open Interest
 Yellow

☐ Use Options Data

Display as: % Bearish/Bullish as Histogram

☒ Long/Short Shading 50%

Thresholds

<input type="checkbox"/> 1	0.00	%	Yellow
<input type="checkbox"/> 2	0.00	%	Yellow
<input type="checkbox"/> 3	0.00	%	Yellow
<input type="checkbox"/> 4	0.00	%	Yellow

☐ JBCOT

Moving Average 1: 28

MA1: Blue

Moving Average 2: 14

MA2: Red

Buy/Sell Arrows

Show Arrow: When Indicator is Visible

Arrow Color: Red

Lines: Select the color, type, and thickness of your lines. Select the box in front of the name to show or hide each component of the commitment of traders.

Display as: **Bearish/Bullish** displays COT by calculating the number of Long positions minus the number of Short positions. If it is positive, more trades are long. If it is negative, more trades are short. If it is zero, they are equal. **Long & Short Positions** display COT as a stacked column. The long position number on top and the short position number on bottom.

Thresholds: View up to four thresholds at a value that you type in and a color that you choose.

JBCOT: Select if you would like to view the JBCOT lines.

Moving Averages: Specify the number of weeks used in calculating the JBCOT buy/sell indicator. Select the color, type, and thickness of your line.

Select when you would want **Buy/Sell Arrows** to show and what color.

Bulls 'n Bears Trading

Green Light, Red Light, Blue Light

Introduction

Bulls 'n Bears is the first trading system designed for Track 'n Trade 5.0 users. This trading system includes easily usable tools to see if the market is bullish or bearish. Bulls 'n Bears allows you to change the sensitivity of the system according to your trading style; whether you are an aggressive trader, or a more traditional trader. The plug-in also comes with the Advantage Lines indicator.

With the Bulls 'n Bears Red Light, Green Light, Blue Light trading method/system you have simple to understand entry and exit signals displayed visually on the chart.



Red Light (Bearish Trend)

Indicates the beginning of a bearish trend, and that the contract has started to move downward; therefore identifying a possible short entry point.



Green Light (Bullish Trend)

Indicates the trend of a market has begun to move upward, identifying a possible long entry point.



Yellow Lights (Neutral or Sideways Trend)

Indicates the trend of the market has entered a sideways or neutral time frame.



Blue Lights (Stop Loss Placement)

The Parabolic stop is used within the Bulls 'n Bears system as the key point for managing your stop loss risk while trading; helping you to identify exit and stop loss placement points after entering a trade.

Preferences

Open the Preference tab from the Control Panel on the left of your screen. Right-click on your chart and highlight “Overlay Properties” from the dropdown menu. Select Bulls ‘n Bears from the list and the preferences will appear in the Control Panel. (Once you click on the chart, the Preference tab will go back to chart settings.)

Restore Settings: TNT Default will change your settings back to the original software settings. **My Default** will change current settings to your personalized default settings. **Apply To All Charts** will apply your selected settings on all open charts. **Save As My Default** will save your current personal settings.

Sensitivity: Adjust what you would like the sensitivity level to be.

Style: Select Lines, Dots, Crosses, Squares, or Price Bars from the dropdown menu.

Formula: Select Traditional, Progressive, or Aggressive from the dropdown menu.

Bearish, Neutral, Bullish: Select what color you would like each indicator to be.

Blue Light: Select to display the blue light on a Bearish or Bullish market and what color you would like it to appear.

Display History: Check if you would like to show Full History or specify how many price bars.

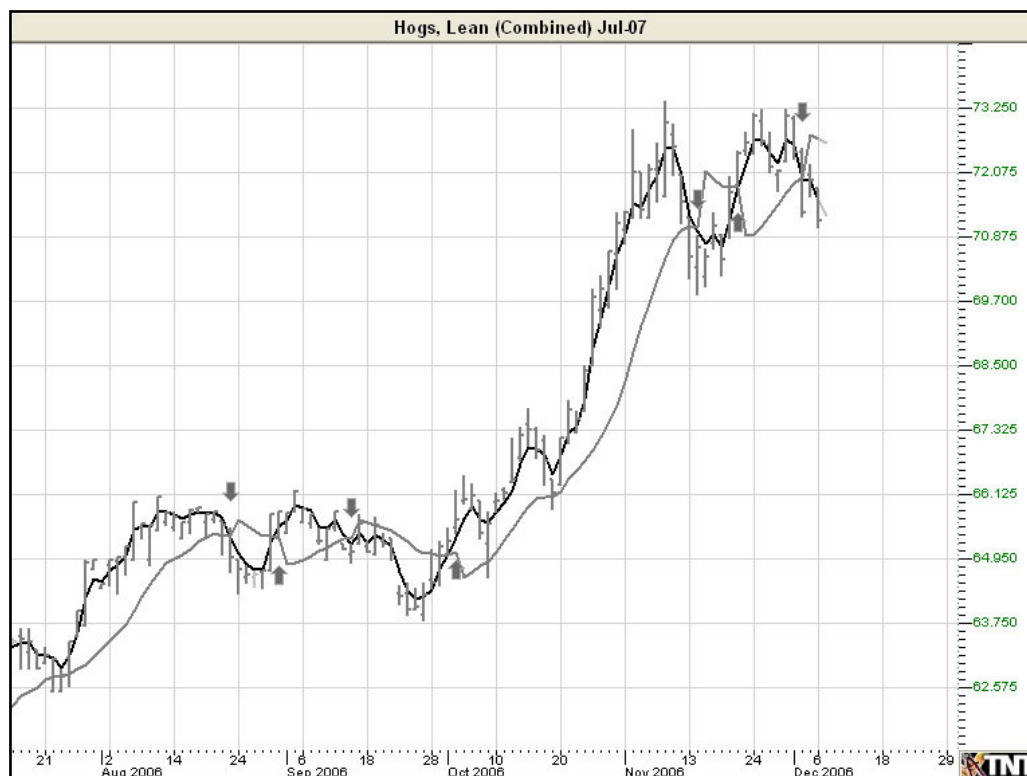
Choose when you want **Buy/Sell Arrows** to show and what color.

Advantage Lines

Advantage lines were created in an attempt to help eliminate whipsaw from a short-term moving average trading system. The main advantage of a short term moving average trading system is that it provides early entry signals to potential trading opportunities and trend reversals. This is also the disadvantage to the same system.

Due to the early entry notification, you receive a lot of false signals, better known as whipsaw. To help eliminate many of these false signals, Mr. Turner created the Advantage Lines, which significantly help in reducing whipsaw, but also somewhat delayed the early entry signals. To enhance and help in getting back the early entry signals, the “projection” part of this indicator actually projects forward where we anticipate tomorrow’s lines to be, and let us know if we are “anticipating” a crossover or not.

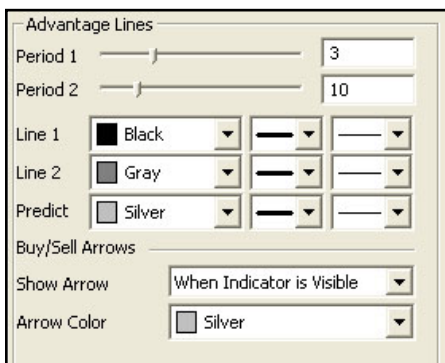
Example of Advantage Lines



Preferences

Open the Preference tab from the Control Panel on the left of your screen. Select the Advantage Line on your screen. The preferences will appear in the Control Panel. (Once you click on the chart, the Preference tab will go back to chart settings.)

Restore Settings: TNT Default will change your settings back to the original software settings. My Default will change current settings to your personalized default settings. Apply To All Charts will apply your selected settings on all open charts. Save As My Default will save your current personal settings.



Period 1,2: Specify your periods by dragging the slider up or down.

Lines: Choose the color, line style, and line thickness of your lines.

Choose when you want **Buy/Sell Arrows** to show and what color.

Candlestick Charting

Introduction to Japanese Candlestick Charting

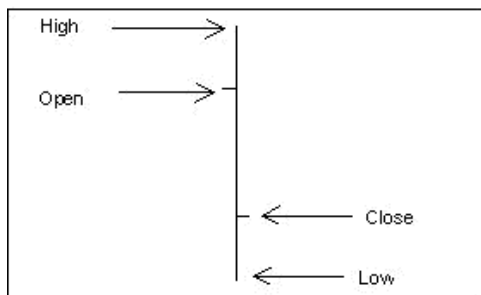
Introduction

Would you like to learn about a commodity price chart that is possibly more effective than the type you are currently using? If you are brand new to the art of chart reading, don't worry. This stuff is really quite simple to learn.

Technical Analysis: A Brief Background

Technical analysis is simply the study of prices as reflected on price charts. Technical analysis assumes that current prices should represent all known information about the markets. Prices not only reflect essential facts, they also represent human emotion and the pervasive mass psychology and mood of the moment. Prices are, in the end, a function of supply and demand. However, on a moment to moment basis, human emotions such as fear, greed, panic, hysteria, elation, etc., also dramatically affect prices. Markets may move not based on facts, but upon people's expectations. A market "technician" attempts to disregard the emotional component of trading by making his decisions based upon chart formations. He assumes that prices reflect both facts and emotion.

Standard bar charts are commonly used to convey price activity into an easily readable chart. Usually, four elements make up a bar chart, the Open, High, Low, and Close for the trading session/time period. A price bar can represent any time frame the user wishes, from 1 minute to 1 month. The total vertical length/height of the bar represents the entire trading range for the period. The top of the bar represents the highest price of the period, and the bottom of the bar represents the lowest price of the period. The Open is represented by a small dash to the left of the bar, and the Close for the session is a small dash to the right of the bar.



Candlestick Charts Explained

You may be asking yourself, "If I can already use bar charts to view prices, then why do I need another type of chart?"

The answer to this question may not seem obvious, but after going through the following candlestick chart explanations and examples, you will surely see value in the different perspective candlesticks bring to the table. In my opinion, they are much more visually appealing, and convey the price information in a quicker, easier manner.

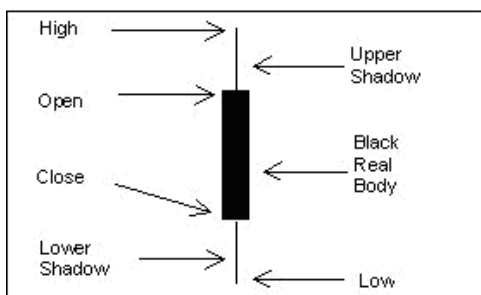
History of Candlestick Charts

Candlestick charts are on record as being the oldest type of charts used for price prediction. They date back to the 1700's, when they were used for predicting rice prices. In fact, during this era in Japan, Munehisa Homma became a legendary rice trader and gained a huge fortune using candlestick analysis. He is said to have executed over 100 consecutive winning trades!

The candlesticks themselves and the formations they shape were given colorful names by the Japanese traders. Due in part to the military environment of the Japanese feudal system during this era, candlestick formations developed names such as “counter attack lines” and the “advancing three soldiers.” Just as skill, strategy, and psychology are important in battle, they are also important elements in the midst of a trading battle.

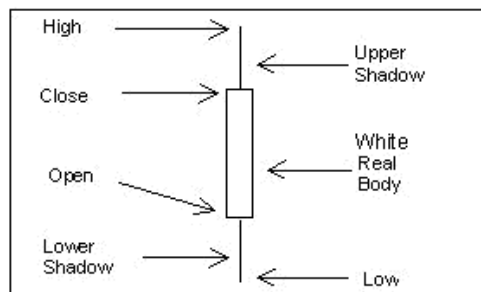
Candlesticks Price Bars

Candlestick charts are much more visually appealing than a standard two-dimensional bar chart. As in a standard bar chart, there are four elements necessary to construct a candlestick price bar: the **open**, **high**, **low**, and **closing** price for a given time period. Here are examples of candlesticks with definitions for each candlestick component:



The body of the candlestick is called the real body, and represents the range between the open and closing prices.

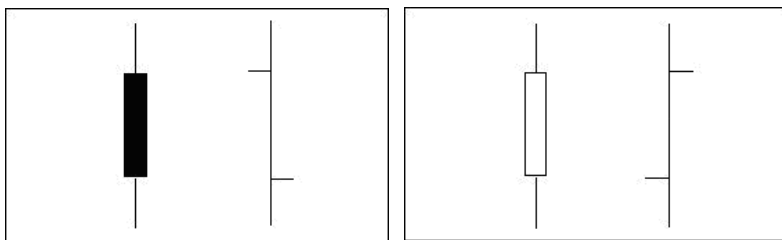
A black or filled-in body represents that the close during that time period was lower than the open, (normally considered bearish) and when the body is open or white, that means the close was higher than the open (normally considered bullish).



The thin vertical line above and/or below the real body is called the upper/lower shadow, representing the high/low price extremes for the period.

Bar Compared to Candlestick Charts

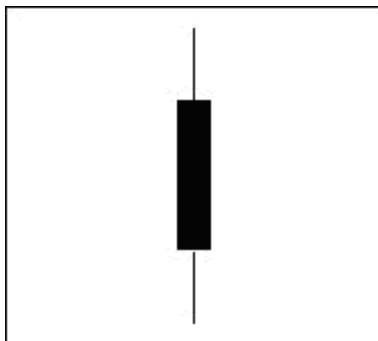
Below is an example of the same price data conveyed in a standard bar chart and a candlestick chart. Notice how the candlestick chart appears 3 dimensional, as price data almost jumps out at you.



The long, dark, filled-in real bodies represent a weak (bearish) close, while a long open, light-colored real body represents a strong (bullish) close. It is important to note that Japanese candlestick analysts traditionally view the open and closing prices as the most critical of the day. At a glance, notice how much easier it is with candlesticks to determine if the closing price was higher or lower than the opening price.

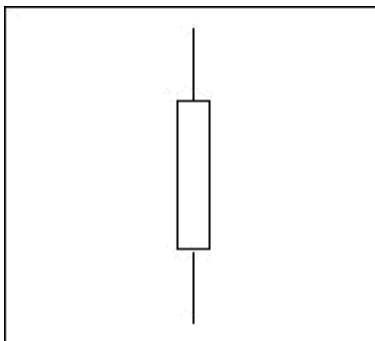
Common Candlestick Terminology

The following is a list of some individual candlestick terms. It is important to realize that many formations occur within the context of prior candlesticks. What follows is merely a definition of terms, not formations.



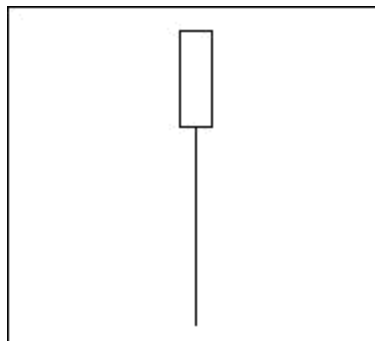
The Black Candlestick

The close was lower than the open.



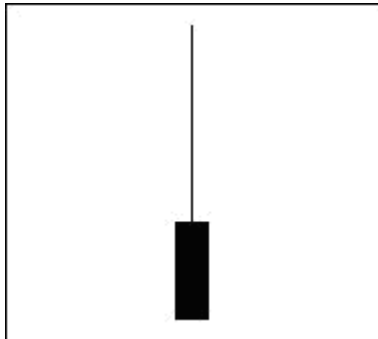
The White Candlestick

The close was higher than the open.



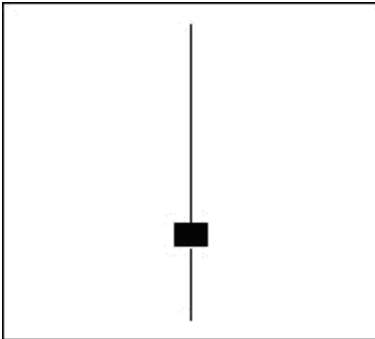
The Shaven Head

A candlestick with no upper shadow.



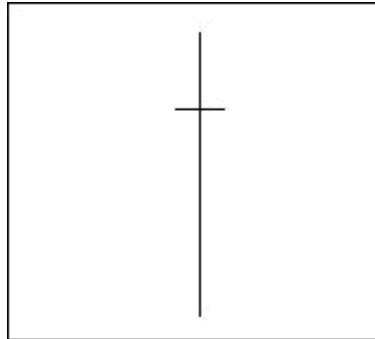
The Shaven Bottom

A candlestick with no lower shadow.



Spinning Top

A candlestick with small real bodies. When appearing in a sideways choppy market, they represent equilibrium between the bulls and the bears. They can be either white or black.

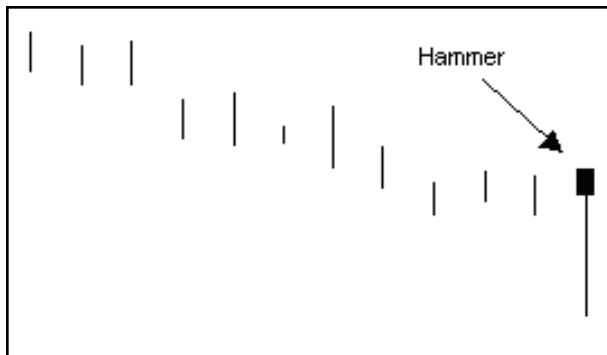


Doji Line

A candlestick with no real body, but instead have a horizontal line. This shows the Open and Close are the same or very close. The length of the shadow can vary.

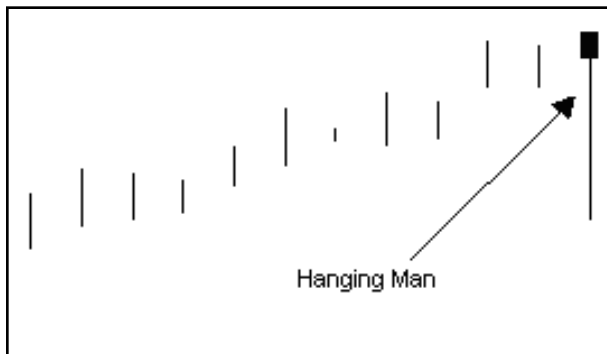
Candlestick Reversal Patterns

Just as many traders look to bar charts for double tops and bottoms, Head & Shoulders, and technical indicators for reversal signals, candlestick formations can also be looked upon for the same purpose. A reversal does not always mean that the current uptrend/downtrend will reverse direction, but merely that the current direction may end. The market may then decide to drift sideways. Candlestick reversal patterns must be viewed within the context of prior activity to be effective. In fact, identical candlesticks may have different meanings depending on where they occur within the context of prior trends and formations.



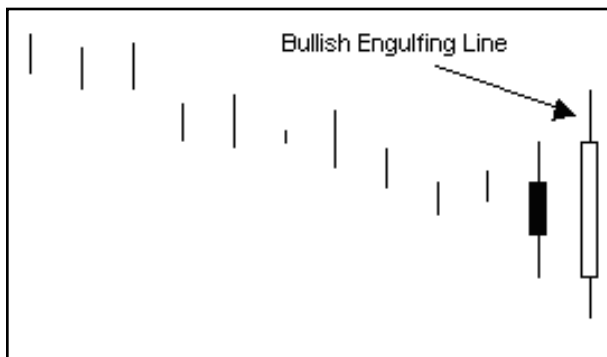
Hammer

A candlestick with a long lower shadow and small real body. The shadow should be at least twice the length of the real body, and there should be no or very little upper shadow. The body may be either black or white, but must occur within the context of a downtrend to be considered a hammer. The market may be “hammering” out a bottom.



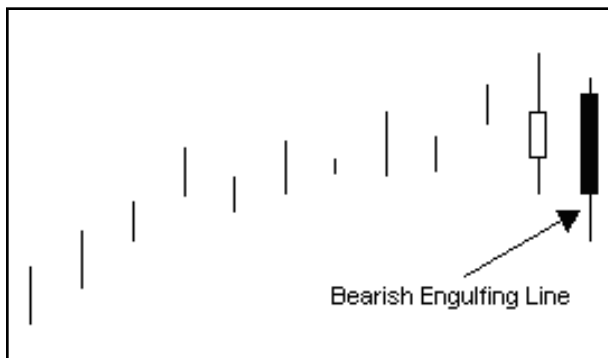
Hanging Man

Identical in appearance to the Hammer, but appears within the context of an uptrend.



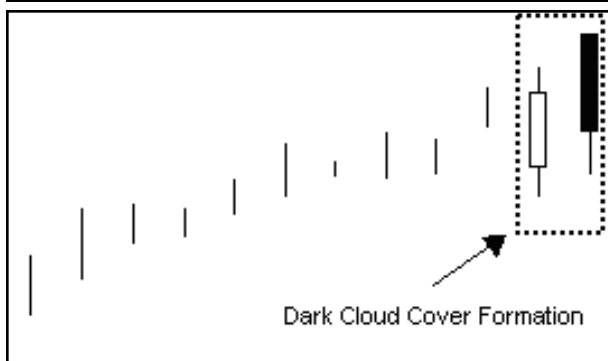
Engulfing Patterns (Bullish)

This occurs when a white real body completely covers, or engulfs, the prior day's real body. The market should be in a definable trend, not chopping around sideways. The shadows of the prior candlestick do not need to be engulfed.



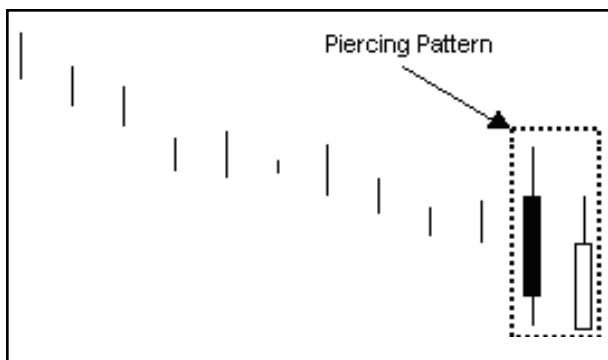
Engulfing Pattern (Bearish)

This occurs when a black real body completely covers, or engulfs, the prior day's real body. The market should be in a definable trend, not chopping around sideways. The shadows of the prior candlestick do not need to be engulfed.



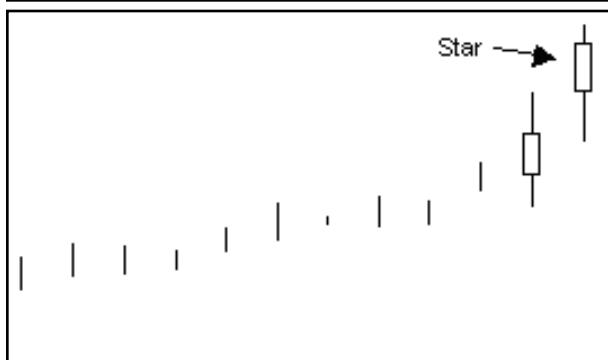
Dark-Cloud Cover (Bearish)

A top reversal formation where the first day of the pattern consists of a strong white, real body. The second day's price opens above the top of the upper shadow of the prior candlestick, but the close is at or near the low of the day, and well into the prior white, real body.



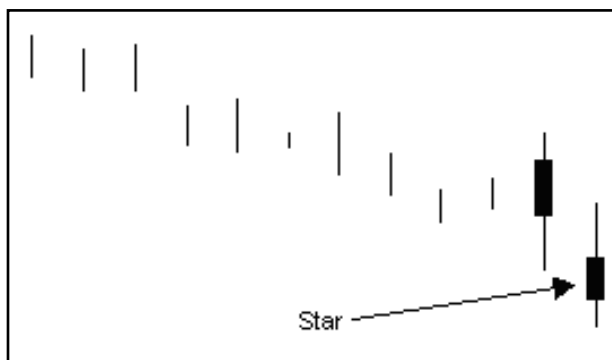
Piercing Pattern (Bullish)

This is opposite of the dark-cloud cover and occurs within a downtrend. The first candlestick has a black real body and the second has a long, white real body. The white day opens sharply lower, under the low of the prior black day. Then, prices close above the 50% point of the prior day's black real body.



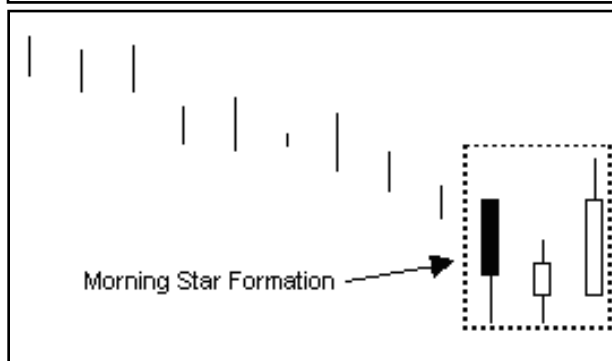
Stars

These candlestick formations consist of a small real body that gaps away from the real body preceding it. The real body of the star should not overlap the prior real body. The color of the star is not too important, and they can occur at either tops or bottoms. Stars are the equivalent of gaps on standard bar charts.



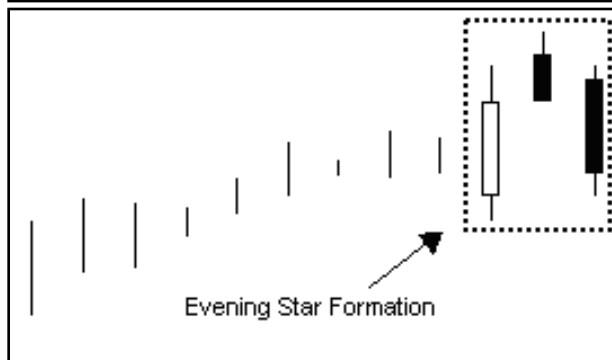
Stars make up part of four separate reversal patterns:

- Morning Star
- Evening Star
- Doji Star
- Shooting Star (Inverted Hammer)



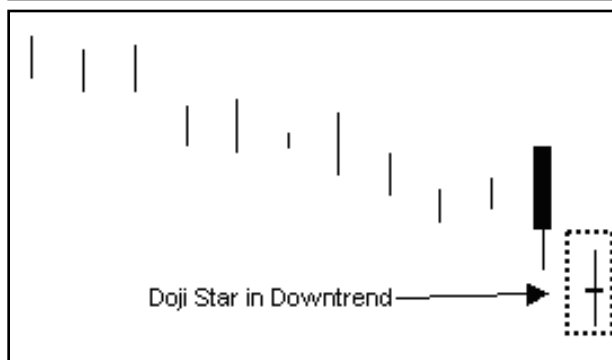
Morning Star

This is a bullish bottom reversal pattern comprised of 3 candlesticks. The first candlestick is a tall black real body and is followed by a small real body candlestick that gaps (opens) lower. The third candlestick is a white real body that moves well into the first period's black real body. This is similar to an island pattern on standard bar charts.



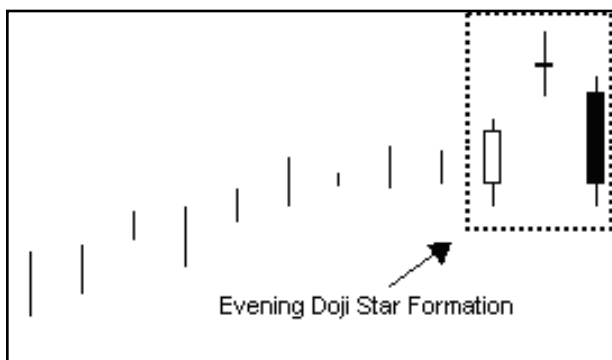
Evening Star

This is a bearish top reversal pattern and counterpart to the Morning star. Three candlesticks compose the evening star, the first being long and white. The second forms a star, followed by the third, which has a black real body that moves sharply into the first white candlestick.



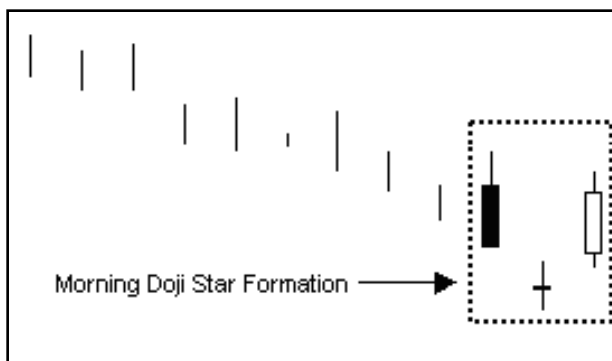
Doji Stars

When a Doji gaps above a real body in an uptrend, or gaps under a real body in a falling market, that particular Doji is called a Doji star. Two popular Doji stars are the evening star and the morning star.



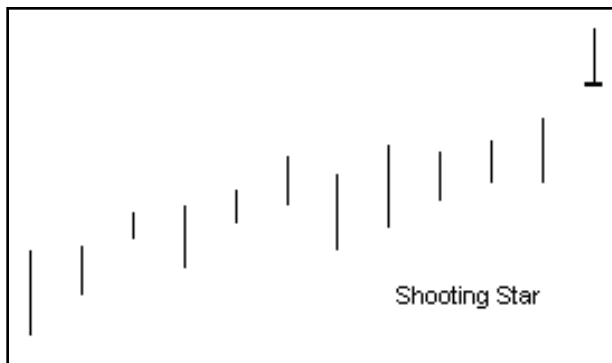
Evening Doji Star

This is a Doji star in an uptrend followed by a long, black real body that closed well into the prior white real body. If the candlestick after the Doji star is white and gapped higher, the bearishness of the Doji is invalidated.



Morning Doji Star

This is a Doji star in a downtrend followed by a long, white real body that closes well into the prior black real body. If the candlestick after the Doji star is black and gapped lower, the bullishness of the Doji is invalidated.



Shooting Star

A small real body near the lower end of the trading range, with a long upper shadow. The color of the body is not critical. Not usually considered a major reversal sign, only a warning.

Candlesticks Conclusion

It is important to realize that this introduction is just that, an introduction to candlestick analysis. After having read this, you will have merely scratched the surface of the many patterns and variables that can go into candlestick analysis. No attempt was made to provide a thorough analysis of each and every pattern. In fact, many formations were left out as they cross the border into a more complicated analysis. For a more complete overview of candlestick analysis, it is highly recommended that you read the book that is referred to below.

A large portion of the material in this introduction is taken from an excellent book called Japanese Candlestick Charting Techniques: A Contemporary Guide to the Ancient Investment Techniques of the Far East. (You can find this book in The PitMaster's Bookstore www.thepitmaster.com.) In some cases, sentences were taken almost verbatim, as there was no better way to say what Mr. Steve Nison, the author, already said. In his book, Mr. Nison completely explains candlesticks and their formations, but more importantly explains how to combine candlestick analysis with traditional technical analysis. It is highly recommended that you consider purchasing this book.

As traders, we need many trading tools in our arsenal, and a basic knowledge of candlesticks provides a trader much needed ammunition. Also remember that no matter what the trading tool, no matter how advanced or ancient, it is only effective when put into practice properly. This is your job as the trader.

