

Micro Pivots / Inflection Points

Micro Pivots / Inflection Points are intra-day micro support and resistance levels. What are support and resistance levels? They represent a price point where buying and selling are at equilibrium. In market auction theory (explained in detail in the Market Structure Training) sometimes there is more supply (sellers) than demand (buyers), and the price goes down. When the opposite occurs the price goes up. There are also times when the price remains somewhat sideways, referred to as a price consolidation. This is a pause in the price action and happens when buyers and sellers are in balance. There are many possible reasons why the price can pause, understanding where this can occur is my role in identifying Micro Pivots / Inflection Points. Taking action off these levels is your role and allows you the ability to initiate a trade, select an appropriate level to place a stop or lock in profits from a previous price move.

Interchange of Levels

From these areas where the price pauses, there are only two possible scenarios; either a continuation of the current trend or a reversal of the trend. These areas of pause are "*Inflection Points*" which act as micro support and resistance levels that are often referred to from technical analyst as either being Support (a level below the current trading) or Resistance (a level above the current trading). Although this distinction is completely correct, we like to refer to our levels simply as Micro Pivots or Inflection Points because of a key trait of Support and Resistance levels... Interchange. The old adage goes "Support becomes Resistance and Resistance becomes Support". Support and Resistance levels will often interchange between the two roles and it is key for trading success to be open to this phenomenon.

Proactive/Reactive Support and Resistance

Most Traders will be aware of the many different types of Support and Resistance methods used by traders we have highlighted over 10 that we use as part of our analysis! At Newbie-Trader.com we try to view Support and Resistance in 2 classes, they are either Proactive or Reactive Support and Resistance levels.

Proactive Support and Resistance methods are 'predictive' they often outline areas where price has not actually been, they are formed based upon current price action that through analysis has been shown to be predictive of future price action. Proactive Support and Resistance methods include Elliot Wave, Fibonacci, Calculated Pivots, Trend-lines and Moving averages. VWAP, Market Profile (VAH, VAL and POC) and Gann Techniques.

Reactive Support and Resistance are the opposite they are formed directly as a result of price action or volume behavior. They include Volume Profile, Price Swing lows/highs, Initial Balance, Open Gaps and OHLC.

Both Proactive and Reactive Support and Resistance methods have merit and form a staple part of the Micro Pivots / Inflection Points method.

Thoughts for Using the Micro Pivots / Inflection Points

The Support and Resistance Micro Pivots / Inflection Points can be used in a number of ways to aid your present trading strategy. They can be used to tell you when to exit or partially exit a current position. A breakout from a Micro Pivots / Inflection Points may be used to enter a new position or add-on to and existing position. Watching what happens when price enters a Micro Pivots / Inflection Points may be indicative of taking a position or deciding to remain "flat". If your strategy gives a buy signal, and the price is just below a zone, you may wait to see how the price reacts to the resistance zone. There are many ways to augment your trade setups using the Micro Pivots / Inflection Points.

Some form of Support and Resistance is a core foundation of most profitable technical analysis based trading strategies. It is a major pillar of Technical Analysis and a must have in the tool box of every successful trader. As simple as the concept behind support and resistance may be, the practice can be difficult due to the wide range of information and techniques available. Our goal at Newbie-Trader.com is to combine and condense this information for traders in a format that is easy for them to use. Professional traders have teams of analysts working for them to do their homework every day. Now you can too. We are committed to providing quality Support and Resistance Micro Pivots / Inflection Points to you every trading day, before the open, so you don't have to spend the time even if you know how to do it.

The Confluence Micro Pivots / Inflection Points

Most traders whether they are newbie's or seasoned veterans with 20+ years of experience have come across Support and Resistance in some way. The methodologies available to calculate Support & Resistance levels are as varied as there are markets to trade. You'll often hear gurus on CNBC and Bloomberg TV saying the market is currently hitting support at a 50% Fibonacci Retracement, shortly followed by someone else saying that the same area is support because it is a Double Bottom. If you watch for long enough you will hear people talking about Moving averages, Volume Profiles, Floor Pivots, Elliott Waves and an endless list of methods for identifying Support and Resistance. The question facing most traders is which of them, if any work? Well the easy answer is that they all do at particular times in the particular market phase.

Market Personality

Most traders recognize that the market goes through various phase's. These include accumulation, distribution, bullish, bearish, trending, range bound, high volatility, low volatility and various combinations of these. These personality shifts lead to one of the most common issues for traders, their strategy worked so well last month, but this month it's not performing so hot. Most trading strategies are built for certain market phases, and when the markets personality shifts they struggle. This is an issue we are sure that most traders have experienced. Where does this tie in with our Micro Pivots / Inflection Points? Well at any given point in time, based upon the markets phase or personality certain methods of Support and Resistance will do very well and others may lag.

Micro Pivots / Inflection Points Core Concept: Confluence

The answer lies in one word. Confluence. In the same way that a steel cable is made up of multiple strands for strength; the Newbie-Trader.com Confluence Micro Pivots / Inflection Points are made up of the confluence of multiple Support and Resistance methodologies including:

Market Profile (TPO) Volume Profile Elliot Wave Calculated Pivots Open Gaps Naked VPOCs VWAP High/Low Volume Nodes OHLC Trend-lines Initial Balance Fibonacci Retracements/Extensions & Clusters Intraday/Prior day/week/month swing highs and lows Moving Averages Gann Lines

The depth of analysis and confluence required to form our Micro Pivots / Inflection Points puts the probability of price stopping and reversing heavily on our side. For example if there was a Micro Pivots / Inflection Points with a Volume Profile peak at 3000.00, an Elliot Wave ending at 3000.25, a Fibonacci cluster from 2999.00-3002.00 and also a prior day high at 3001.50. What do you think are the chances of price stopping and reversing here? The answer is very high! One of the main reasons is visibility; this Micro Pivots / Inflection Points is combining methods used by multiple groups of traders. There are more eyes on this area and thus it is likely to be a significantly liquid and highly probable area for price reversal.

A Statistical Edge

If combining all these methods into a Support and Resistance cluster wasn't enough we go one huge step further. A great deal of our research time is spent in statistical back testing, to help us gauge which methods to give more weight to at any given point in time. Say the market is in a trending phase our statistical testing may indicate that Volume Profile levels tend to outperform other methods. During this phase the Volume Profile Support and Resistance method will have more weight in our analysis. We pay more attention to some methodologies than others, based upon the short, medium and long term performance statistics of that method in specific market environments.

At Newbie-Trader.com our mission is to create Support and Resistance levels that are based upon the confluence of multiple high probability methods. We then combine these methods with thorough statistical analysis to create Support and Resistance levels that are consistently evolving with the market environment. The comprehensive and unique nature of our research will give you the edge to perform in any market.

Please take some time to look at the pictorial results of our past performance and continue to put the daily levels on your chart to see how they react in real time. In short order you will have the confidence to trade around these levels with any system you choose.... (we have more training and systems available at <u>Newbie-Trader.com</u> that factor in the use of these levels). Below are examples of a range, trend and trend reversal day.... Pay particular attention how price reacts to the teal Micro Pivots / Inflection Points.

<u>Range Day</u>



<u>Trend Day</u>



<u> Trend-Reversal Day</u>



The teal bands are 4 ticks wide... Simple take your <u>Daily Micro Pivots / Inflection Points</u> levels provided on the site and add and subtract 2 tick (½ of a point) from the value. Please note the width may change depending on the market traded and the current market volatility.

Macro Pivots

Macro Pivots follow the same concept as the Micro Pivots but are use for a whole weeks worth of trading.



Daily Expected Range

The NTPivot Tool also has a setting to help identify the expected range high and low for the day. This information is computed on market volatility and the previous days close combined with the overnight trading range. Although a sudden news event can derail this information knowing where the expected daily high and low should be can aid in your trading with regards to market extremes.



<u>Market Profile</u>

The concept of Market Profile stems from the idea that markets have a form of organization determined by time, price (TPO-Time. Price Opportunity) and volume. Each day, the market will develop a range for the day and a value area, which represents an equilibrium point where there are an equal number of buyers and sellers. In this area, prices never stay stagnant. They are constantly diverging, and Market Profile records this activity for traders to interpret.

Market Profile is based on the normal distribution curve, wherein approximately 70% of the values fall within one standard deviation of the average. If you rotate the normal distribution curve so that price is along the vertical axis and time on the horizontal axis, you have the structure of Market Profile.

Volume Profile

The TPO method for Market Profile seems to be slowly but surely being pushed to the sidelines and the Volume Profile is slowly becoming the standard. The Volume Profile follows the same principles as the TPO profile. So the VAH, VAL and POC are still a focal point, is based upon daily cumulative volume against price, The peaks and troughs represent areas of high and low volume respectively. These are areas that are highly likely to be Support and Resistance levels as price is often drawn to these levels due to the extreme amounts of volume traded there over time.

Naked VPOCs

Naked VPOCs (or Naked Point of Control) is generated from the Volume profile of previous trading days. The POC is the price at which the highest amount of volume was traded that day, Naked POCs are POCs that price hasn't retested since their formation, thus offering an increased possibility of being filled in future price movements.

<u>Initial Balance</u>

The Initial Balance is a very simple measure used in Market Profile, it is simply the high and low of the first hour of trading. An interesting statistic about this reference tool is that over 68% of the time in the last 5 years, either the high or the low of a trading day has been formed within this time frame. Thus it provides a useful reference for traders in the current trading day and as a reference for the following trading day.

<u>VWAP</u>

The VWAP is similar to a moving average it describes the ratio of the value traded to the total volume traded over a particular time horizon (usually one day). It is a measure of the average price an instrument traded at over that timescale. We reference VWAPs from multiple time-frames in our creation of the Micro Pivots / Inflection Points.

<u>OHLC</u>

Very simply OHLC is an acronym for Open, High, Low and Close. It describes these metrics for the previous trading day/week/month. The OHLC is on its own right very valuable input for Support and Resistance is also the basis for a wide range of calculations derived from it which will be described in the next section.

Calculated Pivot Points

Pivot Points are generally mathematically derived Support and Resistance levels, from the OHLC of the previous trading day, using a variety of formulas with names including, Standard, Camarilla, Woodie, Floor and DeMark.

Standard Pivot Point Calculation

To calculate the Standard Pivots the formulas below are used. This formula uses the range of the given time frame, daily, weekly, monthly etc. Which is calculated by (High-Low), R1-R4 denote Resistance Levels, PP describes the Pivot Point, S1- S4 are Support levels.

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R4 = R3 + (H - L)

R3 = R2 + (H - L)

R2 = PP + (H - L)

R1 = (2 * PP) - LOW

PP = (HIGH + LOW + CLOSE) / 3

S1 = (2 * PP) - HIGH

S2 = PP - (H - L)

S3 = S2 - (H - L)

S4 = S3 - (H - L)
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Camarilla Pivot Point Calculation

To calculate the Camarilla Pivots the formulas below are used. This formula uses the range of the given time frame, daily, weekly, monthly etc. Which is calculated by (High-Low), R1-R4 denote Resistance Levels, S1- S4 are Support levels. The actual Camarilla number set does not have a PP and includes the Close (C) in its calculation

$$\begin{split} \text{R4} &= (\text{H} - \text{L}) * 1.1/2 + \text{C} \\ \text{R3} &= (\text{H} - \text{L}) * 1.1/4 + \text{C} \\ \text{R2} &= (\text{H} - \text{L}) * 1.1/6 + \text{C} \\ \text{R1} &= (\text{H} - \text{L}) * 1.1/12 + \text{C} \\ \text{S1} &= \text{C} - (\text{H} - \text{L}) * 1.1/12 \\ \text{S2} &= \text{C} - (\text{H} - \text{L}) * 1.1/6 \\ \text{S3} &= \text{C} - (\text{H} - \text{L}) * 1.1/4 \\ \text{S4} &= \text{C} - (\text{H} - \text{L}) * 1.1/2 \end{split}$$

Woodie Pivot Point Calculation

To calculate the Woodie Pivots the formulas below are used. This formula uses the range of the given time frame, daily, weekly, monthly etc. Which is calculated by (High-Low), R1-R4 denote Resistance Levels, PP describes the Pivot Point, S1- S4 are Support levels. This formula also includes the Open.

R4 = R3 + (H - L) R3 = H + 2 * (PP - L) R2 = PP + (H - L) R1 = (2 * PP) - LOW PP = (HIGH + LOW + (OPEN * 2)) / 4 S1 = (2 * PP) - HIGH S2 = PP - (H - L) S3 = L - 2 * (H - PP)S4 = S3 - (H - L)

Floor Pivot Point Calculation

To calculate the Floor Pivots the formulas below are used. R1-R3 denote Resistance Levels, PP describes the Pivot Point, S1- S3 are Support levels.

R3 = (P - S1) + R2 R2 = (P - S1) + R1 R1 = (2*P) - L PP = (H + L + C)/3 S1 = (2*P) - H S2 = P - (R1 - S1)S3 = P - (R2 - S1)

DeMark Pivot Point Calculation

To calculate the DeMark Pivots the formulas below are used. This calculation method differs slightly from the others in terms of its structure, The PP is not an official DeMark Number but is required to calculate the formula.

The value of X in the formula below depends on where the Close of the market is.

If Close < Open then X = (H + (L * 2) + C)If Close > Open then X = ((H * 2) + L + C)If Close = Open then X = (H + L + (C * 2))

R1 = X / 2 - L PP = X / 4S1 = X / 2 - H

Moving Averages

Moving averages are among the most popular and versatile indicators used by traders. They are used by many as criteria for entry (MA crosses) as a way to manage a trade in a trending market and as dynamic Support and Resistance. Moving averages smooth the price data to form a trend following indicator. They do not predict price direction, but rather define the current direction with a lag. Moving averages are based upon past prices, which means that they will lag behind current prices. Price leads and the Moving average follows. They offer traders a dynamic form of Support and Resistance the major numbers 20, 40, 50 and 200 period moving averages are the most used. Inside the Newbie-Trader.com system we have develop our own proprietary moving averages that currently define the market on an intra-day basis and are a key component of our <u>Ultimate Fractal Tool</u>.

Simple Moving Averages

We factor our simple moving averages into our calculations of Support and Resistance. A simple moving average is formed by computing the average price of an instrument over a specific number of periods. Most moving average are based on the closing prices. A 20-period simple moving average is the twenty period sum of closing prices divided by twenty. As its name implies, a moving average is an average that moves. Old data is dropped as new data comes available. This causes the average to move along the time scale. On period 21 of a 20-period SMA, the first period would be dropped from the calculation and the twenty first period would be added.

Exponential Moving Averages

We factor our exponential moving averages into our calculations of Support and Resistance. Exponential moving averages reduce the lag by applying more weight to recent prices. The weighting applied to the most recent price depends on the number of periods in the moving average. There are three steps to calculating an exponential moving average. First, calculate the simple moving average. An EMA has to start somewhere so a simple moving average is used as the previous period's EMA in the first calculation. Second, calculate the weighting multiplier. Third, calculate the exponential moving average.

Price Swing lows/highs

Price Swing offer the most widely known Support and Resistance methodology, at Newbie-Trader.com we apply a keen focus to this age old Support and Resistance method. We analyze price swing lows from the 5 minute all the way to the monthly charts for any given market.

Trend Lines

Trend-lines are an important tool in technical analysis for trend identification and confirmation. They are unique in that they help traders define Support and Resistance across time as well as price. As such they are a predictive form of Support and Resistance and offer great value to traders

<u>Open Gaps</u>

Open Gaps are very simply the difference between a prior session close and the following sessions open, if their has been no price action 'checking' the prior session close it is considered an 'open' gap. Gaps tend to be a magnet for price and form important areas for Support and Resistance

<u>Fibonacci</u>

The Fibonacci sequence is named after Leonardo of Pisa, who was known as Fibonacci. Fibonacci's 1202 book Liber Abaci introduced the sequence to Western European mathematics, although the sequence had been previously described in Indian mathematics.

Fibonacci numbers are used in the analysis of computer algorithms, biological systems and very often in analyzing financial markets. They form one of the main pillars of Technical Analysis.

Fibonacci Retracements

Fibonacci retracements are a very well known and well used trading method. There are several retracements numbers which a 'hit' on a frequent basis on an intra-day time frame as well as longer ones.

The most common Fibonacci Retracements number are; 38.2%, 50.0%, and 78.6%. There are many others. The idea goes like this; the market is trending, in order to enter, we would like to wait for a pullback. After the price retraces to the numbers, it often continues it's trend.

Fibonacci Expansion

A Fibonacci Expansion is calculated by by measuring a wave (extended move), and applying the Fibonacci percentages of that move, from the end of its subsequent corrective move. 78.6%, 100%, 138.2%, and 161.8% are the most common expansion fib numbers.

Fibonacci Extension

A Fibonacci Extension is calculated by measuring a wave (extended move), and applying the common Extension numbers to the tool without moving it from the original move. 127.20% and 141.67%, 150%, and 161.8% are among the more common fib numbers for calculating the continuation of the present move.

Fibonacci Clusters

We employ all of these Fibonacci methods at Newbie-Trader.com in a process called Fibonacci Clustering. A Fibonacci Cluster occurs when a group of independent fibs lineup within a tight span and form a cluster. These clusters tend to offer high probability Support and Resistance areas as they are derived from analysis across multiple time-frames

Elliott Wave

The wave principle posits that collective investor psychology moves from optimism to pessimism and back again in a natural sequence. These swings create patterns, as evidenced in the price movements of a market at every degree of trend.

Elliott's model says that market prices alternate between five waves and three waves at all degrees of trend. Within the dominant trend, waves 1, 3, and 5 are "motive" waves, and each motive wave itself subdivides in five waves. Waves 2 and 4 are "corrective" waves, and subdivide in three waves. In a bear market the dominant trend is downward, so the pattern is reversed—five waves down and three up. Motive waves always move with the trend, while corrective waves move against it.

Gann Techniques

The Gann Angles are named after W. D. Gann, a 20th century market theorist. Gann described the use of the angles in the stock market in The Basis of My Forecasting Method, a 33-page course written in 1935. Calculating a Gann angle is equivalent to finding the derivative of a particular line on a chart in a simple way.

Each geometrical angle (which is really a line extended into space) divides time and price into proportionate parts. The most important angle Gann called the 1x1 or the 45° angle, which he said represented one unit of price for one unit of time. If you draw a perfect square and then draw a diagonal line from one corner of the square to the other, you have illustrated the concept of the 1x1 angle, which moves up one point per day. Other important angles were the 2x1 (moving up two points per day), the 3x1, the 4x1, the 8x1, and the 16x1. When the angles are drawn in a group, they are often called a Gann fan. Angles may either be drawn ascending from price bottoms, as just described, or descending from price tops.

As with other forms of technical analysis of stock price movements, the Gann angle model contradicts the weakest form of the efficient market hypothesis which states that past price movements cannot be used to forecast future price movements.