# Nirvana's All Indicator Suite 2

User Guide



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# Conventions

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Following conventions are used in this manual:

The » symbol leads you through nested menu items and dialog box options to a final action. The sequence **File**»**Page Setup**»**Options** directs you to pull down the **File** menu, select the **Page Setup** item, and select **Options** from the last dialog box.

	8
Ŷ	This icon denotes a tip, which alerts you to advisory information.
	This icon denotes a note, which alerts you to important information.
bold	Bold text denotes items that you must select or click in the software, such as menu items and dialog box options.
italic	Italic text denotes variables, emphasis, a cross reference, or an introduction to a key concept. This font also denotes text that is a placeholder for a word or value that you must supply.

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# 1

# **Introduction to Nirvana's All Indicator Suite 2**

Congratulations on your purchase of Nirvana's All Indicator Suite. This module includes all of the indicators in Nirvana's arsenal of Plug-ins and modules from November 2019 to September 2022.

# **Installing the All Indicator Suite 2**

Before you can begin using All Indicator Suite, confirm that you have the latest version of OmniTrader or VisualTrader installed. Then, click the following link to install and follow the on-screen instructions:

http://www.omnitrader.com/currentclients/downloads/item.asp?Prodcode=3872

Follow the instructions that appear in the installation wizard dialog boxes.

# **Registering the All Indicator Suite 2**

Before you can use the All Indicator Suite plug-in, you must register it.

- 1. Open OmniTrader and you will be prompted to register a new systems library. Click "Yes" to register your All Indicator Suite.
- 2. Click **Get My CD Keys** and your registration file will be updated automatically with your new key.

# 2

# **Catch a Wave Indicators**

There are two indicators included in Catch a Wave. The first, Catch a Wave Volume Price (CAW-VP), is also known as the VWAP indicator. the VWAP or volume weighted average price indicator is used by institutions and traders in intraday timeframes as a general rule.

# **Catch a Wave Volume Price Indicator (CAW-VP)**

The CAW-VP indicator is the ratio of the value traded to the total volume traded over a particular period of time, usually one day. It is a measure of the average traded price over a given period of time. The indicator begins its calculation at the beginning of a day (or week, month, quarter) and finishes upon the last trade of the day (or week, month, quarter).



Figure 2-1. The Catch a Wave Volume Price Indicator Plotted on Tillray

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#### Chapter 2 Catch a Wave Indicators

CAW-VP is often seen as the best price for any given trading day. As such, any selling

pressure below CAW-VP is seen as a buying opportunity, while any buying pressure above VWAP is usually seen as a selling opportunity by professional traders that are looking to either take profits or establish new short positions.

#### **Parameters**

• Boundary—Defines the start and end time for calculations.

- Daily—Uses one trading day from the open to close.

- Weekly—Uses a calendar week from open on Monday to close on Friday.

**Monthly**—Uses a calendar month starting with the open on the first trading day of the month to the close of the last trading day of the month.

- **Quarterly**—Uses a calendar quarter starting with the open on the first trading day of the quarter to the close of the last trading day of the quarter.

• **Boundary Periods**—Used for creating custom boundaries. For example, setting the parameter to 2 will create a two-day calculation if the boundary is set to Daily, or a two-month calculation if the boundary is set to Monthly.

# Catch a Wave Zig-Zag Indicator (CAW-ZZ)

The Catch a Wave Zig-Zag Indicator plots the pivots on the chart, and returns a value to determine whether the price is moving upward or downward. When the stock is moving upward the indicator returns the value -1, when the stock is moving downward the indicator returns 1. Direction shifts each time a new pivot is formed.



Figure 2-2. The Catch a Wave Zig-Zag Indicator Plotted on Tillray

#### **Parameters:**

• Sensitivity—Defines the level of price action required to determine a new pivot. It is measured in ATR's and the default setting is 1.

• **ATR Periods**—Specifies the number of periods used to calculate the ATR's for the pivot algorithm. The default value is 14.

To add the indicators to charts, right-click a chart and select Add Indicator. The two indicators are in the Catch a Wave group.

Chapter 2 Catch a Wave Indicators

# 3

# **CT Indicators**

Coral Trend is one of the most predictive indicators available to traders, because it (a) effectively anticipates turns in the chart and (b) is not too sensitive, meaning it can stay with trends longer.

To illustrate this, the chart shown here for Home Depot has a flat period in October 2021 and another one in January 2022, but Coral Trend stayed green in the first one and red in the second, enabling a trader to confidently stay with the trend during these uncertain periods.



Figure 3-1. The Coral Trend Indicator Plotted on HD

# **CT Pivot Indicator**

Historically, we have used Pivots based on Percentage movement (such as with Zig Zag) or ATRs (Wave Trader). CT Pivot was created to generate a faster, more predictive Pivot on which to base Reversal and Breakout trades.



Figure 3-2. ZigZag (Pivots) and CT Pivots Plotted for Comparison

CT Pivots form more quickly AND are better defined, because they follow the ebb and flow of the Coral Trend indicator as described below.

#### How CT Pivots are Constructed

CT Pivot is based on changes in the CoralTrend indicator. When CoralTrend (for a specific Smoothing Period) turns up or down, the most recent High or Low is identified and drawn as the prior pivot.

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Figure 3-3. CoralTrend Pivot Examples on Home Depot

Zig Zag pivots may not be "found" until many bars later, because the chart has to move the given amount first. But we can see that Coral Trend Pivots are found quickly because they are based on the turn in Coral Trend, not a Percent or ATR move. This makes CT Pivots ideal for any application where pivots are used.

CT Indicators

#### **Parameters:**

- Smoothing Periods—Smoothing Periods for the CoralTrend Indicator
- Constant D—Constant applied to the CoralTrend Indicator
- **[x] Use CT Change**—Plots the Pivots at the points where CoralTrend changes direction. This has various applications, including with trend-following Systems, since higher pivots mean the chart is going higher. See example next.

An example of "Use CT Change" for the Pivots is shown below.



Figure 3-4. Pivots Drawn on the Bars Where Coral Trend Changes Direction

#### Using CT Pivot in OmniLanguage

The CT Pivot indicator returns an array of pivot pointers. This powerful feature is useful for identifying pivots and pivot relationships in the past.

For example, here is a Triangle pattern with pivots P1, P2, P3, P4, and P5.



Figure 3-5. The Array of Pivots for the CT Pivot Indicator

We can use CTPivot() to get the array and then convert it into Offsets by using the following:

CBar = CTPivot(9,1,0) P1 = Bar - Cbar P2 = Bar - CBar[P1] P3 = Bar - CBar[P2] P4 = Bar - CBar[P3] P5 = Bar - CBar[P4]

Now, when the following condition is true, you've found a Triangle Breakout at today's Close.

L[P1] < H[P2] and L[P1] > L[P3] and H[P4] > H[P2] and L[P5] < L[P3] and C > P2

That's just one line! Virtually any pivot relationship can be found using this technique.

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# **CT WM Indicator**

The CT WM Indicator uses Coral Trend Pivots to find the W and M patterns in your data. These can be explosive breakout patterns. They can also indicate counter trend moves when they are broken in the opposite direction.



Figure 3-6. "W" Pattern Identified on Amgen (AMGN)



Figure 3-7. W and M Pattern on Walmart (WMT)

#### **Parameters:**

- Smoothing Periods Smoothing Periods for the CoralTrend Indicator
- Constant D—Constant applied to the CoralTrend Indicator
- Base Ratio—Ratio of left leg to center of W or M (A/B in the following picture)
- **Base Tolerance**—Percentage tolerance of the Support Pivots for a W or Positional Pivots for a M

for a W or Resistance Pivots for an M.

CT Indicators





Larger **Base Ratios** and tighter **Base Tolerances** provide more accurate patterns. Because it is easy for a W to form a consolidation and fail downwards, initial stops should be placed very close to the apex of the W. If it does fail, a break of the Support level is typically met with ferocious selling. Similar dynamic for an M, which can form an upside consolidation and fail upwards.

- Constant D—Constant applied to the CoralTrend Indicator
- Signal Type—Pivot Break, Higher Low/Lower High, All Reversals
- [x] Trending—Check to set Trending Requirement

# 4

# **The GatorTrader Indicators**

GatorTrader includes four indicators developed by Bill Williams.

# **The Alligator Indicator**

The Alligator Indicator is comprised of three shifted moving averages. The longer term moving average is considered the Alligator Jaw. The medium term moving average is the Alligator Teeth, and the short-term moving average is the Alligator Lips.

#### **Parameters:**

- Jaw Period: MA periods used for the long term calculation.
- Jaw Shift: Number of periods to shift the MA.
- Teeth Period: MA periods used for the medium-term calculation.
- Teeth Shift: Number of periods to shift the MA.
- Lips Period: MA periods used for the short-term calculation.
- Lips Shift: Number of periods to shift the MA.

The different moving averages are usually colored as the Jaw being blue, the teeth being red and the lips being green.



Figure 4-1. The Classic Configuration of the Alligator Indicator

As mentioned in the previous chapter, the moving averages relationship to each other helps us determine whether the market is trending and how strong the trend is.

If the Teeth and Jaw cross each other or multiple times, then the Alligator is considered to be sleeping and there is no trend. When the Lips and Teeth start to separate, it means that the Alligator is awakening and a trend could be starting. As the Alligator components diverge, it is said to be eating and we have a trending market.

The Alligator Indicator is an essential component in both of the strategies provided in GatorTrader.

# The Gator Oscillator

The Gator Oscillator references the same information as the Alligator Indicator, but calculates the difference between two different sets of moving averages.

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#### **Parameters:**

- Jaw Period: MA periods used for the long term calculation.
- Jaw Shift: Number of periods to shift the MA.
- Teeth Period: MA periods used for the medium-term calculation.
- Teeth Shift: Number of periods to shift the MA.
- Lips Period: MA periods used for the short-term calculation.
- Lips Shift: Number of periods to shift the MA.



Figure 4-2. The Gator Oscillator Plotted on Dollar Tree

The positive values (above the zero line) are the absolute difference between the Alligator's jaws and teeth (the blue and red lines). The negative values are calculated as the absolute difference between the teeth and lips (the red and green lines) and then given a negative value, so as to lie below the zero line. When a bar in the histogram is of a greater value than the previous bar, it is colored green.

## **Gator Awesome Oscillator Indicator**

This indicator is used to measure market momentum. It uses the median price and calculates the difference of two moving averages in order to create a histogram.

#### **Parameters:**

• Short Periods: The number of bars used to calculate the shorter moving average.

• Long Periods: The number of bars used to calculate the longer moving average. If the indicator is rising, the histogram bars are colored green. If it is falling, the histogram bars are colored red. Values above the zero line indicate bullish momentum, particularly if bars are green. Values below the zero line indicate bearish momentum, particularly if the bars are red.



Figure 4-3. The Gator Awesome Oscillator Plotted on Disney

## **Gator Acceleration Indicator**

The Gator Acceleration Indicator is also referred to as the Bill Williams Acceleration/Deceleration Indicator. It is based off of the Awesome Oscillator, but it adds a Trigger Line which is a third moving average.

#### **Parameters:**

- Short Periods: The number of bars used to calculate the shorter moving average.
- Long Periods: The number of bars used to calculate the longer moving average.
- Trigger Line: The number of bars used to calculate the third moving average.



Figure 4-4. The Gator Acceleration Indicator on Citrix

If the indicator is rising, the histogram bars are colored green. If it is falling, the histogram bars are colored red. Values above the zero line indicate bullish momentum, particularly if bars are green. Values below the zero line indicate bearish momentum, particularly if the bars are red.

## **Gator Eating Indicator**

The GatorEating Indicator shows how many bars have passed since either an Eating Bulls or Eating Bears condition was initiated. In the "Eating Bulls" case, the "Lips" (green line) are above the "Teeth" (red line) and the "Jaws" (blue line) are below the "Teeth." For Eating Bears, it is the opposite.As soon as ANY line crosses any other, the count (indicator) is reset back to zero.

At a glance, this Indicator shows whether a chart is in a significant up-trend or down-trend. Recent peaks of the indicator can be used for Breakout Indications.

#### **Parameters:**

- Jaw Period: MA periods used for the long term calculation.
- Jaw Shift: Number of periods to shift the MA.
- Teeth Period: MA periods used for the medium-term calculation.
- Teeth Shift: Number of periods to shift the MA.
- Lips Period: MA periods used for the short-term calculation.
- Lips Shift: Number of periods to shift the MA.



Figure 4-5. The Gator Eating Indicator in AAPL

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# 5

# Harness Relative Strength (Rocket) Indicators

The acronym "HRS" stands for "Harness the power of Relative Strength". The HRS indicators were used in the Rocket 1 and Rocket 2 Plug-In packages.



Figure 5-1. HRS Difference and HRS Accumulation Plotted on Bidu

# **HRS Difference**

HRS Difference is the difference between the slope of a linear regression line fitted through a symbol in the chart over Periods and a linear regression line fit through the reference symbol (which is typically an index) over the same periods. Both lines are normalized (divided by price) so they represent a percentage move per-bar.

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In the picture below, Periods=10 and the line has gained 10%. The line through the index has gained 2%. The difference is 8%, so HRS\_Diff will be 8%/10 periods = 0.8.



When stocks have increasing values of HRS\_Diff they are rising faster than the index. The value of HRS\_Diff "oscillates" from high to low as Relative Strength to the reference symbol changes over time.

When HRS Difference turns up (and goes above its moving average), that is a very good time to buy the stock for a **Swing Trade** – and especially if Accumulated Relative Strength is also positive. HRS Accumulation is described next.

#### **Parameters**

Value = HRS\_Diff (Periods, SMAPeriods, RefSymbol)

- Periods—Lookback periods used to calculate the indicator
- **SMAPeriods**—Periods used to calculate a simple moving average (displayed only)
- **RefSymbol**—Index symbol against which the given symbol is compared.
- **Return Value**—The value of the curve.

## **HRS** Accumulation

HRS Accumulation is the accumulation or sum of HRS\_Diff over time, and is formed by 3 lines – green, red, and blue. The green and red lines are used to create the blue line.

The green line is the sum of HRS\_Diff values that are above zero, going back the same number of periods that HRS\_Diff is calculated over. The red line is calculated the same way, using values of HRS\_Diff that are below zero.

The lines are weighted so that the most recent values of HRS\_Diff have more impact. This makes the most recent behavior of HRS\_Acc reflect the most recent values of HRS\_Diff, which enables the indicator to form a smooth ascending curve if Relative Strength is increasing.

The **blue line** is the value of the green line minus the red line. If the blue line is trending up, the stock is being accumulated. If it is trending down, it is being distributed in the market.

The green and red lines are plotted because if either is very close to zero, that means the other is highly dominant, which tells us that trend is likely to continue in that direction.

#### Parameters

Value = HRS\_Diff (Periods, SMAPeriods, RefSymbol)

- **Periods**—Lookback periods used to calculate the indicator
- **SMAPeriods**—Periods used to calculate a simple moving average (displayed only)
- **RefSymbol**—Index symbol against which the given symbol is compared.
- **Return Value**—The value of the curve.



#### **Pull-Back Line and Market Direction Indicator**

Figure 5-2. HRS Pull Back Line Potted on RVLV

# **HRS Pull Back Line**

#### HRS\_PBL(Periods)

Periods: Periods used in the calculation.

Much like a Moving Average, this indicator is used to determine trend, and is based on the Low value going "Periods" bars back. For example, HRS\_PBL(3) is based on the Low 3 periods back. The chart above has 2 lines plotted, HRS\_PBL(3) and HRS\_PBL(6).

If the Close is above the Pull Back Line, the chart is in an uptrend over those periods. Note how well reversals are indicated by crossing a HRS PBL line.

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## **HRS Market**

HRS\_MKT(Count)

Count: How many PBLs are used to determine direction.

In the chart above, you can find places where Close is above HRS\_PBL(3) but not above HRS\_PBL(6). These are trading ranges. HRS\_MKT adds +1 for every PBL that is below price subtracts 1 if above price.

- If HRS\_PBL(1) is above Close, add 1. If below Close, subtract 1.
- If HRS PBL(2) is above Close, add 1. If below Close, subtract 1.
- If HRS\_PBL(3) is above Close, add 1. If below Close, subtract 1.
- If HRS\_PBL(4) is above Close, add 1. If below Close, subtract 1.
- If HRS\_PBL(5) is above Close, add 1. If below Close, subtract 1.
- If HRS\_PBL(6) is above Close, add 1. If below Close, subtract 1.

If the Close is above all of them, the value will be 6, indicating a very strong up-move. We can trade in the direction of this move or look for resistance to form shortly. Values near zero are considered "pull-backs" and can be used to trade in the direction of trend.

# 6

# Elliott Fibonacci Trader Indicators

The Elliott Fibonacci plugin includes four indicators.



This chart shows the plot generated by EFTWave(4). Numbers appear below and above the chart that represent *likely* Elliott Wave Counts, as pivots are discovered.

When the trend changes, the Count is adjusted to either "2" or "3" based on the prior pivot and direction of trend. This is why you see multiple "3's" or "2's" in a row. This adjustment is designed to reflect the most accurate designation for the next pivot, as discovered from left to right. <u>The Count for a prior pivot is never changed</u>.

# Elliott Fibonacci Trader Waves (EFT\_Wave)

EFT Waves plots the Pivots ("zig zag") and Wave Count in the chart as it is discovered. In the indicator pane, plots the current Wave Count for every bar.

Indicator = EFT Wave (Sensitivity)

#### **Parameters**

- Sensitivity—The value used for the EFT\_PBL indicator, which finds reversals in the chart.
- Indicator—The indicator array that contains the current wave count at every bar.

Plots the pivots in the chart and numbers them. Also plots the current wave count in an indicator pane as shown in the example chart.

## Elliott Fibonacci Trader Scan (EFT\_Scan)

Finds the Count of the current Wave. Typically used in a Focus List column to identify the current Wave Count.

Value = EFT Scan (Sensitivity, Wave, Trend)

#### **Parameters**

- Sensitivity—Passed to EFT\_Wave, which is then passed to the EFT\_PBL indicator (see below).
- Wave—Desired Wave, either a specific count (1, 2, ...) or zero (0) which means "any"
- **Trend**—1 if the pivot must be higher (uptrend) or lower (downtrend). Zero (0) means direction does not matter.
- Value—A specific Wave count (1, 2, ...) if one was found at the current bar that matches the criteria. Otherwise it returns zero (0).

No plot is generated.

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# Elliott Fibonacci Trader Pivot (EFT\_Pivot

<u>This is an internal indicator that is not intended to be plotted by a user</u>. It is used by EFTWave to find the offset to a relative high or low (pivot) between StartBar and EndBar.

Offset = EFT\_Pivot(StartBar,EndBar,Direction)

#### Parameters

- StartBar—Starting offset (bars back from current bar) to look for pivot.
- EndBar—Ending offset (bars back from current bar) to look for pivot.
- **Direction**—1 for lower pivot, 0 for higher pivot
- **Offset**—The offset that marks the actual Lowest Low or Highest High where the pivot is. For example, if Offset = 2 for a lower pivot, the pivot can be found at L[2].

Plots construction lines that can be used for debugging the algorithm (not intended for a user).

# **Elliott Fibonacci Prior Bar Level (EFT\_PBL)**

The Prior Bar Level is used by EFT\_Wave to identify changes in direction in the chart, so it can find the pivots.

Indicator = EFT\_PBL(Sensitivity)

See HRS\_PBL in the Harnessing Relative Strength section.

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# **Relative Rotation Indicators**

The Realtive Rotation Plugin includes five indicators.



Figure 7-1. The Three Primary Indicators of the Relative Rotation Method

# **Primary Indicators**

Relative Rotation is about measuring Relative Strength relative to other stocks in the same industry group. The indicators are measured against the market (using the SPY ETF by default). Group Rotation can be seen in a List when multiple symbols high high Relative Strength appear from a Scan.

The above picture shows how to use the Primary Indicators that are individually described below. The key is RR\_Rotation, which shows two indicators, RR\_Momentum and RR\_Strength so they can be compared. When both are

increasing, that's a great time to buy (decreasing to sell). When both are increasing and ALSO above zero, that is a great indication of a strong trend.

The RR\_Direction and RR\_DIFF indicators can be used for more accurate timing of swing trades. When RR\_DIFF turns up, a new Swing move is often starting. RR\_Direction will go to +1 a bit later, and indicates a breakout of a ZMA-based channel. This can be used to further confirm the move or as a more qualified Swing signal.

### **RR\_Rotation**

RR Rotation combines RR\_Strength and RR\_Momentum into one indicator pane. (see below)

Value = RR\_Rotation(Lookback, LRSPeriods, Smoothing, ACCPeriods, SMAPeriods, RefSymbol)

#### Parameters

#### **RR Indicator**

- LookBack—The total number of bars over which RR\_Momentum is calculated.
- LRSPeriods—Linear Regression Slope Periods

#### **RR\_Momentum**

• **Smoothing**—EMA periods applied to smooth RR\_Momentum indicator.

#### Inputs for RR\_Strength

- ACCPeriods—Accumulation Periods for RR\_Strength
- **SMAPeriods**—Smoothing Periods for RR\_Strength
- **RefSymbol**—Reference Symbol for RR\_Strength

## **RR\_Direction**

Determines strong trend based on excursions of the ZMA using bands around it. Once we break through the ZMA band decisively, trend is assumed to be in that direction.

Value = RR\_Direction(ZPeriods, DirBand)

#### Parameters

- **ZPeriods**—Periods that go into the Zero-Lag Moving Average.
- DirBand—Direction band
- Value—The value of the indicator

#### **RR\_DIFF**

Calculates changes in Relative Strength to an index. This indicator is identical to HRS\_Diff, which is a rather sophisticated indicator that determines Relative Strength by measuring linear regression slope of both the target symbol and an index symbol. This indicator is used in the RR\_Strength indicator to determine Accumulated Relative Strength. See the Harness Relative Strength section.

# **Secondary Indicators**



These indicators are used in the primary indicators.

Figure 7-2. The Secondary Indicators of the Relative Rotation Method

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Chapter 7 Relative Rotation Indicators

### **RR\_Momentum**

Calculates average linear regression slope for (shorter) LRSPeriods, over (longer) LookBack bars. This value is then smoothed with an EMA using the Smoothing Periods. Since it is an average of slopes over a longer lookback, it is a good indicator of a solid trend. If the chart is going mostly in one direction, the value will be higher than if it is going up and down during the LookBack. This is designed to be used as an extra "Confirmer" in conjunction with RR\_Strength.

Value = RR\_Momentum(LookBack, LRSPeriods, Smoothing)

#### Parameters

- LookBack—The total number of bars over which the indicator is calculated.
- LRSPeriods—Linear Regression Slope Periods
- **Smoothing**—EMA periods applied to smooth the indicator.
- Value—The value of the indicator

#### **RR\_Strength**

Calculates Relative Strength to an index Symbol.

#### Parameters

• **Value** = RR\_Strength(LRPeriods, ACCPeriods, RefSymbol)

This indicator is identical to HRS\_ACC from the Harness Relative Strength package, except it plots a colored histogram, which makes it much easier to see the truly strong zones. Buy when the darker green color appears. See HRS\_ACC in the Harness Relative Strength section.

# **The Rhino Suite Components**

The Rhino Suite includes two indicators.

# **Rhino Summary**

The Rhino Summary indicator utilizes a multitude of market oscillators and moving averages to identify the current market sentiment in any timeframe by displaying a color-coded histogram of Strong Buy, Buy Neutral, Sell and Strong Sell. You will also have a summary score representing how many of the indicators and Moving averages have contributed to the results.

#### **Parameters:**

• Line—Allows the user to change the color of the representation"

# **Rhino Harmonic**

Rhino Harmonic aims to identify key Market Structures throughout the chart. Market Structures are areas of interest that institutional brokers use in their automated trading algorithms. These key levels allow you to quickly identify areas that you need to pay attention to in your trading.

#### **Parameters:**

- **EOD Boundary**—This allows the user to display Weekly, Monthly, or Quarterly in end of day. Intraday automatically displays on each timeframe.
- Levels:
  - **Key Levels** Key levels use our proprietary Market Structure calculation to plot only the levels used in the calculation.
  - **Base Levels**—Base levels will display the 4 key Market Structures above and below your key levels.

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Chapter 8 The Rhino Suite Components

- Automatic—Extends the level calculation to show all key levels. This is normally used when the price moves outside the base levels.

# **Rhino First Print**

Rhino FP is identifying institutional market structure on key market identifiers such as the SPY, DIA and QQQ's. By using hidden information in the chart, you are quickly able to identify the market direction for the day and key levels at where the market is going to turn. Now you can literally trade like the pros do.

#### **Parameters:**

• Price Change—Dictates the value used in the calculation of the FP levels.

# 9

# The Rhino Suite 2.0

The Rhino Suite includes nine indicators.

# **Rhino Summary**

The Rhino Summary indicator utilizes a multitude of market oscillators and moving averages to identify the current market sentiment in any timeframe by displaying a color-coded histogram of Strong Buy, Buy Neutral, Sell and Strong Sell. You will also have a summary score representing how many of the indicators and Moving averages have contributed to the results.

#### **Parameters:**

• Line—Allows the user to change the color of the representation"

# **Rhino Harmonic**

RhinoHarmonic aims to identify key Market Structures throughout the chart. Market Structures are areas of interest that institutional brokers use in their automated trading algorithms. These key levels allow you to quickly identify areas that you need to pay attention to in your trading.

#### **Parameters:**

- **EOD Boundary**—This allows the user to display Weekly, Monthly, or Quarterly in end of day. Intraday automatically displays on each timeframe.
- Levels:
  - **Key Levels** Key levels use our proprietary Market Structure calculation to plot only the levels used in the calculation.
  - **Base Levels**—Base levels will display the 4 key Market Structures above and below your key levels.

- Automatic—Extends the level calculation to show all key levels. This is normally used when the price moves outside the base levels.

## **Rhino First Print**

Rhino FP is identifying institutional market structure on key market identifiers such as the SPY, DIA and QQQ's. By using hidden information in the chart, you are quickly able to identify the market direction for the day and key levels at where the market is going to turn. Now you can literally trade like the pros do.

#### **Parameters:**

• Price Change—Dictates the value used in the calculation of the FP levels.

## **RhinoBands Indicator**

The RhinoBands indicator uses a powerful combination of recent price action to accurately identify areas in any chart where you are likely to see a pending shift in market behavior. This indicator takes advantage of the Rhino Summary 2 count to provide additional confirmation. As your Trigger line crosses below 0 this is an indication that the market will be moving lower and when it crosses above the 0 line you will see bullishness return. This is one of the main components in the Rhino 2 EOD Chart Template that is included.

#### **Parameters:**

- **Fast**—This value can range from 3-100 and is used in calculating the trigger for the exit.
- Slow—This value can range from 2-100 and is used in calculating the trigger for the exit.

## **Rhino HullMA**

Rhino HullMA is a modified version of the Hull Moving Average. This system uses trend identification and market sentiment to generate entries.

#### **Parameters**

• **Periods**—Controls the number of periods used in the plot.

# **Rhino Synapse Indicator**

The RhinoSynapse uses an intuitive predictive component to quickly pinpoint areas in a chart where you are likely to see a quick swing in momentum. Using a noise filter, the Synapse fires as it identifies the shift.

#### **Parameters:**

- **Period**—Number of bars to be included in the prediction formula.
- **Predict**—This value is used to calculate the predicted move forward.
- **Bandwidth**—This value determines the maximum deviation from the Synapse and Noise Filter.



Figure 9-1. RhinoSynapse Plotted on Cerner Corp.

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# **Rhino Summary 2**

The Rhino Summary 2 is an improved version of the original Rhino Summary. The updates to this included the exclusive use of the RhinoHullMA levels and an all new interface showing you not only "sentiment" of the market but how the current weighting of indicators are playing out



Figure 9-2. The Rhino Summary 2 Indicator Plotted on ALGN

# **Rhino First Print 2**

Rhino FP 2 has been improved to automatically identify institutional market structure on ANY stock, ETF or Index. This indicator **Requires Real Time Data** and works best when you have "Pre-Market" enabled. By using hidden information in the chart, you are quickly able to identify the market direction for the day and key levels where the market is going to turn. Now you can literally trade like the pros do.

#### **Parameters:**

• Vertical Markers—This simply adds vertical markers every 30 minutes.



Figure 9-3. Rhino First Print 2 Plotted on the SPY

## RhinoRelativeVolume

The RhinoRelativeVolume uses real time relative volume to indicate when a stock is experiencing odd or abnormal volume based over a specified period of time. This indicator is best used in real time. This indicator also has horizontal markers indicating 2x, 5x, or 10x typical volume.

#### **Parameters:**

• **Period**—This value indicates the number of bars(days back) to be included in the calculation.

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#### Chapter 9 The Rhino Suite 2.0



Figure 9-4. Rhino Relative Volume Plotting on EDU

# -10

# **The Rocket 2 Indicators**

The acronym "HRS" stands for "Harness the power of Relative Strength". The HRS indicators were used in the Rocket 2 Plug-In packages.



Figure 10-1. HRS Difference and HRS Accumulation Plotted on Bidu

# HRS Difference (RKT\_Diff

HRS Difference is the difference between the slope of a linear regression line fitted through a symbol in the chart over Periods and a linear regression line fit through the reference symbol (which is typically an index) over the same periods. Both lines are normalized (divided by price) so they represent a percentage move per-bar.

#### Chapter 10 The Rocket 2 Indicators

In the picture below, Periods=10 and the line has gained 10%. The line through the index has gained 2%. The difference is 8%, so HRS\_Diff will be 8%/10 periods = 0.8.



When stocks have increasing values of HRS\_Diff they are rising faster than the index. The value of HRS\_Diff "oscillates" from high to low as Relative Strength to the reference symbol changes over time.

When HRS Difference turns up (and goes above its moving average), that is a very good time to buy the stock for a **Swing Trade** – and especially if Accumulated Relative Strength is also positive. HRS Accumulation is described next.

#### Parameters

Value = HRS\_Diff (Periods, SMAPeriods, RefSymbol)

- Periods—Lookback periods used to calculate the indicator
- **SMAPeriods**—Periods used to calculate a simple moving average (displayed only)
- **RefSymbol**—Index symbol against which the given symbol is compared.
- **Return Value**—The value of the curve.

# HRS Accumulation (RKT\_Acc)

HRS Accumulation is the accumulation or sum of HRS\_Diff over time, and is formed by 3 lines – green, red, and blue. The green and red lines are used to create the blue line.

The green line is the sum of HRS\_Diff values that are above zero, going back the same number of periods that HRS\_Diff is calculated over. The red line is calculated the same way, using values of HRS\_Diff that are below zero.

The lines are weighted so that the most recent values of HRS\_Diff have more impact. This makes the most recent behavior of HRS\_Acc reflect the most recent values of HRS\_Diff, which enables the indicator to form a smooth ascending curve if Relative Strength is increasing.

The **blue line** is the value of the green line minus the red line. If the blue line is trending up, the stock is being accumulated. If it is trending down, it is being distributed in the market.

The green and red lines are plotted because if either is very close to zero, that means the other is highly dominant, which tells us that trend is likely to continue in that direction.

#### Parameters

Value = HRS\_Diff (Periods, SMAPeriods, RefSymbol)

- **Periods**—Lookback periods used to calculate the indicator
- **SMAPeriods**—Periods used to calculate a simple moving average (displayed only)
- **RefSymbol**—Index symbol against which the given symbol is compared.
- **Return Value**—The value of the curve.

# 11

# **The T21 Indicators**

T21 includes two indicators.

# **T21 Zig Zag Indicator (T21-ZZ)**

The T21 Zig-Zag Indicator plots the pivots on the chart, and returns a value to determine whether the price is moving upward or downward. When the stock is moving upward the indicator returns the value -1, when the stock is moving downward the indicator returns 1. Direction shifts each time a new pivot is formed.



Figure 11-1. The T21 Zig Zag Indicator Plotted on AAPL

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Chapter 11 The T21 Indicators

#### **Parameters:**

• Sensitivity—Defines the level of price action required to determine a new pivot. It is measured in ATR's and the default setting is 1.

• **ATR Periods**—Specifies the number of periods used to calculate the ATR's for the pivot algorithm. The default value is 14.

To add the indicators to charts, right-click a chart and select Add Indicator. The two indicators are in the T21 group.

# 12

# **The TrendMaster Indicators**

TrendMaster includes two indicators:

# **The Rainbow Indicator**

The Rainbow Indicator was discussed in the previous chapter as it is the basis of all TrendMaster components. The Rainbow Moving Average indicator shows multiple simple moving averages (SMAs). Each SMA is calculated based on the previous SMA and is color-coded in the chart..



Figure 12-1. The Rainbox Indicator plotted on Kinder Morgan (KMI)

Chapter 12 The TrendMaster Indicators

#### **Parameters:**

- Price—This determines which price to use for the base calculation.
- Periods—Number of moving average periods for all of the moving average calculations.

# The Rainbow Oscillator

The Rainbow Oscillator is based off of the Rainbow Indicator. It defines the highest high and lowest low of the Rainbow Indicator moving averages to create an oscillator and bandwidth lines based on those calculations.



Figure 12-2. The Rainbow Oscillator is based on the Rainbow Indicator

The histogram in the oscillator represents the relationship of price to the average value of the moving averages. The bands around the histogram represent the bandwidth of the moving averages.

# 13

# **The VBX-4 Indicator**

VBX-4 includes the Gap Direction indicator.

# **Gap Direction**

The Gap Direction Indicator (Gap\_Dir) indicator is used in multiple plugins including VBX-4 and T-21 and is typically applied as a filter rather than a visual indicator on the chart and it will not allow trades based on the upward gap size and frequency on the symbol.

#### **Parameters:**

- Periods—Number of periods to be used to identify Gaps. Value—Is the size of the Gap to be measured
- Units—What calculation to be used in the gap value calculation.
- ATR Period—Periods to be used in the ATR Calculation

# 14

# **VWAP Power Suite Indicators**

The VWAP Power Suite includes three indicators: The AVWAP Indicator, the AVWAP Bands Indicator, and the MVWAP Indicator. Each indicator uses a boundary and boundary periods parameter and Anchor Periods in its calculations.

# The VWAP Power Suite Boundaries

The VWAP Power Suite Systems and Indicators use boundaries, boundary periods and Anchor Periods to start and end their calculations. The VWAP Power Suite boundary is set to Daily by default, which is defined as the daily trading session. However, you can choose from four different boundary options, including Daily, Weekly, Monthly, and Quarterly, which use the Anchor Periods for calculating the indicators. For example, if we are looking at a 5-minute chart using the Daily boundary, then the indicator would use only the current trading session for its calculation. However, if the boundary was set to Weekly, the indicator would begin calculating on Monday and finish at the end of Friday's session. Furthermore, the Anchor Periods allow you to modify the bar that VWAP is starting on. By default, we are using 12 bars after the open. The boundary periods parameter allows you to create custom boundaries by increasing the number of periods. By default, this parameter is set to 1, which means one day, week, or month, etc. If this parameter is set to 2, it would create custom boundaries that would multiply the boundary by 2, thus creating a two-day indicator for a Daily boundary, or a two-week indicator for a Weekly boundary.

# **AVWAP Indicator**

The Anchored Volume-Weighted Average Price (AVWAP) indicator is the ratio of the value traded to the total volume traded over a particular period of time, usually one day. It is a measure of the average traded price over a given period of time. The indicator begins its calculation at the Anchor Period of the day (or week, month, quarter) and finishes upon the last trade of the day (or week, month, quarter) with an option to continue into the next session. VWAP Power Suite Indicators



Figure 14-1. The Monthly AVWAP Plotted on the Daily Chart of AAPL

#### Use

AVWAP is often seen as the best price within any given trading day. As such, any selling pressure below AVWAP is seen as a buying opportunity by professional traders, while any buying pressure above AVWAP is usually seen as a selling opportunity by professional traders that are looking to either take profits or establish new short positions.

#### **Parameters**

- **Boundary**—Defines the start and end time for calculations.
  - **Daily**—Uses one trading day from the open to close.
  - Weekly—Uses a calendar week from open on Monday to close on Friday.
  - **Monthly**—Uses a calendar month starting with the open on the first trading day of the month to the close of the last trading day of the month.
  - **Quarterly**—Uses a calendar quarter starting with the open on the first trading day of the quarter to the close of the last trading day of the quarter.

- **Boundary Periods**—Used for creating custom boundaries. For example, setting the parameter to 2 will create a two-day calculation if the boundary is set to Daily, or a two-month calculation if the boundary is set to Monthly.
- Anchor Periods—Used for creating custom starting boundaries for VWAP calculations. For example, setting the parameter to 12 will start the VWAP calculations 12 bars after the session has begun.
- Stop at Session End— Determines if AVWAP will end at the current session or continue through to the next Anchor Point.

# **AVWAP Bands Indicator**

The AVWAP Bands indicator plots three standard deviation bands above and below VWAP, revealing "hidden" areas of support and resistance. In addition to having the ability to plot daily, weekly, monthly, and quarterly boundaries, you can also choose from three preset methods for calculating the bands and even adjust the deviations of the bands.



Figure 14-2. Monthly AVWAP Bands Indicator Plotted on AAPL

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#### Use

Experienced traders use VWAP to identify when price is overbought or oversold. This skill is essential to finding and trading the best opportunities. The beauty of the bands is that they reveal hidden areas of support and resistance, allowing any trader to see important value opportunities. The ability to see these hidden levels allows you to anticipate price movement at important action zones. As price trades away from VWAP (the blue center line) the bands above and below it become targets. Likewise, as price reverses from the outer bands, the probability of reaching VWAP increases significantly.

#### **Parameters**

- **Boundary**—Defines the start and end time for calculations.
  - **Daily**—Uses one trading day from the open to close.
  - Weekly—Uses a calendar week from open on Monday to close on Friday.
  - **Monthly**—Uses a calendar month starting with the open on the first trading day of the month to the close of the last trading day of the month.
  - **Quarterly**—Uses a calendar quarter starting with the open on the first trading day of the quarter to the close of the last trading day of the quarter.
- **Boundary Periods** Used for creating custom boundaries. For example, setting the parameter to 2 will create a two-day calculation if the boundary is set to Daily, or a two-month calculation if the boundary is set to Monthly.
- **Method**—The types of methods that are used to calculate the bands.
  - **ABS(VWAP-Close)**—Calculates the bands using absolute value of VWAP minus the close price.
  - **VWAP Close**—Calculates the bands using the difference between VWAP and the close price.
  - Close—Calculates the bands using the close price.
- **Periods**—The number of bars used to calculate the bands.
- **Deviations**—The multiplier for creating each band. By default, 1 is used to create the first, second, and third deviations of the bands, thus creating 1, 2, and 3 deviations. If this level is set to.5, then deviations of .5, 1, and 1.5 will be created for the three bands.
- **Plot Band**—Allows you to specify which band level to plot.

# **MVWAP Indicator**

This indicator allows you to plot MVWAP providing you with the Average VWAP over any given number of periods, thus giving you a visual representation of value in your charts. Unlike AVWAP or VWAP the MVWAP calculates through all available sessions.



Figure 14-3. MVWAP Indicator Plotted on the Daily Chart of AAPL

#### Use

The MVWAP indicator can be used to judge the overall market value and overall trend direction in multiple timeframes. Since VWAP is used as a key barometer of value, it makes sense to understand where the Average price was seen throughout prior periods of time so the information can be used as guidance in the future.

#### **Parameters**

- **Boundary**—Defines the start and end time for calculations.
  - **Daily**—Uses one trading day from the open to close.
  - Weekly—Uses a calendar week from open on Monday to close on Friday.
  - **Monthly**—Uses a calendar month starting with the open on the first trading day of the month to the close of the last trading day of the month.
  - **Quarterly**—Uses a calendar quarter starting with the open on the first trading day of the quarter to the close of the last trading day of the quarter.
- **Boundary Periods**—Used for creating custom boundaries. For example, setting the parameter to 2 will create a two-day calculation if the boundary is set to Daily, or a two-month calculation if the boundary is set to Monthly.
- **Moving Average Periods**—The number of periods included in the Moving Average of VWAP.
- Stop at Session End— Determines if AVWAP will end at the current session or continue through to the next Anchor Point.