

# QUICK HARMONIC TRADER<sup>®</sup>

## EXTENDED INDICATORS ADD-ON MANUAL

This add-on package will allow you to access an extended set of technical tools for the Quick Harmonic Trader. In this manual, we will simply describe each indicator and its intended purpose, with a sample chart for each.

To apply an indicator to your chart, simply click on Indicators in the Main Menu to access the Indicator window. In the Indicator window, you can simply double-click on any indicator in the lower list to add it to the upper list, or highlight the indicator and click on ADD. If you wish to change the indicator's default values, you can highlight it on the lower list and click on the EDIT button at the bottom of the window to access the default edit window. All of these functions are described in greater detail in your Quick Harmonic Trader Users Manual.

I have provided internet links to additional information on as many indicators as possible. These sources may be copyrighted by their owners, so I have not copied the information, but have simply included the links so that you can check them out for yourself. I recommend that you do so to find more detailed descriptions and suggested uses of the indicators. If you find that a link is no longer active, please let me know so that I can supply an alternate link. In most cases, a simple internet search will turn up plenty of information on these standard indicators. If you turn up a good source of additional information on any of these indicators, please send to me so that I can add it for other users. Thank you.

Many of these indicators are calculated using a **length** value. In the description, reference is made to the **length** value. For each indicator, the **length** value is predefined, but can be modified to slow down or speed up the response time of an indicator.

Following are brief descriptions and examples of the extended indicators.

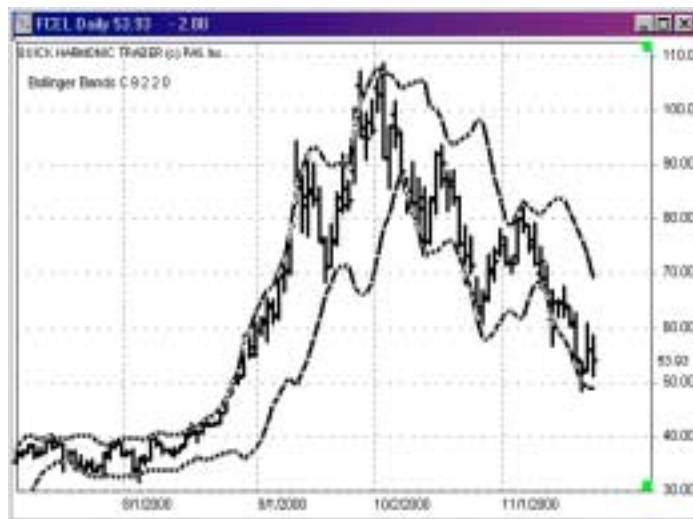
### **BOLLINGER BANDS**

Created by John Bollinger, this envelope uses standard deviation to plot the lines above (**Dev. Up**), and below (**Dev. Down**) a moving average, which is defined by the **Length** value. The moving average can be calculated using the values of the open, high, low, close, median point, volume, or tick volume. The Bollinger Bands can be used as a dynamic support/resistance channel.

Information link: <http://www.e-analytics.com/bolinger.htm>

#### DEFAULT INPUTS:

Use	C (close value)
Length	9
Dev. Up (Value)	2
Dev. Down (Value)	2
Offset Value	2
Line 1 Color	Cyan
Line 2 Color	Red
Line 1 Style	Solid
Line 2 Style	Solid
Subchart	1
Draw Type	Line
X Position	0
Symbol	None

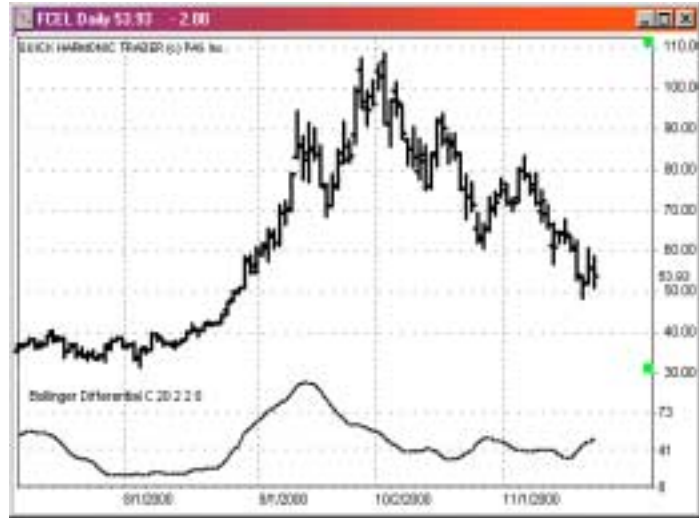


## **BOLLINGER DIFFERENTIAL**

This indicator plots the difference between the upper and lower Bollinger Bands, as described above. The Bollinger Differential can be used as a trend momentum indicator.

### DEFAULT INPUTS:

Use	C (close value)
Length	9
Dev. Up (Value)	2
Dev. Down (Value)	2
Offset Value	2
Line 1 Color	Cyan
Line 1 Style	Solid
Subchart	1
Draw Type	Line
X Position	0
Symbol	None



## **COMMODITY CHANNEL INDEX**

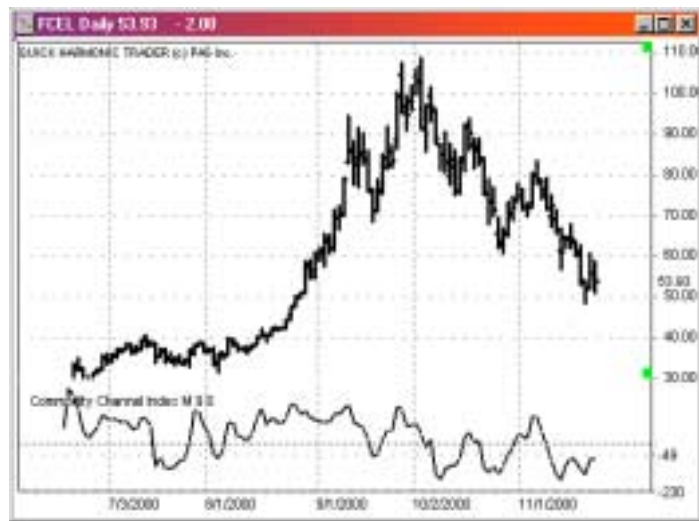
The CCI, developed by Donald R. Lambert, is a price-momentum indicator. You can plot the CCI using the values for the open, high, low, close, median, volume, or tick volume.

For more information, see the following link:

<http://www.e-analytics.com/cci.htm>

### DEFAULT INPUTS:

Use	M (Median Value)
Length (Value)	9
Offset (Value)	0
Line 1 Color	Light Red
Style	Solid
Sub Chart	4
Draw Type	Line
X position	0
Symbol	None



## ENVELOPE

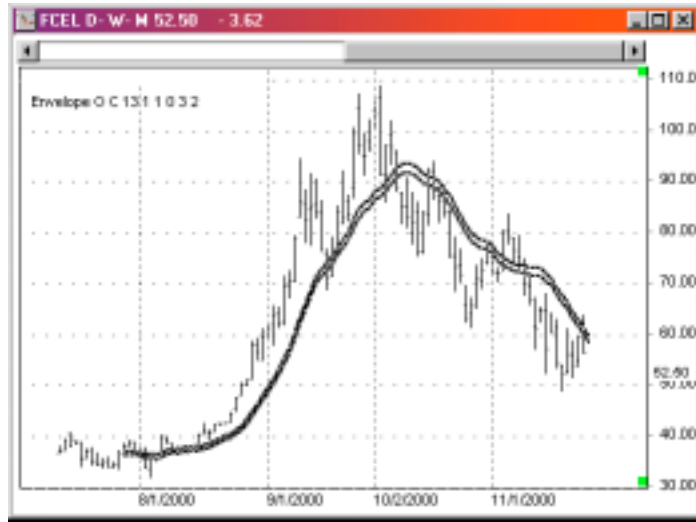
Envelope is based on the moving average of **length** plotted with a **% Up** line above the moving average and a **% Down** line below the moving average. The Envelope can be based on a moving average of the open, high, low, close, median, volume or tick volume values. The Envelope is typically used to define a support/resistance zone for the trend, as it tends to stay below uptrends, and above downtrends.

For more information, try the following link:

[http://tradingtactics.com/technical\\_analysis/Indicators/envelope.htm](http://tradingtactics.com/technical_analysis/Indicators/envelope.htm)

### DEFAULT INPUTS:

Use	C (Close Value)
Length (Value)	5
% Up (Value)	1
% Down (Value)	1
Line 1 Color	Green
Line 1 Style	Solid
Line 1 Draw Type	Line
Line 1 X position	0
Line 2 Color	Red
Line 2 Style	Solid
Line 2 Draw Type	Line
Line 2 X position	0
Subchart	1



## KELTNER CHANNEL

Based on a moving average of **length** bars and on the volatility of **length** bars' true range. The Keltner Channel can be calculated using the values for the open, high, low, close, median, volume, or tick volume. The Keltner Channel is typically used to define a support/resistance zone for the trend, as it tends to stay below uptrends, and above downtrends.

### DEFAULT INPUTS:

Use	C (Close Value)
Length (Value)	10
Constant (Value)	.5
Offset Value	0
Line 1 Color	Magenta
Line 1 Style	Dashed
Line 2 Color	Red
Line 2 Style	Solid
Line 3 Color	Red
Line 3 Style	Solid
Subchart	1
Draw Type	Line
X position	0
Symbol	None



## LEAST SQUARE CHANNEL

This indicator calculates the theoretical value using the **Least Square Method** for **length** bars back, then the standard deviation to draw the upper and lower lines. You can plot the LSC using the calculation based on the open, high, low, close, median, volume, or tick volume. This indicator is generally thought to provide a dynamic support resistance channel for market price action.

For more information on the least square method, try this link:

<http://www.efunda.com/math/leastsquares/leastsquares.cfm>

### DEFAULT INPUTS:

Use	C (Close Value)
Length (Value)	5
Dev. Up (Value)	2
Dev. Down (Value)	2
Offset Value	0
Line 1 Color	Blue
Line 1 Style	Dashed
Line 2 Color	Yellow
Line 2 Style	Solid
Line 3 Color	Yellow
Line 3 Style	Solid
Subchart	1
Draw Type	Line
X position	0
Symbol	None



## LEAST SQUARE

Using the **Least Square Method**, this indicator calculates the theoretical value for that specific bar using **length** bars back. You can plot the LS using the calculation based on the open, high, low, close, median, volume, or tick volume. The Least Square can be used as a momentum/trend direction indicator.

### DEFAULT INPUTS:

Use	C (Close Value)
Length (Value)	5
Offset Value	0
Line 1 Color	Light Cyan
Line 1 Style	Dashed
Subchart	3
Draw Type	Line
X position	0
Symbol	None

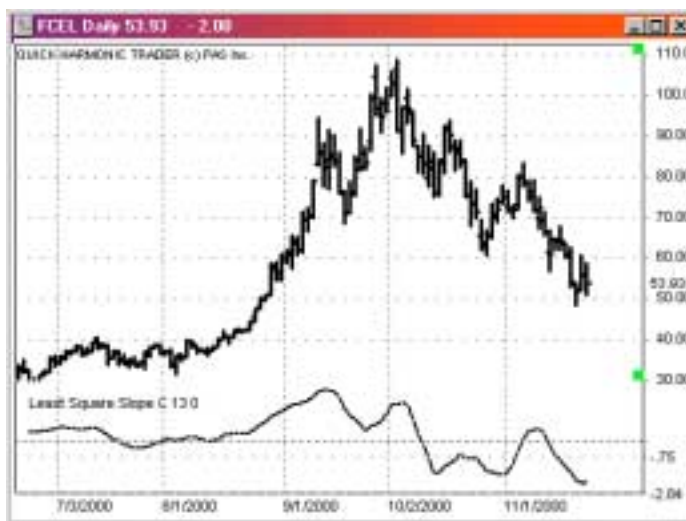


## LEAST SQUARE SLOPE

Using the Least Square Method, this indicator shows the degree of slope of the best fit trend line using **length** bars back. You can plot the LSS using the calculation based on the open, high, low, close, median, volume, or tick volume. The Least Square Slope can be used as a momentum/trend direction indicator.

### DEFAULT INPUTS:

Use	C (Close Value)
Length (Value)	5
Offset Value	0
Line 1 Color	Light Cyan
Line 1 Style	Dashed
Subchart	3
Draw Type	Line
X position	0
Symbol	None



## MOMENTUM

The Momentum indicator plots the difference between today's bar and **length** number of bars back. You can plot the Momentum indicator using the calculation based on the open, high, low, close, median, volume, or tick volume. The Momentum can be used as a momentum/trend direction indicator.

Information links: <http://www.e-analytics.com/momentu.htm>

<http://www.quotelinks.com/technical/momentum.html>

### DEFAULT INPUTS:

Use	C (Close Value)
Length (Value)	10
Offset Value	0
Line 1 Color	Light Cyan
Line 1 Style	Solid
Subchart	4
Draw Type	Line
X position	0
Symbol	None



## WEIGHTED MOVING AVERAGE

The Weighted Moving Average is a moving average of length bars that puts more weight on recent data and less weight on past data. You can plot the Weighted Moving Average indicator using the calculation based on the open, high, low, close, median, volume, or tick volume. This indicator can be used as a momentum/trend direction indicator.

Information link: <http://www.e-analytics.com/movavg.htm>

### DEFAULT INPUTS:

Use	C (Close Value)
Length (Value)	5
Offset Value	0
Line 1 Color	Light Cyan
Line 1 Style	Solid
Subchart	1
Draw Type	Line
X position	0
Symbol	None



## PERRY KAUFMAN'S ADAPTIVE MOVING AVERAGE

Developed by Perry Kaufman, this indicator is an EMA (exponential moving average) using an Efficiency Ratio to modify the smoothing constant, which ranges from a minimum of **fast length** to a maximum of **slow length**. You can plot this indicator using the calculation based on the open, high, low, close, median, volume, or tick volume. This indicator can be used as a momentum/trend direction indicator.

See **Trading Systems and Methods** (Wiley Trading Advantage Series) by Perry Kaufman

### DEFAULT INPUTS:

Use	C (Close Value)
Length (Value)	10
Fast Length (Value)	2
Slow Length (Value)	30
Offset Value	0
Line 1 Color	Light Red
Line 1 Style	Solid
Subchart	1
Draw Type	Line
X position	0
Symbol	None



## PERRY KAUFMAN'S AMA BANDS

This is a set of bands plotted above and below Perry Kaufman's Adaptive Moving Average. This indicator functions well as a trend support/resistance channel.

### DEFAULT INPUTS:

Use	C (Close Value)
Length (Value)	10
Fast Length (Value)	2
Slow Length (Value)	30
Offset Value	0
Line 1 Color	Red
Line 1 Style	Solid
Line 2 Color	White
Line 2 Style	Solid
Line 3 Color	White
Line 3 Style	Solid
Subchart	1
Draw Type	Line
X position	0
Symbol	None

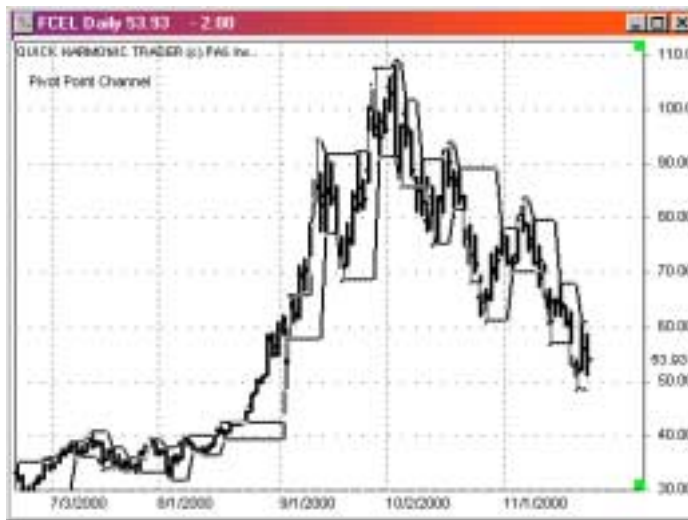


## PIVOT POINT CHANNEL

The Pivot Point Channel is based on the previous MVP (Maximum Vibration Point – or isolated high or low). The upper line is always drawn from the last top MVP and the lower line is drawn from the last bottom MVP. The Pivot Point Channel can be viewed as a trend support/resistance channel.

### DEFAULT INPUTS:

Line 1 Color	Cyan
Line 1 Style	Solid
Line 2 Color	Green
Line 2 Style	Solid
Subchart	1
Draw Type	Line
X position	0
Symbol	None



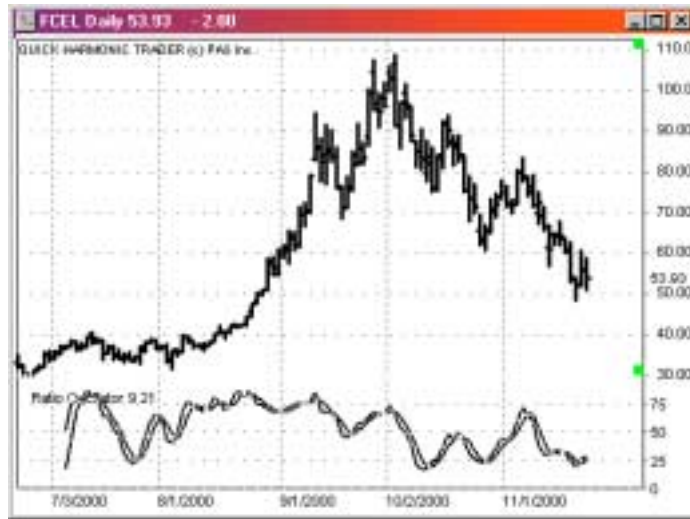
## RATIO OSCILLATOR

The Ratio Oscillator is a proprietary indicator developed by Danton Long. It uses fibonacci ratios to calculate an oscillating indicator. Like other oscillators, this indicator can be used to define trend, momentum, and overbought/oversold conditions. This indicator can be used effectively combined with Danton Long's Shockwave tool to define trend exhaustion points and trend changes.

For information on the Shockwave tool, visit [www.marketdetective.com](http://www.marketdetective.com)

### DEFAULT INPUTS:

Fast Length (Value)	9
Slow Length (Value)	21
Line 1 Color	Green
Line 1 Style	Solid
Line 2 Color	Red
Line 2 Style	Dashed
Subchart	6
Draw Type	Line
X position	0

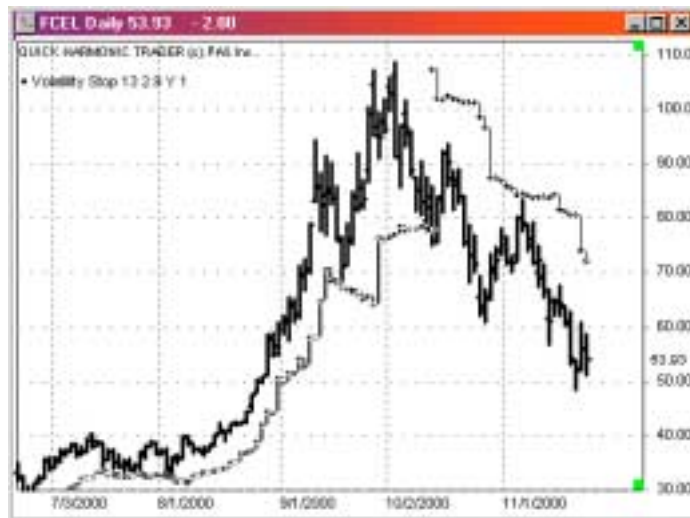


## VOLATILITY STOP

The Volatility Stop is a reversal system. The reversal stop is calculated using the average of **length** periods' ranges multiplied by a **constant**. If you are long this value is subtracted from the highest close, if you are short this value is added to the lowest close.

### DEFAULT INPUTS:

Length (Value)	7
Constant (Value) 2.9	
Line 1 Color	Red
Line 1 Style	Solid
Line 2 Color	Red
Line 2 Style	Solid
Subchart	1
Draw Type	Line
X position	0
Symbol, Line 1	Circle 2
Symbol, Line 2	Circle 2



## WILLIAM'S %R

Williams %R is the inverse of the 10-day stochastic, using the high price rather than the low price in the numerator. This indicator functions as an oscillator, and can be used to define trend, momentum, and overbought/oversold conditions.

$$\%R = (H_{10} - C_{\text{today}}) / (H_{10} - L_{10})$$

$C_{\text{today}}$  is today's closing value

$H_{10}$  is the 10 day High

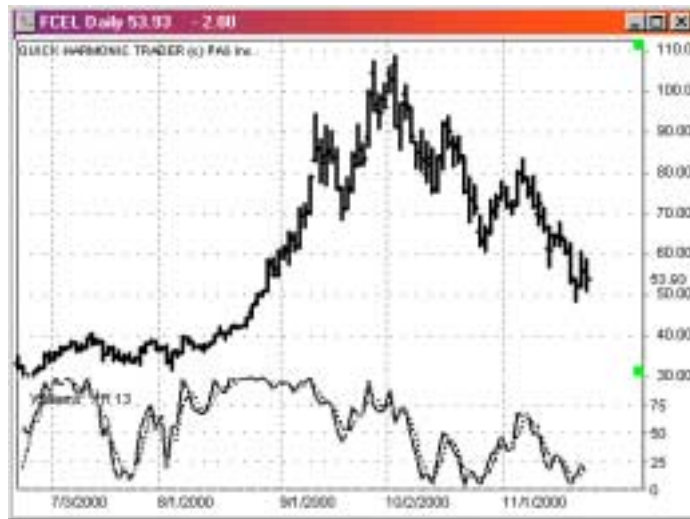
$L_{10}$  is the 10 day Low

Information links: <http://www.e-analytics.com/wpr.htm>

<http://www.e-analytics.com/stochast.htm>

### DEFAULT INPUTS:

Length (Value)	10
Line 1 Color	Green
Line 1 Style	Solid
Line 2 Color	Blue
Line 2 Style	Dashed
Subchart	2
Draw Type	Line
X position	0
Symbol	None



## WILLIAM'S A/D OSCILLATOR

The Williams A/D Oscillator is a volume price momentum indicator.

$$DRF = [(H - O) + (C - L)] / [2 \times (H - L)]$$

C is the Close

O is the Open

H is the High

L is the Low

### DEFAULT INPUTS:

Line 1 Color	Red
Line 1 Style	Solid
Line 2 Color	Cyan
Line 2 Style	Dashed
Subchart	3
Draw Type	Line
X position	0
Symbol	None

