ALGO
Trading & Investment

We help you to win

in your investment and trading

www.algotrading-investment.com

Instruction (Manual) Document

This part should be filled by author before your submission.

1. Information about Author

Your Surname	N/A
Your First Name	N/A
Your Country	N/A
Your Email Address	admin@algotrading-investment.com
Your ID on our website	N/A
Your website	www.algotrading-investment.com

2. Information for the submitted materials

Title of the submitted instruction or manual	Next Generation Technical Indicator – Harmonic Volatility Indicator
Language of Instruction	English
Key words (at least 3)	Forex, Stock, Investment, Trading, optimization, simulation, backtesting, technical analysis, economic analysis, Quantitative Trading
Date of Completion	21 June 2017
Version of this Document	1.0

3. If it is about any trading platform or any of our products (leave empty if you don't use)

Name of Trading Platform	Meta Trader 4 and 5
Trading Platform version	Version 4.00 (1090) and Version 5(1607)
Name of Product	Double Harmonic Volatility Indicator
Product version	1.8

Next Generation Technical Indicator

Harmonic Volatility Indicator

Introduction to Volatility in Financial Trading

Volatility is the most watched variable among the institutional traders because the market volatility have a direct impact on their trading risk. It is not easy to meet up any successful traders without emphasizing the importance of the volatility for their trading. In addition, we can even find countless trading strategies or trading courses based on the market volatility around us. In spite of its high importance, unfortunately, the access to the volatility tools for average traders are not easy in general. It is partly true that the library of the price based technical analysis is ever growing whereas the development in the volatility based technical analysis is almost halt after the invention of Bollinger bands in 1980s by John Bollinger. In general, you can find fewer number of the technical analysis tools based on the volatility in the most of trading or charting platforms. Here is the list of some popular volatility indicators for traders.

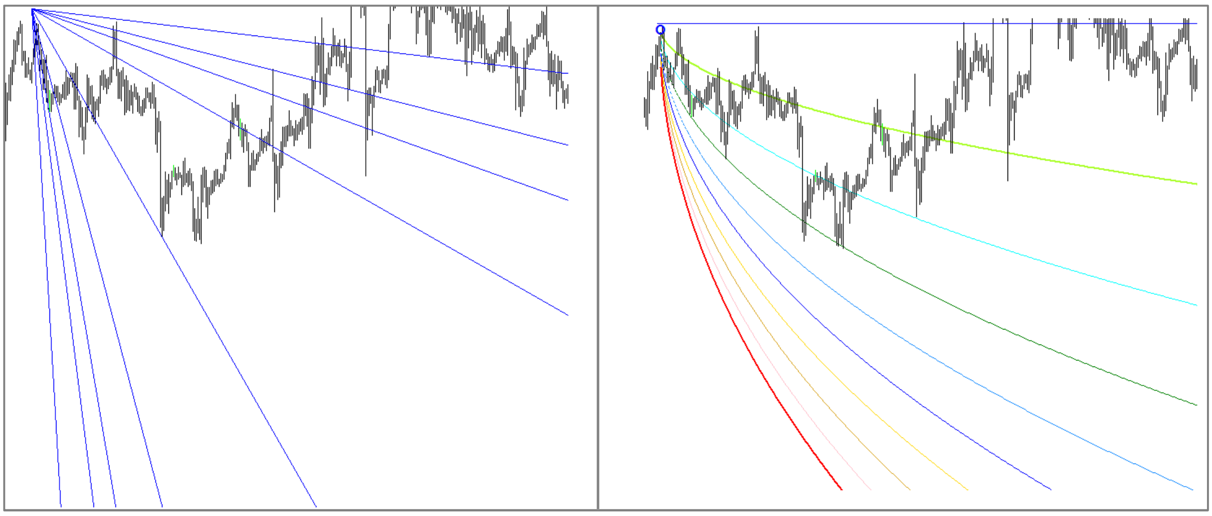
- Standard Deviation indicator
- Average True Range indicator
- True Range Indicator
- Keltner Channel
- Bollinger bands indicator

Regardless of fewer tools available to analyse the market volatility for traders, the high importance of watching market volatility will never change in the future. Market can only move as much as the fuels available in the market. Therefore, watching the market volatility will never harm your trading but will do many good things for your trading.

This document was submitted and shared by trading community to help other traders through www.algotrading-investment.com

Overview on the Harmonic Volatility Indicator

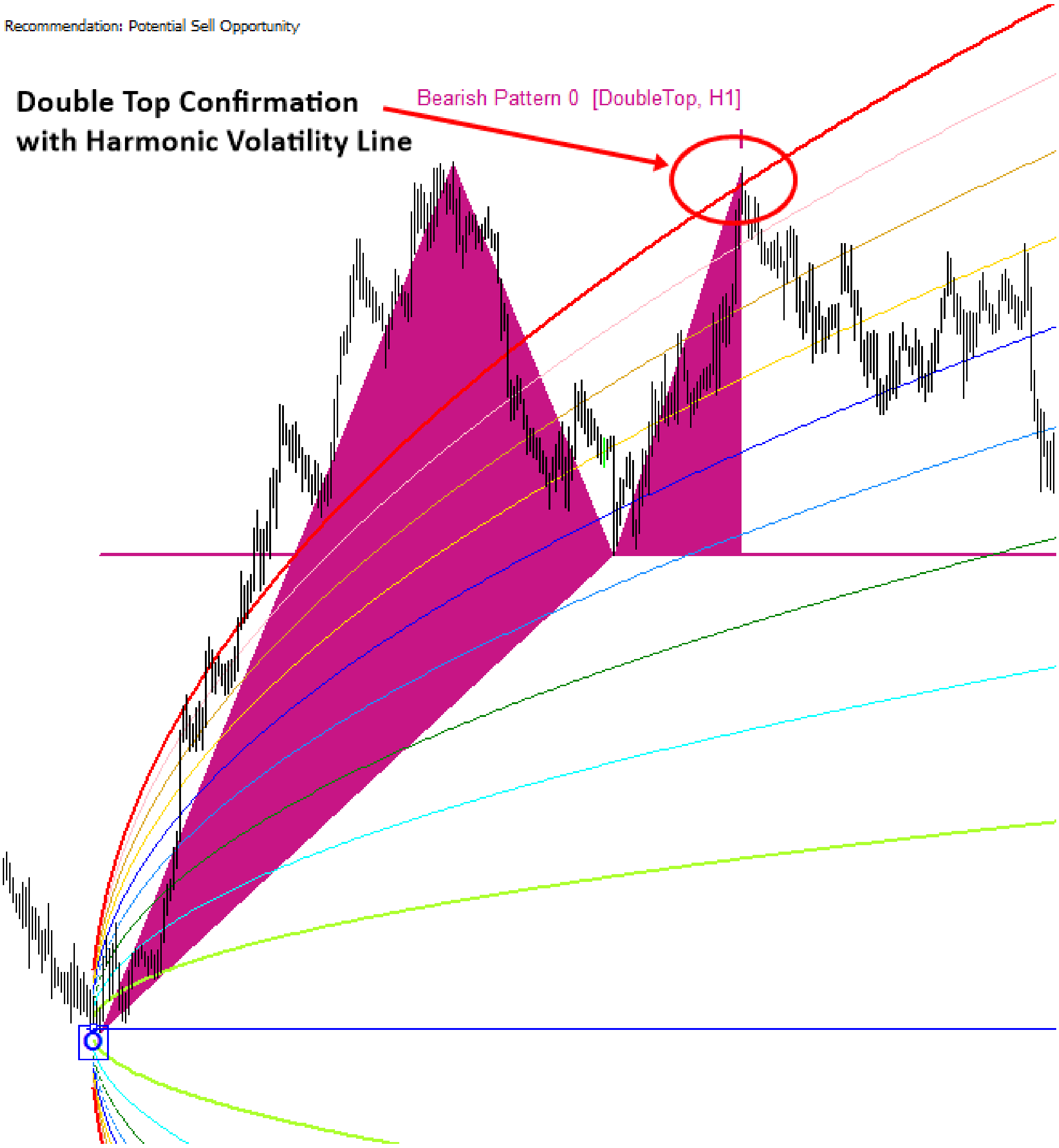
Harmonic Volatility Indicator was originally developed to overcome the limitation of Gann's Angle, also known as Gann's Fan. For this reason, trader can use Harmonic Volatility Indicator like Gann's Angle (or Gann's Fan). At the same time, the harmonic volatility indicator bases its core concept on the Volatility and Fibonacci analysis, which is distinctive from the Gann's Angle. Therefore, the Harmonic Volatility Indicator can offer many other benefits, which are not offered by Gann's Angle. In this article, we will talk about the Harmonic Volatility Indicator without comparing it to the Gann's Angle because there are many traders who are not familiar with Gann's technique.



One of the very distinctive characteristic of the Harmonic Volatility Indicator is that it provide the curved support and resistance lines. In our trading, we can find out many technical analysis providing us the horizontal support and resistance lines like daily pivot analysis and Fibonacci analysis, Harmonic pattern trading. We can find out some tools providing diagonal support and resistance lines, like rising wedge and falling wedge. As if combing horizontal and diagonal support and resistance can bring the synergy to your trading, you can combine the harmonic Volatility lines with typical horizontal support and resistance levels for your trading. Two screenshots below shows some example cases.

This document was submitted and shared by trading community to help other traders through www.algotrading-investment.com

This document was submitted and shared by trading community to help other traders through www.algotrading-investment.com

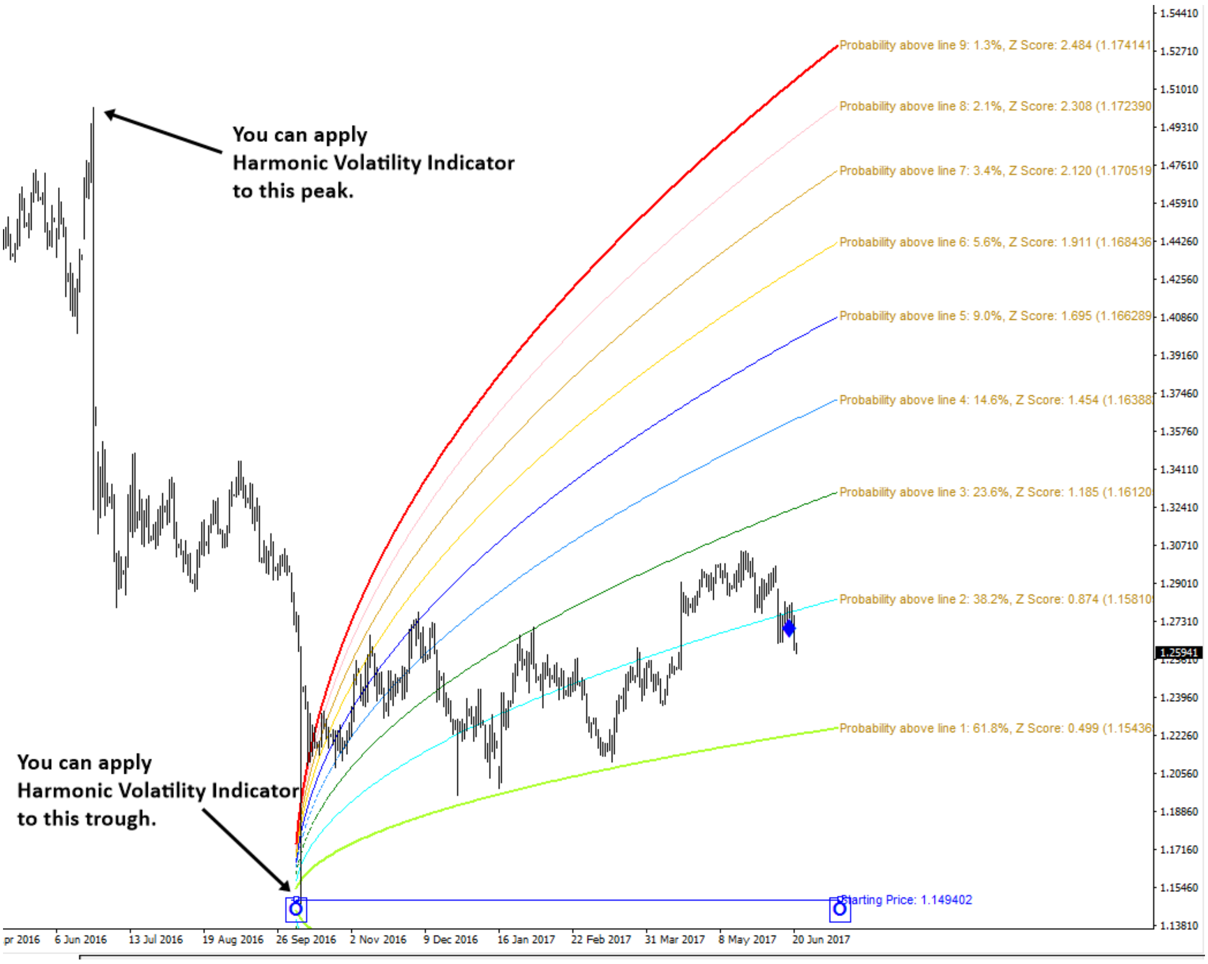


The Harmonic Volatility indicator can be running in the several different mode. Firstly, one can apply the Harmonic Volatility indicator at the open price of day, week or month assuming you are using the intraday chart in H4 or H1 or M15 timeframe. When you apply the Harmonic Volatility indicator at the open price of day, week or month, you are visually observing the market volatility of that timeframe in the sub timeframe (H4 or H1 or M15). You will not only find out that each Harmonic Volatility line will provide you important support and resistance levels for your trading but also you will find that you can combine them with many other existing technical analysis. This mode is simple and easy. In fact, our Double Harmonic Volatility Indicator can automatically find out the open price of day, week and month from your chart and it will apply the Harmonic Volatility Indicator in place for you. Therefore, you will not have to do this manually. Since this is simper mode of running the Harmonic Volatility Indicator, we recommend this mode generally.

You can also apply the Harmonic Volatility indicator to the significant peak and trough as if you apply the Fibonacci retracement in your chart. For example, where you place your Fibonacci retracement, you can always place the Harmonic Volatility indicator. To extend the application little further, you can apply two Harmonic Volatility Indicators at the same time running it in the double Harmonic Volatility Mode. In our Double Harmonic Volatility Indicator,

This document was submitted and shared by trading community to help other traders through www.algotrading-investment.com

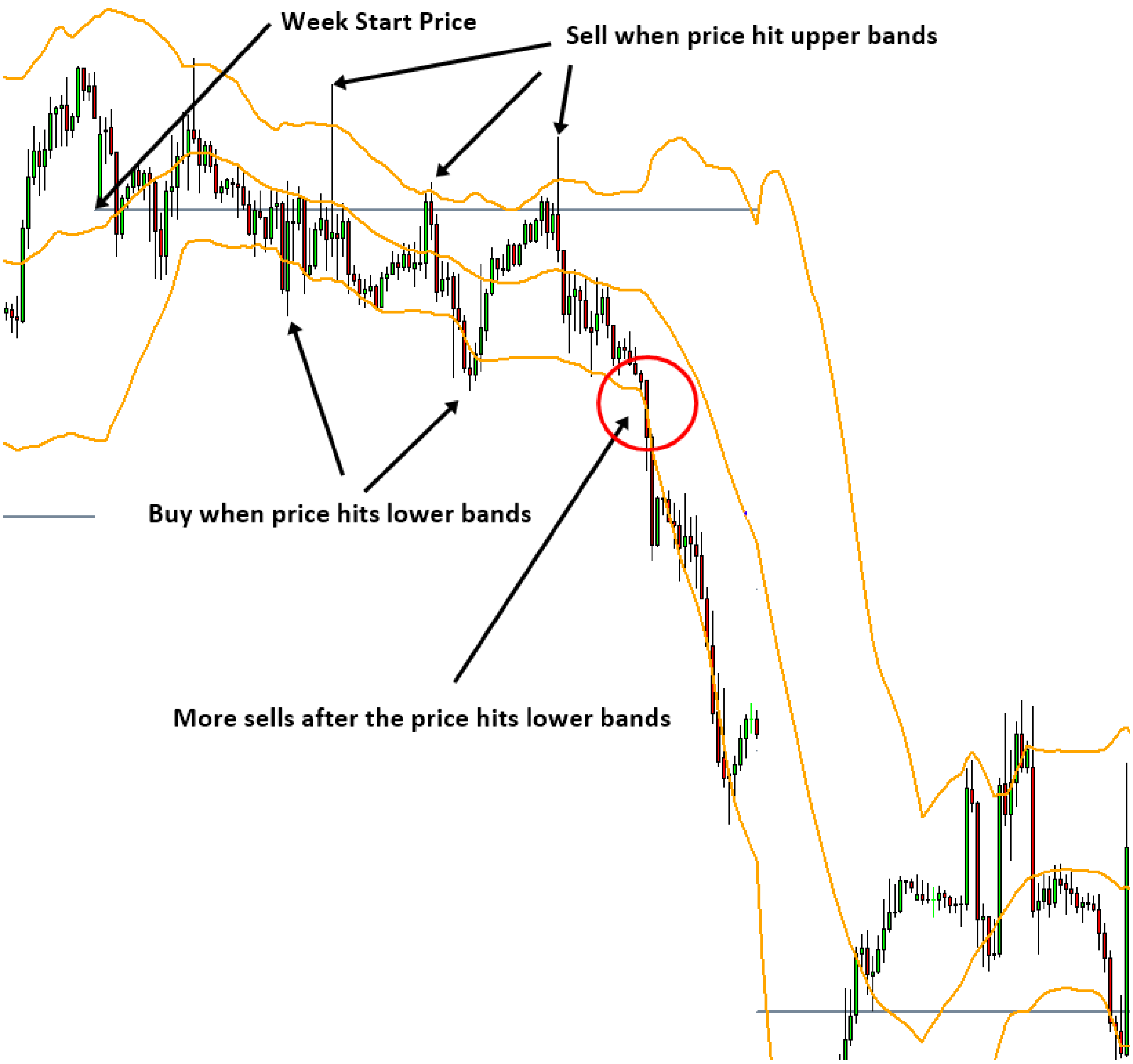
you can use this double harmonic Volatility mode in the automatic manner. The indicator will recommend you the significant peak and trough automatically. Which mode you want to run the harmonic Volatility indicators is entirely up to your trading experience and preferences.



This document was submitted and shared by trading community to help other traders through www.algotrading-investment.com

Traditional Volatility indicator VS Harmonic Volatility Indicator

You will find the benefits of the Harmonic Volatility Indicator quickly if we compare the traditional volatility indicator to Harmonic volatility indicator. Many traders uses Bollinger bands to measure the current market volatility. Many years ago, I was also the big user of the Bollinger bands for the mean reversion trading too. For example, buying when the price hit the upper bands of the Bollinger bands and selling when the price hit the lower bands. As you know, such a technique does not work. I will illustrate why they do not work. For an example, you might enjoy some reversal trading as shown in the screenshot below for some period. However, there will be time, the trick will not work anymore, circled in the red in the screenshot. Even if you increase the indicator period of your Bollinger bands or increase the standard deviation parameter, the results will not change because there is something fundamentally wrong. The fundamental problem is that you do not have the full picture of current market volatility but very limited picture from Bollinger bands. To see where our mistake was, please consider the next screenshot.



I have put the Harmonic Volatility Indicator to the week open price, which is running the weekly mode. In fact, the several sell pull back was happening because the market was testing the Sideways Market line of the Harmonic Volatility indicator, where the area between the two green Harmonic Volatility lines nearly have 33% probability coverage. In fact, when your Bollinger bands trick did not work, the market was trying to breakout its state from sideways to trendy market. Now you know where the things gone wrong. It was simply because you missed to have the full picture of market volatility. This is not hard math either. Anyone can understand that we will get 33% (0.3333) if we divide the probability 1 by 3. Therefore, we can account for the three market states including bullish, bearish and sideways market.

This document was submitted and shared by trading community to help other traders through www.algotrading-investment.com

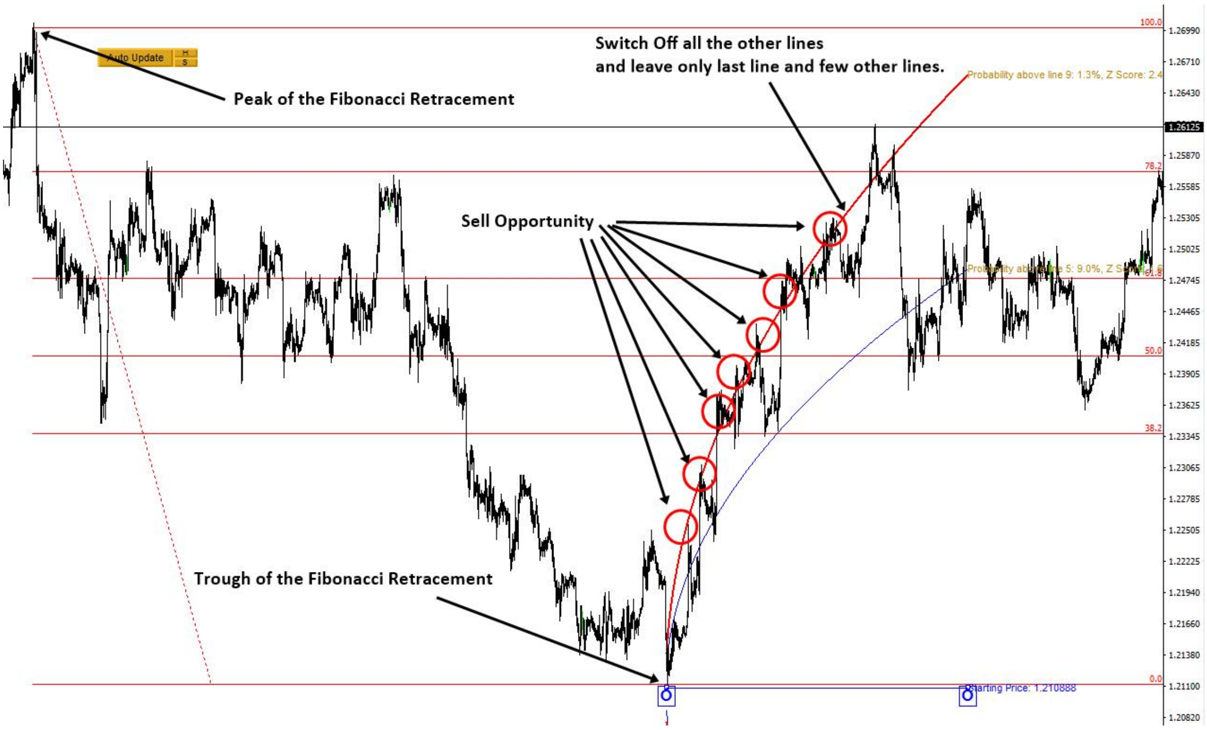
This document was submitted and shared by trading community to help other traders through www.algotrading-investment.com

Identifying mature trend in its end phase

Another excellent benefit of the Harmonic Volatility Indicator is its capability to identify the mature trend in its end phase. As we have mentioned before, the market can move as much as the fuel available in the market. Once the fuel is exhausted, the airplane have to come down to the earth. To illustrate this, please consider next screenshot. There is very thin chance for the price to move outside the last Harmonic Volatility line (red line). If they do, then it indicates that market fuel is almost exhausted. It is likely that the price will change its direction at this point, at least for short period. Pointing out this reversal moment is not difficult just watch out if the price move outside the last Harmonic Volatility line.

This document was submitted and shared by trading community to help other traders through www.algotrading-investment.com

One practical way of applying this technique is to apply the Harmonic Volatility Indicator in the second point of your Fibonacci retracement. With strong momentum in the current trend, you will find that many trade opportunities. If you want to base your trading strategy exclusively on identifying mature trend or turning point, then switch off all other lines except the last Harmonic Volatility line (Red line) and few others.

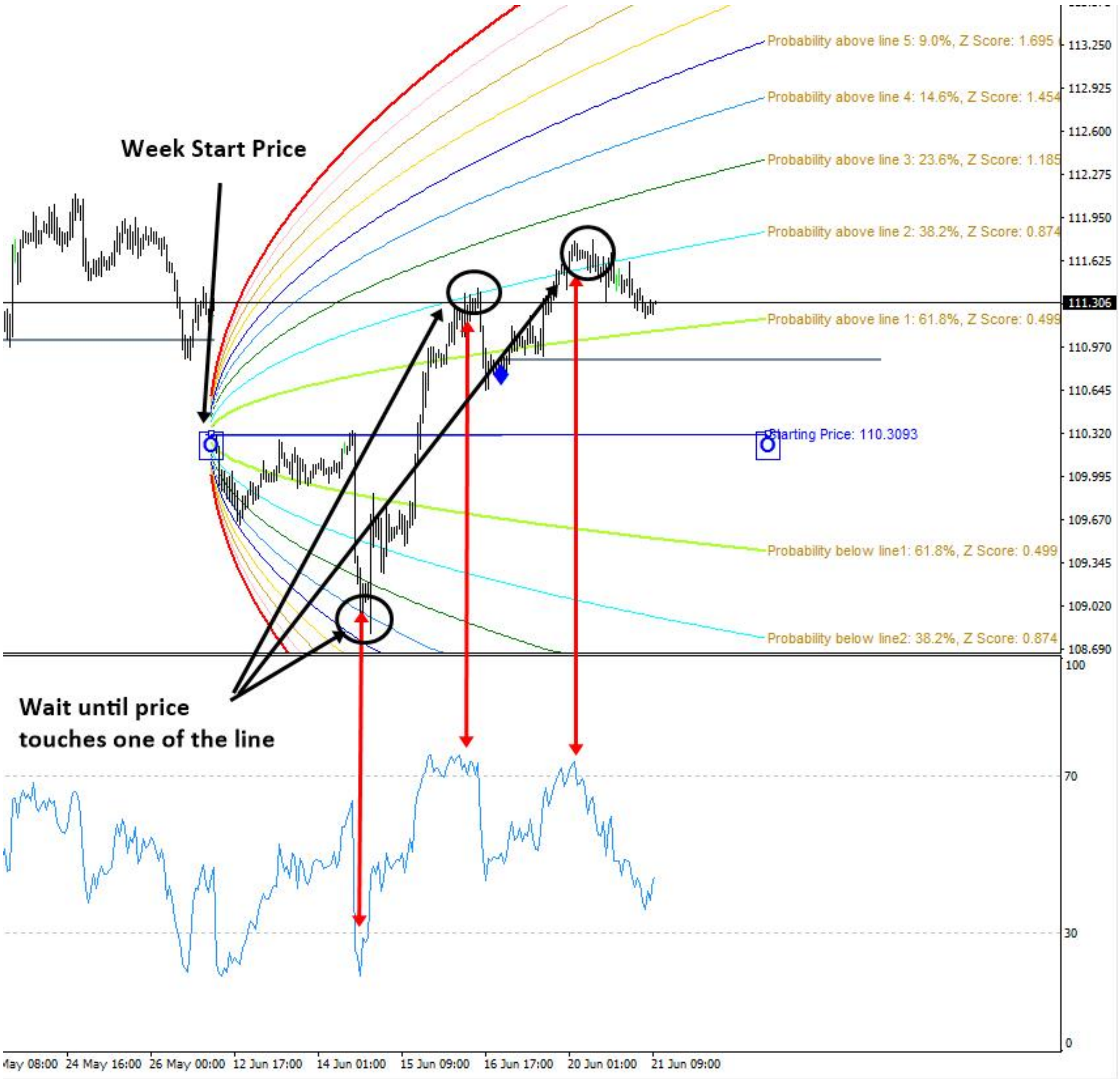


Improving market timing with the Volatility tuned with Fibonacci analysis

Use of the Fibonacci analysis for financial trading can nearly go back to 85 years from today since the birth of Elliott Wave Theory by R. N. Elliott. Until now, traders use the Fibonacci analysis to identify the patterns in the price series mostly. Yet, we could not find any one attempted to use Fibonacci analysis for the Volatility. The Harmonic Volatility Indicator was the first approach of applying Fibonacci analysis to the Volatility instead of price series. The Harmonic Volatility Indicator uses the Golden ratio 0.618 and its direct derivative only, for example, 0.618^2, 0.618^3, etc, for its Fibonacci analysis. So what is the benefits? Generally, the Harmonic Volatility Indicator is supportive for mean reversion trading strategy. Therefore, often the Harmonic Volatility Indicator can work with oscillators like RSI, CCI, Stoch, etc. It can

This document was submitted and shared by trading community to help other traders through www.algotrading-investment.com

also work well with Harmonic pattern trading too. Two screenshots below shows some example cases.




Auto Update
Week Start Price
Harmonic Pattern Formation near the Harmonic Volatility line
Bearish Pattern 1 [AB=CD, 8.24%, H1]
Custom Stop Loss: 112.502
Median Open Price
1.435
Custom Take Profit: 110.783
0.586