

# Autochartist USER MANUAL





# **INTRODUCTION CHAPTER 1**

Autochartist offers traders automated market-scanning tools that highlight trade opportunities based on support and resistance levels. Autochartist products include:

- Chart pattern formations such as Triangles, Wedges, Head-and-Shoulders and Channels;
- Fibonacci Retracements, Extensions, ABCD, Gartley and Butterfly patterns;
- **Key Levels** the technical analysis of horizontal support and resistance levels;
- Volatility Analysis provides an overall assessment of risk and volatility;
- **Performance Statistics** provides insight as to which patterns have reached their forecast levels over the last 6 months.

Autochartist's technical analysis products, Chart patterns, Fibonacci patterns and Key Levels are automatically identified by pattern recognition engines that continuously monitor financial instruments.

Emerging patterns provide one with early warning of where trade opportunities are developing, that is, where price is approaching support or resistance. This is useful to swing traders looking for ranges within which they can trade.

The Volatility Analysis tool provides statistical information about price volatility for the instruments traded. Volatility Analysis provides an assessment of risk when setting take profit and stop-loss levels.

#### Benefits:

- Autochartist covers most financial markets such as Forex, Indices, Commodities, Stocks, CFDs and Futures.
- Autochartist saves time by continuously scanning the markets for trade opportunities.
- Each Chart pattern, Fibonacci pattern and Key Level comes with a set of visual quality indicators that give novice traders the ability to interpret patterns, while it lets more experienced traders perform advanced search functions.
- Autochartist provides a wide variety of educational material such as this online manual, a quick start guide, videos, eBooks and free webinars.



# **AUTOCHARTIST WEB INTERFACE - CHAPTER 2**

When the Autochartist web application is opened, the interface will display information that has been loaded by default on a page with the ten features as described below.





#### **Trading Opportunities**

Contains search results for Chart and Fibonacci Patterns, as well as Key Levels



**Performance Statistics** 



**Trading Community** 



**Search Pane** 





Pattern Display: Click on display to enlarge pattern result



Price Movement Pane: Quality Indicators and Volatility Analysis



**Sound Switch** 



**Results Filter:** 

Chart Patterns: [Emerging / Complete]
Fibonacci Patterns: [Emerging / Complete]
Key Levels: [Breakouts / Approaches]



**Active Trading Opportunities** 



**Expired Trading Opportunities** 



#### **Trading Opportunities**

Search for Chart Patterns and Fibonacci Patterns as well as Key Levels trade opportunities from the **Trading**Opportunities Tab. The Results Filter refines one's preferences by including or excluding some or all of the trade opportunities available.



#### **Performance Statistics**

This tab provides detailed statistics on the overall accuracy of Autochartist for the preceding 6-month period, as well as specific statistics on how Autochartist performs on particular symbols, time granularities, patterns and directions.

Disclaimer: These statistics are not a measure of profitability, but simply count the quantity of identified opportunities that reach the forecast level within a predefined time.





#### **Trading Community**

This section provides access to education and product support documentation, as well as downloads and installation instructions for Autochartist's MT4 and MT5 plugin. In addition, one can follow live intraday trading using Autochartist.



#### **Search Pane**

When logging in for the first time, the search pane contains a default list of populated searches. Each search contains a set of criteria defined by the individual which specifies which **symbols** to include in the search. The symbols can be included by:

- 1. Selecting from predefined groups such as exchanges or instrument types; or
- 2. Selecting individual symbols



The Advanced Search option gives one the ability to choose certain criteria when setting up a search to filter and further refine search results.

When a new trade opportunity is identified this icon appears next to the search name. By clicking on the icon one is redirected to the relevant search results.

The information displayed in the **Active Trading Opportunities** and **Expired Trading Opportunities** sections ( $\underline{I}$  and  $\underline{J}$ ) are from the highlighted search (the search name will be marked in green).

An existing search can be edited by clicking on the pencil icon (a), or deleted by clicking on the 'close' icon (a).

(Please refer to Chapter 3 "Creating and Editing a Search" for details on creating or editing a search.)





#### **Pattern Display**

The price graph in this pane represents the result that was selected in the Active Trading Opportunities. (I)



#### The following information can be seen on the Pattern Display area:

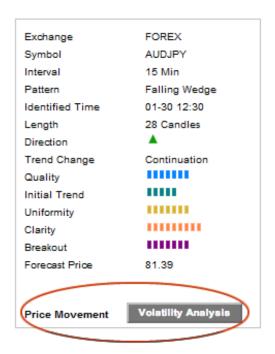
- The date and time at which the pattern was identified is highlighted in grey on the chart.
- Completed patterns are displayed with a horizontal line representing the forecast level. The color of the line is representative of the forecast direction of the pattern (green=up and red=down) and is displayed with a directional arrow from the point of breakout to the forecast line.
- The columns to the right of the price graph contain additional information about the pattern, such as direction, pattern type, identified time, quality (various indicators) and forecast price (completed patterns). For more information see the **Active Trading Opportunities Pane** (I).



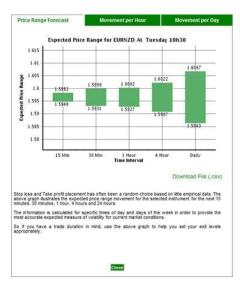


#### Price Movement Pane; Quality Indicators and Volatility Analysis

The **Volatility Analysis** tool provides insight into the movement of instruments. This tool can be used to assess the trading risk associated with different instruments in relation to the time of day in which they are being traded.



A new screen will pop up with 3 tabs:

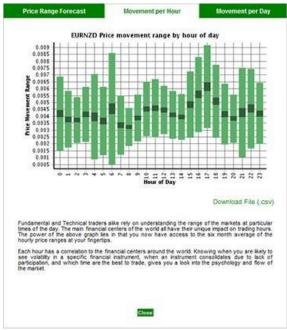


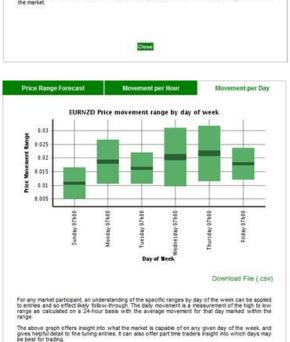
#### **Price Range Forecast**

The Price Range Forecast section is used to get a view of probable ranges that price is likely to move within over different periods/intervals. This allows one to assess the risk of take profit and stop loss levels based on the past six months of price movement data for a particular instrument for the current day of the week at the current time of day.

For advanced users, these ranges are calculated as one standard deviation around the mean of the price movement.







#### **Movement Per Hour**

The Movement per Hour view gives an overview of which hours in the day see more volatility in price movement for a selected instrument.

One can therefore assess the risk associated with trading certain instruments at different times of day.

## **Movement Per Day**

Very similar to the Movement per Hour view, the Movement per Day view indicates the weekdays on which more volatility can be expected. This view is aimed at providing information on when certain structural aspects of certain markets make trading on certain days more risky.





#### **Sound Switch**

When new results are identified an audible sound is played. The alert sound can be toggled to On or Off.



The component that Autochartist uses to play sound notifications uses an automatic selection of HTML5 audio, native browser audio and Flash (if installed) to play the sound. Flash is most commonly used. To update Flash click here: <a href="http://get.adobe.com/flashplayer/">http://get.adobe.com/flashplayer/</a>

Computer sound as well as that of the application must be switched on to receive audio alerts.

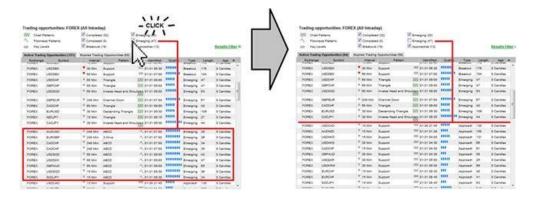


#### **Results Filter**

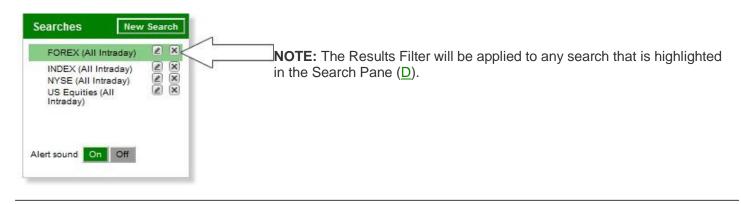


Should the results filter not be in view between the Pattern Display and the Trading Opportunities Pane click on the **Results Filter** > link.

Select preferred types of trade opportunities by using the Results Filter. Tick and/or untick the check boxes next to each type of trade opportunity to view results in the Trading Opportunities Pane. Results will appear or disappear from the Trading Opportunities Pane in real time as the checkboxes are ticked or un-ticked.





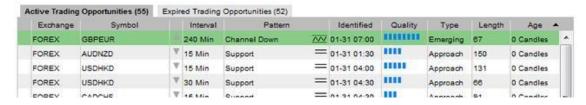




#### **ACTIVE Trading Opportunities**

The **Active Trading Opportunities** section is continuously populated with all the latest results of the search highlighted in the **Search Pane** (D), that fall within the categories selected in the **Results Filter** (H).

Active Trading Opportunities are patterns in which there still can be trades. This means that the price is not moving away from the expected direction and target, and the pattern has not yet completed or reached its target. As soon as any of this changes, the result is moved to the 'Expired Trading Opportunities' tab (see below)



By default the first result is selected and highlighted in green.

For the sake of clarity and ease of use, results are highlighted in yellow when the mouse cursor hovers over them. Once clicked the pattern of the selected result will be displayed in the Pattern Display area and the result will be highlighted in green.

Information provided in the Results Pane for Active Trading Opportunities includes:

- Exchange
- Symbol
- The **direction** of the pattern
- Time interval of the bar chart
- The pattern name
- The time when the pattern was identified
- Overall visual quality assigned to the pattern (arithmetic average of various different visual quality indicators)
- Pattern type, indicating whether it is emerging or completed, or a breakout or approach, (See Chapter 4: "Emerging vs. Complete Results" for a more in-depth explanation of the difference between completed and emerging patterns.)
- Pattern length in bars/candles

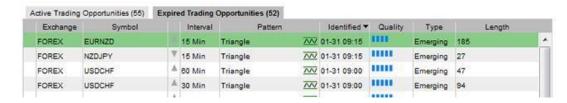


This list is sorted by Age, which is the number of candles/bars that formed after the pattern was identified. This method of sorting means that longer term patterns such as 1-day and 4-hour patterns will move down the list at a much slower rate than short term patterns (15 min, 30 min). Also, the latest patterns will be listed first.



### **EXPIRED Trading Opportunities**

To view this pane click on the 'Expired Trading Opportunities' tab which will be highlighted in dark grey. This pane lists all expired results for the search highlighted in the **Search Pane** ( $\underline{D}$ ).



A result expires as soon as an event occurs that makes the expected outcome either unlikely or impossible, or when the expectation was fulfilled and the target reached. Some examples of expired opportunities would be when price starts moving consistently away from the target level of a completed pattern, or when an emerging pattern completes (in this case the emerging pattern expires, but a new completed pattern opportunity will arise). See the examples below.





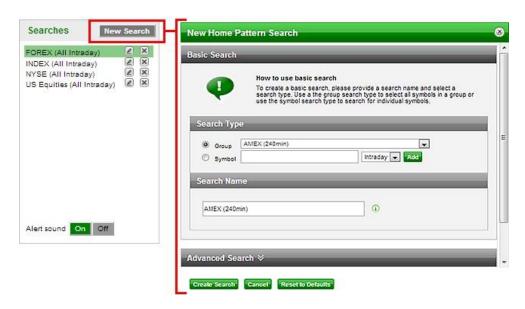


The information in this section is displayed in exactly the same way as the information in the Active Trading Opportunities tab. For more information on how results are displayed, please see the preceding section (I).



# CREATING AND EDITING A SEARCH - CHAPTER 3

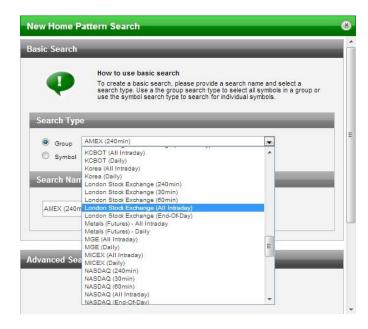
A *Search* is a group of symbols, either predefined or selected for which one wishes to find trade opportunities. Each search combines a filter to the symbol selection that filters results based on a set of advanced criteria. These are discussed under Advanced Search Filters below.



To start a new search, click on the 'New Search' button at the top of the Search Pane (near the top left corner of the screen). The first step in creating a search is to specify the symbols to which the scan must be applied.

#### **Basic Search (Selecting symbols/instruments):**

The Basic Search functionality is also known as "Grouping". The basic search allows one to choose between selecting a predefined group (usually symbols on a particular exchange or symbols for a particular time granularity) and selecting symbols individually to form a unique portfolio.





When a new group has been selected, the search name is automatically set to the default name of the group. The search name can be edited or augmented at any time.



To search for specific symbols choose the "Symbol" option on the radio button, add preferred symbols by typing in the name of the Forex pair or other symbols and an auto-complete list will appear and update as one types.

Next, select the relevant time granularity for each symbol and click on the "Add" button to add the symbol to a custom list.



**Note:** The search name will automatically change to the latest symbol added each time an addition is made to the symbol list.

#### **Search Name**

The lower part of the search window provides a text field to enter a name for the search. It changes automatically to the last group that was selected, or the last symbol that was added to a custom list. The name of the search will be displayed in the Search Pane.

The last step in the process of creating a basic search is to click the "Create Search" button at the bottom of the popup window.



#### **Advanced Search Filters**

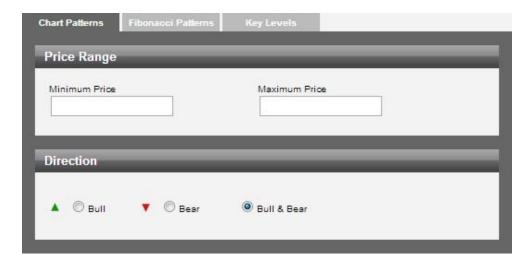
To create an "Advanced Search" filter on a new or existing search, select the "Advanced Search" link at the bottom of the basic search options.





The Advanced Search screen will expand with a list of additional criteria to refine a search. Note the three separate tabs for Chart Patterns, Fibonacci Patterns and Key Levels. Each tab displays specific criteria that will refine the search for the selected category of pattern or Key Level.

The selected tab is displayed in a darker grey, and all the filter criteria relevant to that analysis type can be changed below.

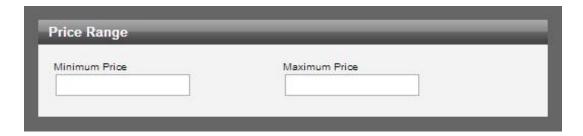


**NOTE:** Beware not to make the advanced filter criteria too restrictive. It can easily happen that two or three criteria can be made too restrictive and cause the search to end up with an empty result set and the message "No Patterns Found "in the Results Pane.

Each set of search criteria will be discussed in separate sections below.

#### **Advanced Filters: Chart Patterns**

### **Price Range**



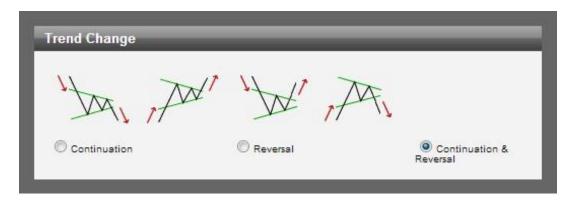
This functionality is useful for scanning Equities and CFDs. One can define a minimum to maximum price range in the text boxes provided, for example to limit penny stocks or very expensive equities.





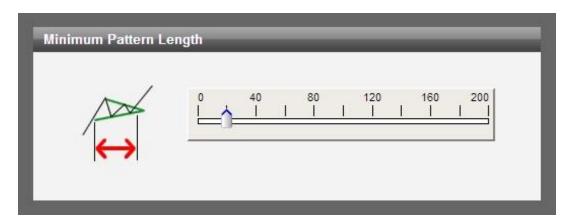
Search results can be filtered according to the direction of the possible outcome of price movement after the pattern is identified. Select the market direction of choice by clicking the applicable radio button.

#### **Trend Change**



The forecast price movement after a chart pattern is found would either be in the same direction as the Initial Trend, or in the opposite direction. If the forecast price movement after the pattern follows the same direction as the Initial Trend it is known as a continuation pattern. If it goes in the opposite direction to the Initial Trend it is called a reversal pattern.

#### **Minimum Pattern Length**



Pattern length is determined by the number of candles (bars) of the price chart that are contained in the pattern. For example, a pattern length of 30 on a graph with 60-minute bars would mean that the pattern was formed over 30 hours.



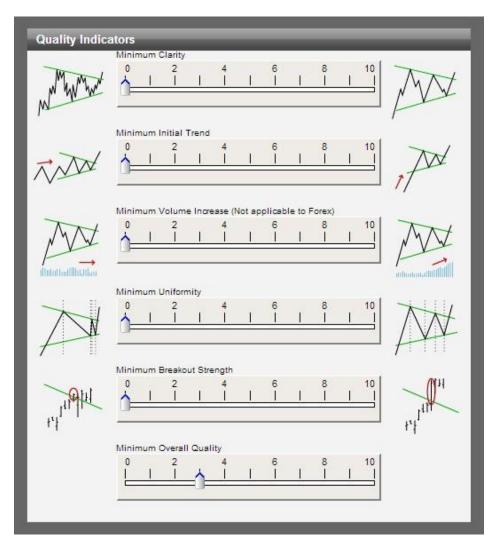
## **Chart Pattern Quality Indicators**

Autochartist automatically rates 5 objective indicators to measure the visual quality of Chart patterns: Clarity, Initial Trend, Volume, Uniformity and Breakout strength.

Quality indicators reflect the visual appeal of the pattern. A high quality pattern will appear more attractive, well-proportioned and symmetrical. The overall quality measure is the arithmetic average of all other indicators.

Disclaimer: Visual Quality is not an assessment of the efficacy of the Chart Pattern, nor the possible profit or loss one can realize from specific trading opportunities.

Quality is expressed as a number ranging from 0 to 10, where 10 is the best quality and 0 is the poorest. Use the sliders to set the required levels of pattern quality for a search (see image below).



It is important to remember that the settings in this section determine the minimum requirements for quality. A lower threshold would allow more patterns to pass the search criteria. If the requirements are set too high, the search may return very few results or none at all. If all the quality indicator filters are set to zero, no results will be filtered out on quality and all results will be returned.



Clarity: Indicates the level of "noise" in the price graph. If there are many spikes in the price movements the clarity will be low.

Initial Trend: The strength of the trend that precedes a pattern. A long, consistent Initial Trend will have a higher rating for this indicator.

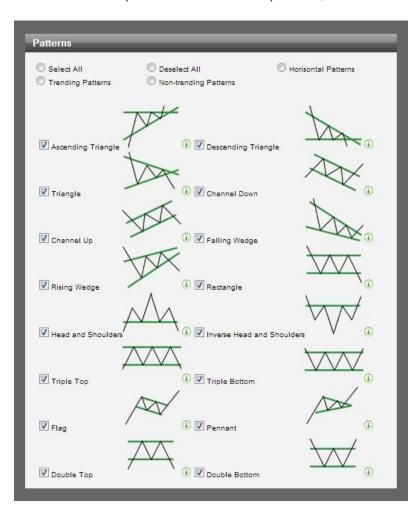
Volume: An important indicator that measures the increase in volume during the breakout of a price through support/resistance. Volume is only applicable to exchange-traded instruments (equities, ETFs).

Uniformity: If the points touching the support and resistance lines are more evenly spaced over time, the pattern will have a better Uniformity rating.

Breakout Strength: The size of the candle with which the price breaks through a support or resistance level

#### **Types of Chart Patterns**

Autochartist identifies 16 different Chart Patterns. Any of these can be filtered out in the Advanced Filter section of a search. For descriptions of each of these patterns, click on the sicon next to the pattern.





#### **Price Range**



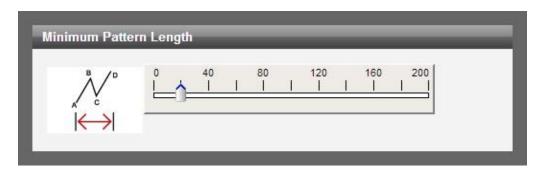
This functionality is useful for scanning Equities and CFDs. Traders are able to define a minimum to maximum price range in the text boxes provided, for example to limit penny stocks or very expensive equities.

#### Direction



Search results can be filtered according to the direction of the forecast price movement after the pattern is identified. Every pattern has either a bullish or bearish outlook. If you are interested only in a particular market direction you can select it here by clicking the applicable radio button.

#### **Minimum Pattern Length**



Pattern length is determined by the number of candles (bars) of the price chart that are contained in the pattern. For example, a pattern length of 30 on a graph with 60 minute bars would mean that the pattern was formed over 30 hours.

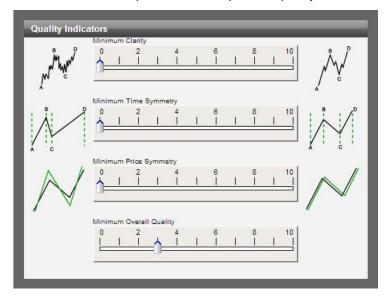
#### **Fibonacci Pattern Quality Indicators:**

Three indicators measure Fibonacci pattern quality. Each Indicator is discussed below.

Quality indicators reflect the visual appeal of the pattern. A high quality pattern will appear more attractive, well-proportioned and symmetrical. The overall quality measure is the arithmetic average of all other indicators.



Quality is expressed as a number ranging from 0 to 10, where 10 is the best quality and 0 is the poorest. Use the sliders to set the required levels of pattern quality for a search (see image below).



#### Clarity

Indicates the level of "noise" in the price graph. If there are many spikey movements in the price movements the clarity will be low.

#### **Time Symmetry**

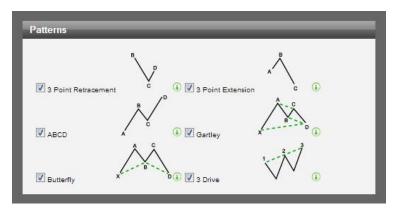
The degree to which time differences between turning points follow the same Fibonacci ratios found in price levels.

### **Price Symmetry**

Price Symmetry is the degree to which the identified ratios match the theoretical Fibonacci ratios, within some margin of error. Therefore, the smaller the margin of error, the higher the Price Symmetry.

### Fibonacci Pattern Types

Autochartist identifies six different Fibonacci patterns. Any of these can be filtered out in the Advanced Filter section of a search. For descriptions of each of these patterns, click on the icon next to the pattern.





#### **Advanced Filters: Key Levels**

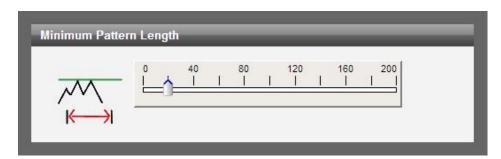
Chart patterns, Fibonacci Patterns and Key Levels are accompanied by their own set of unique search criteria. Each section is described below.

#### **Price Range**



This functionality is mainly useful for scanning Equities and CFDs. Traders can define a minimum to maximum price range in the text boxes provided, for example to limit penny stocks or very expensive equities.

#### Minimum Pattern Length



Pattern length is determined by the number of candles (bars) of the price chart that are contained in the pattern. For example, a pattern length of 30 on a graph with 60 minute bars would mean that the pattern was formed over 30 hours.

#### **Quality Indicators**

Key Levels have one assessment of possible significance of the identified level - this is a measure of the number of points where the price graph touches the support or resistance level and thus confirms it.



By default, any Key Level will have at least 3 touching points, but this set of radio buttons allows traders to select a higher minimum number of touching points to filter. Note that the higher number this filter is set to, the fewer results will be displayed.



## **Key Level Pattern Types**

There are only two types of Key Levels – Support and Resistance. Horizontal Resistance is a price ceiling that is touched from below and broken through in a bullish direction, while Horizontal Support is a low price level that is tested and touched from above.





# EMERGING VS COMPLETE RESULTS - CHAPTER 4

This is a brief overview of emerging patterns, what they mean, and how they become completed patterns.

### **Emerging Chart Patterns:**



Emerging chart patterns provide one with early notification of potential trading opportunities. They represent fully formed patterns that only need price to break through support or resistance in order to complete.

As soon as price breaks through the anticipated level of support or resistance, the emerging pattern is expired and a completed pattern presented as a trading opportunity.

Many emerging patterns do not complete however, and this usually means that the price has not continued moving in the direction of support or resistance where the breakout for completion was expected. If a new turning point forms between the support and resistance levels before breaking out, the emerging pattern will expire.



## **Emerging Fibonacci Patterns:**



Emerging Fibonacci patterns are slightly more convoluted, as there is more than one hypothetical condition that needs to occur for the pattern to complete.

The setup for an emerging Fibonacci pattern has a theoretical final turning point set at a particular price level, indicated by a pink dot on the graph. For the pattern to complete, price not only has to reach that level, but it has to find support/resistance at that level and retrace in the opposite direction.

If either the price does not reach the target level, or it does not turn around at that level, the pattern will expire.



## **SUPPORT**

This manual gives an overview of how to use the **Autochartist web interface**. You can also download Autochartist's popular MT4/MT5 plug-in for up-to-date, real time automated trend analysis inside the MT4/MT5 platform.

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