

Line Sync

Introduction

Line Sync synchronizes your manually drawn chart annotations (lines, channels, zones and text) across multiple charts.

For instance, when you manually draw support/resistance lines, trend lines, pivot points, or other key levels onto a chart, it's often really useful to have these same levels and lines copied to a different chart, e.g. a lower timeframe chart of the same instrument. Line Sync can do just that.

Objects drawn or imported using Line Sync are stored in a shared SQL database that other instances of Line Sync can access. Furthermore, the lines are persistent and will be remembered even if the original chart is removed.

NOTE: Due to platform limitations, Line Sync only works with graphic objects created via its own interface. Unfortunately, this means that objects created through MarketScope's native interface can not be handled by the Line Sync tool.

Line Sync also allows you to export (or import) to (or from) a file. The file is a 'csv' (Comma Separated Value) text file. This file format can be edited by a plain text editor (e.g. Notepad) or Excel.

Installation

Please use the provided installer.

This software is for MarketScope 2.0 charting/trading application. There are no special hardware or software requirements. If your PC will run the MarketScope 2.0 software then you should be good to go. A good performance internet connection is recommended.

User Guide

Basic Usage

Since Line Sync is only an "add-on" to MarketScope and not part of the platform, there are some limitations to what it can do. In particular, it only has limited access to the user-interface (mouse position and buttons).

Line Sync utilizes the "context menu" (i.e. the menu that appears when you right-click on an area of the chart) for much of the required user input.

Line Sync has additional custom menu options towards the bottom of the context menu. See Figure 1.

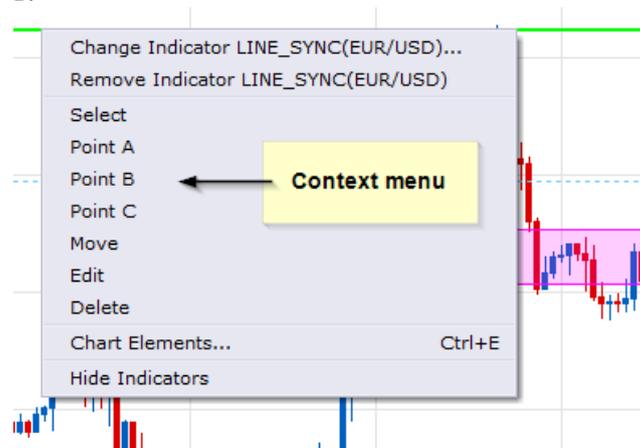


Figure 1 : Custom context menu

The basic context menu options are:

- **Select:** Use to select a tool-bar option, or to select an object prior to moving.
- **Point A / B / C:** Specify point A, B or C for the selected objects (objects require different number of points to specify them, e.g. a trend lines requires Point A and Point B to be specified).
- **Move:** Use to move an object to the selected position after it has been selected.
- **Edit:** Use to modify an object's properties, e.g. line colour.
- **Delete:** Use to delete an object.

An extended menu is available which adds:

- **Change tool:** Use to change the currently selected drawing tool. It cycles through the available tools each time it is used.
- **Delete all:** Deletes all objects.
- **Export:** Use to export objects to a text file.
- **Import:** Use to import objects from a text file.

Line Sync uses a custom “tool-bar” to allow the user to specify the selected tool, as well as providing additional options / commands. See Figure 2.



Figure 2 : Custom tool-bar

The tool-bar feature is activated using the “Select” option on the context menu.

The basic tool-bar options are:

- **Horizontal line drawing mode**
- **Vertical line drawing mode**
- **Trend line drawing mode**
- **Zone drawing mode**
- **Channel drawing mode**
- **Text drawing mode**
- **Delete all objects**

An extended tool-bar is available which adds:

- **Export to file**
- **Import from file**

It is also possible to turn the tool-bar and context menu options off.

The required drawing tool is selected by the tool-bar. It can also be selected the “Change tool” option on the extended context menu. The currently active tool is shown by the status text to the right of the indicator legend, and also graphically by the depressed state of the appropriate tool-bar option.

For example, to select the horizontal line tool, either right-click on the  icon on the tool-bar and select the “Select” option on the context menu, or repeatedly select the “Change tool” option on the extended context menu until the horizontal line tool is selected.

Once the desired tool is selected, you can place objects of that type by using the context menu and selecting Point A/B/C as appropriate. Horizontal lines, vertical lines, and text objects only require Point A to be specified. Trend lines and zones require Point A and Point B to be specified (in that order). Channels require Point A, Point B and Point C to be specified (in that order). See Fig Figure 5, Figure 6, Figure 7, Figure 8, Figure 9 and Figure 10.

Once all the points for a particular object have been specified a pop-up window will appear where additional settings can be changed, such as optional label, colour, line style, etc. Click on “OK” to confirm the settings and create the object, or click on “Cancel” to discard the object.

Objects can also be edited after creation any time by using the “Edit” option of the context menu. See Figure 11.

Unfortunately, due to the restricted user interface, it is not possible to “drag” an object to a new position in order to move it. Instead, an object has to be “Selected” and then “Moved” using the context menu. When you “Select” an object the control point (Point A/B/C) nearest the cursor position will be high-lighted; and this is the point that will ultimately be moved. If another point is desired then simply use “Select” again with the cursor nearer the desired point.

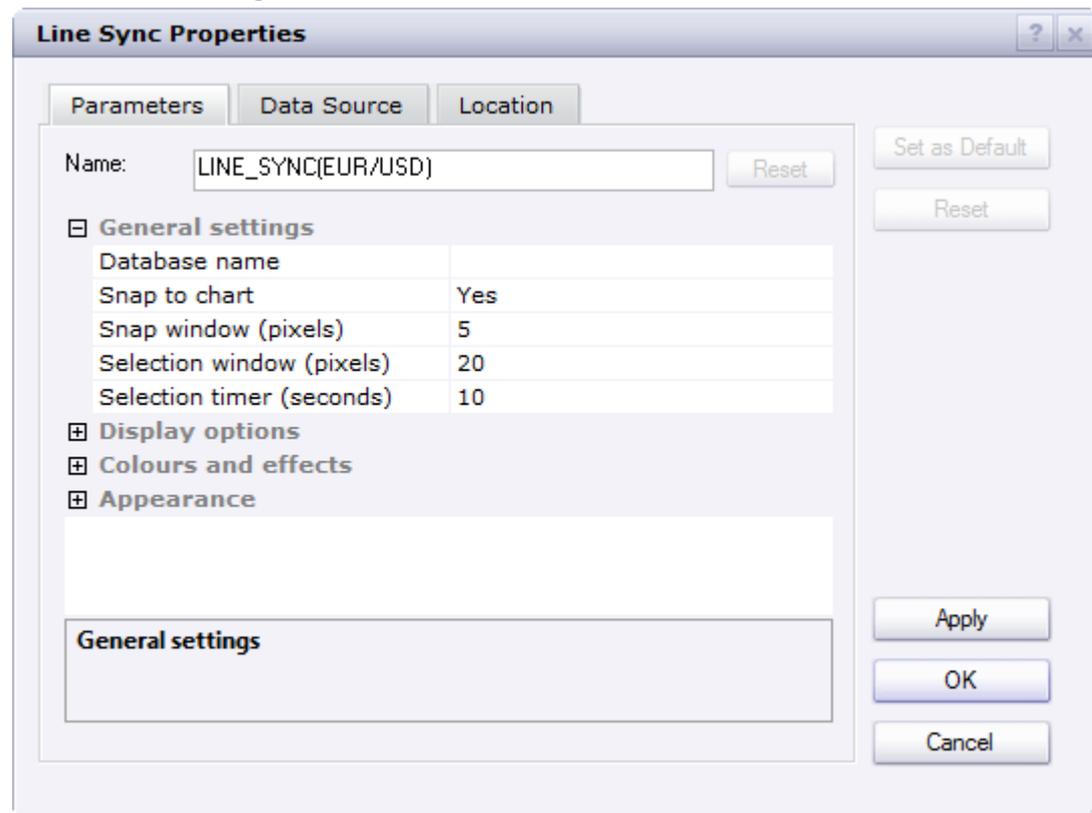
NOTE 1: For convenience, selected objects remain active for a few seconds to allow other actions to be performed.

NOTE 2: For channels and zones, select one of the lines not the shaded area.

Objects can also be deleted by the “Delete” option on the context menu. It is also possible to delete all objects by selecting the  icon on the tool-bar.

Input Parameters

General Settings



The image shows a dialog box titled "Line Sync Properties" with three tabs: "Parameters", "Data Source", and "Location". The "Parameters" tab is active. It contains a "Name:" field with the text "LINE_SYNC(EUR/USD)" and a "Reset" button. To the right of the dialog are buttons for "Set as Default" and "Reset". Below the name field is a tree view with expandable sections: "General settings", "Display options", "Colours and effects", and "Appearance". The "General settings" section is expanded and contains a table with the following data:

Database name	
Snap to chart	Yes
Snap window (pixels)	5
Selection window (pixels)	20
Selection timer (seconds)	10

At the bottom of the dialog are buttons for "Apply", "OK", and "Cancel".

Database name: This is the name for the database used to store the Line Sync data. If this is left blank, then the instrument name is used as a default. In most cases you can leave this blank and use the default name. However, sometimes it is useful to have a specific database name.

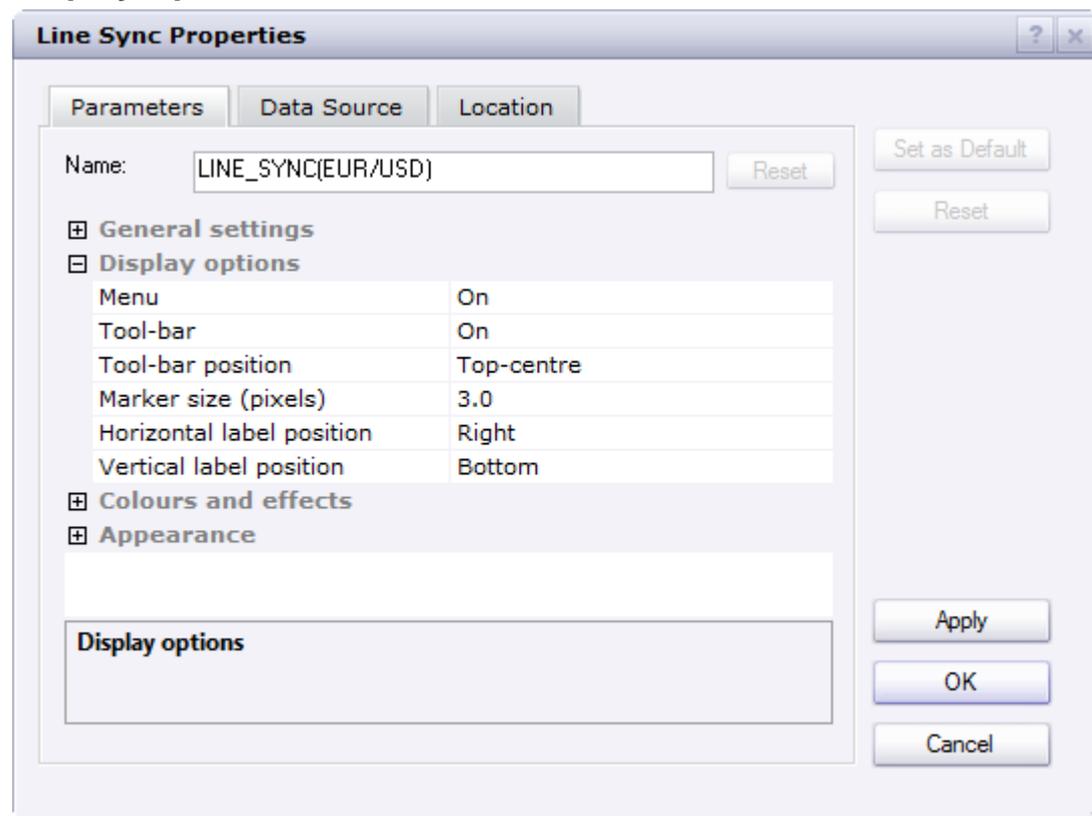
Snap to chart: This can be Yes or No. When set to Yes, the price will snap to the nearest value of the bar’s open, high, low or close, if (and only if) the distance is less than or equal to the “Snap window” (in pixels).

Snap window (pixels): This is the maximum distance used for the “Snap to chart” feature. It is measured in pixels.

Selection window (pixels): This is the maximum distance used for when selecting objects on the chart. It is measured in pixels.

Selection timer: This sets the duration (in seconds) for the “selection timer”, which keeps a selected line active for a short period after the last action.

Display Options



Menu: The context menu feature can be turned on or off. There is also an extended menu with additional options. See Figure 1.

Tool-bar: The tool-bar feature can be turned on or off. There is also an extended tool-bar with additional options. See Figure 2.

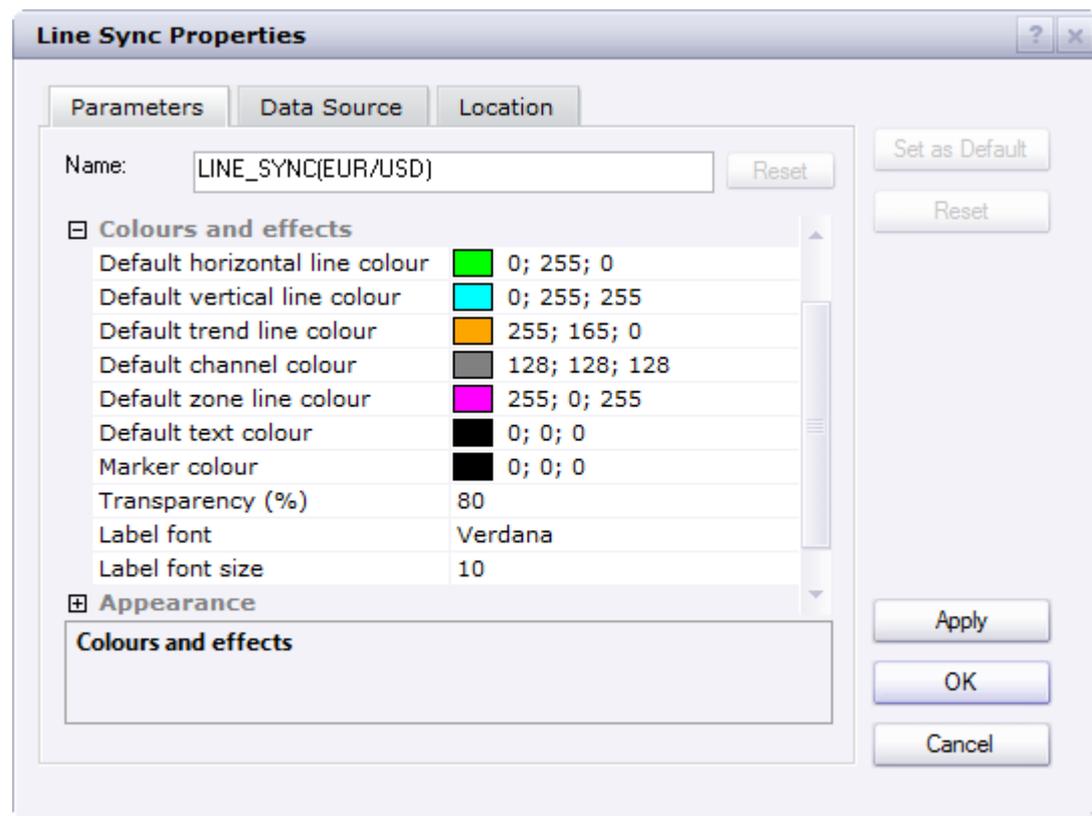
Tool-bar position: This sets the position of the tool-bar on the chart.

Marker size (pixels): When creating objects, or when an object is selected, a small rectangle is drawn to mark the object's control points (i.e. Points A/B/C). This setting sets the size of these markers.

Horizontal label position: This can be Off, Left, Right or Both. It dictates where labels are drawn in relation to the object. For example, when set to Both, a horizontal line's label will be drawn at the left and right extremes of the line.

Vertical label position: This can be Off, Top, Bottom or Both. It dictates where labels are drawn in relation to the object. For example, when set to Both, a vertical line's label will be drawn at the top and bottom extremes of the line.

Colours and Effects



Default horizontal line colour: The default colour for horizontal lines.

Default vertical line colour: The default colour for vertical lines.

Default trend line colour: The default colour for trend lines.

Default channel colour: The default colour for channels.

Default zone colour: The default colour for zones.

Default text colour: The default colour for text labels.

Transparency (%): The transparency value used for the channel and zone objects.

Label font: The font used for text labels.

Label font size: The font size used for text labels.

File Export / Import

Line Sync can import lines from a file, or export the current lines to a file. This could be useful, for example if you use an external Excel spreadsheet to compute or store key levels, or if you want to transfer lines between computers or share the lines with other traders.

A plain text file is used for the Export / Import option. It should be given the extension ‘.txt’ or ‘.csv’ so that it can be edited/viewed by a plain text editor (such as Notepad) or even Excel.

The Export / Import option is available from the tool-bar. Select the  or  icons as required. A pop-up will appear asking for the file name, and also allowing you to specify the date format. Select “OK” to confirm the operation. See Figure 12.

When importing the data from a file, it replaces all previous data in the database. The new lines are stored in the database, and the indicator will use the internal database from then on. The Line Sync indicator does not automatically check for changes in the file, the user has to manually Import each time the file is changed.

The file format consists of a number of rows of data. Each row of data is a separate line definition, consisting of a list of comma separated values. The format for each line type is slightly different. The first value in the line definition is a letter identifying the line type (H = Horizontal, V = Vertical, T = Trend line, L = Label, C = Channel, Z = Zone).

Horizontal lines have the following format:

H, price, colour, width, style, label

Vertical lines have the following format:

V, date&time, colour, width, style, label

Trend lines have the following format:

T, point A date&time, point A price, point B date&time, point B price, colour, width, style, extend, label

Text labels the following format:

L, date, price, colour, label

Channels have the following format:

C, point A date&time, point A price, point B date&time, point B price, point C date&time, point C price, colour, extend, label

Zones have the following format:

Z, point A date&time, point A price, point B date&time, point B price, colour, extend, label

In all cases, the formats of the values are:

“price” is a number

“date&time” is YYYY/MM/DD hh:mm (the hh:mm is optional and can be blank)

“colour” is an integer number (i.e. a whole number) which represents the RGB value
“width” is an integer in the range 1 .. 6
“style” is an integer in the range 1 .. 4
“extend” is an integer in the range 1..4 (1 = Off, 2 = Left, 3 = Right, 4 = Both)
“label” is a quoted string, e.g. “January pivot”

NOTE: Since Release 2, the date format is selectable (e.g. DD/MM/YYYY, MM/DD/YYYY and YYYY/MM/DD).

Here is an example text file, which has a trend line, 2 horizontal lines and a vertical line...

```
T,2013/1/1 21:01,1.63412,2013/1/23 09:01,1.58813,8421504,2,4,"Example line 1"  
H,1.59541,16711935,3,3,"Example line 2"  
V,2013/1/18 01:01,8421504,2,3,"Example line 3"  
H,1.5805,16711680,2,3," Example line 4"
```

Special Note on Trend Lines and Channels

The Line Sync indicator allows you to draw trend lines and channels. However, these sloping objects can be problematic when drawing over multiple time-frames. This is because the time axis is not linear – it has gaps due to the weekend, missing bars or session closed times. This means that the line slope calculated at one time frame might not exactly match the line slope calculated at another timeframe.

To avoid this problem, Line Sync will only display trend lines and channels if all of their control points are within the current loaded chart data. The control points don't have to remain visible, just as long as the chart data is loaded. If you don't see a trend line or channel that you need then zoom out to load the data and then zoom back in again once the line appears.

Screenshots



Figure 3 : Typical use of Line Sync



Figure 4 : Two charts with Line Sync synchronized objects



Figure 5 : Horizontal line

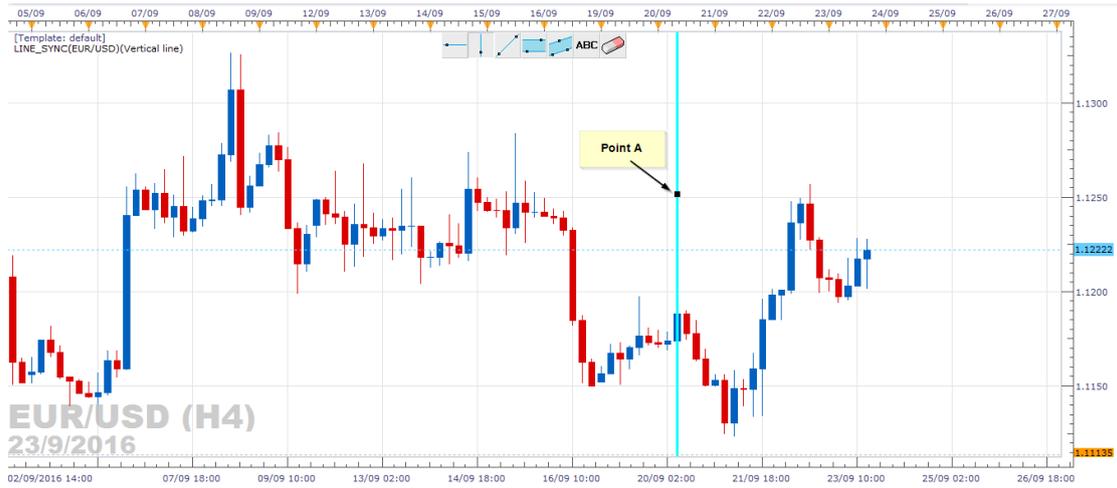




Figure 9 : Channel



Figure 10 : Text

Line Sync ? x

Edit Object

Parameters

Label	TEST123
Price	1.12558
Colour	 0; 255; 0
Width	2
Style	Solid line

Figure 11 : Edit pop-up

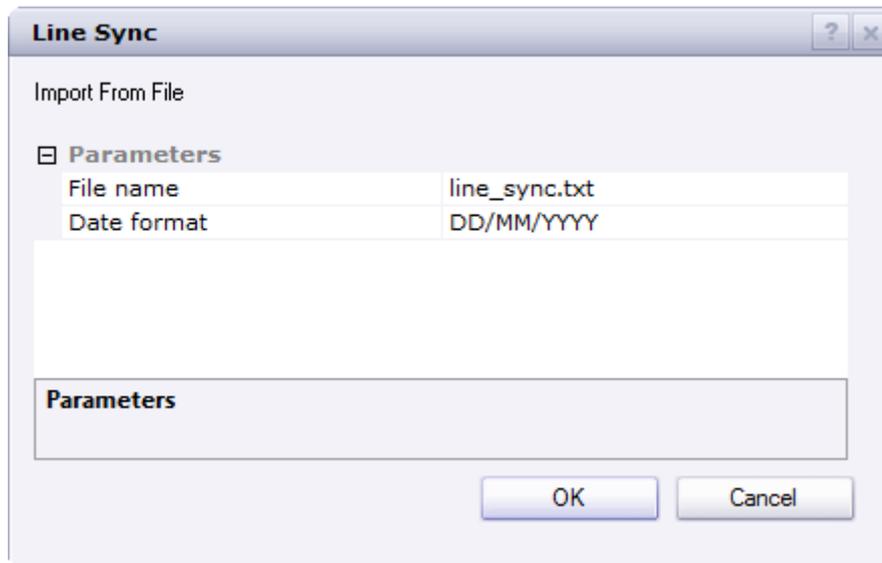


Figure 12 : Import from file pop-up

Further Information

Additional information can be found on my blog (<http://robocod.blogspot.co.uk/>).

Support

Should you have any problems with installation or use of this tool, then please email sjdcknsn@gmail.com with a description of your problem or query.

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