IC Markets Global

MINI CHART INDICATOR

1. Overview

The Mini Chart indicator creates a chart in a draggable, resizable sub-window inside a main MT4 chart. It lets you see the price action on other instruments and/or timeframes without needing to switch between different MT4 charts.

The Mini Chart has a wide variety of features:

- Timeframes such as M4 and H3 in addition to standard timeframes such as M1 or H1
- Tick bars (e.g. bars made up of 10 ticks each) and seconds bars (e.g. 20-second bars)
- Range, Renko, Kagi and Point & Figure charts
- Data-transformations such as Heikin Ashi and Three Line Break

Although you cannot add MT4 indicators to a Mini Chart, it does provide its own options for showing popular indicator calculations such as moving averages and Bollinger bands.

2.   Using the Mini Chart indicator

2.1   Adding the indicator to a chart

You add the Mini Chart indicator to a chart in the usual MT4 way, either by dragging it from the Navigator onto a chart, or by double-clicking on it in the Navigator. You can also use standard MT4 features such as adding the indicator to your list of Favorites, or assigning a Hotkey to it.

You need to turn on the "Allow DLL imports" setting in the "Common" tab of the indicator's options:

2.2   Choosing the symbol

You set the symbol to display using the Symbol parameter in the Inputs tab. The symbol must be present in the MT4 market watch, and you should include any suffix which your account has for symbol names, e.g. EURUSD+

To display more than one symbol, you simply add multiple copies of the indicator to the chart.

You can also leave the symbol set to (current). This will then display the same symbol as the main MT4 chart, and will change if the main chart changes.

2.2.1   Inverting prices

You can invert prices by turning on the option on the Inputs tab. For example, this will convert USDJPY into JPYUSD.

2.3   Chart timeframe / type

You choose the chart timeframe, or a type such as [Kagi](), using the option on the Inputs tab.

If you leave the timeframe set to (current) then the Mini Chart will use the same timeframe as the main MT4 chart, and will change if the main chart changes.

The Mini Chart offers a range of different timeframes and chart types:

- Standard timeframes such as M5 and H1
- Extra timeframes such as M4 and H6
- Sub-minute, seconds-based time periods such as S10 and S30
- Tick-lines, i.e. lines showing each change in the ask and bid price
- Tick charts, i.e. candles which are not time-based and are instead made up of the same number of ticks
- Price-based charts such as Renko and Kagi

2.3.1　Seconds charts

MT4 does not have historic data at frequencies under 1 minute (M1). Therefore, the Mini Chart cannot show a history for a seconds-period such as S30 when it loads. The indicator can only start recording and showing the data from the time that it starts running.

2.3.2　Tick charts

Tick charts draw a new bar every N ticks (i.e. they are based on activity, not on time). You need to fill in the number of ticks you want to use in the setting on the Inputs tab.

As with seconds charts, MT4 does not have historic data at frequencies under 1 minute (M1), and can only show the tick bars from the time that the indicator starts running.

2.3.3　Tick lines

A tick-lines chart shows the ask and bid prices as separate lines, updating whenever either the ask or bid price changes (i.e. each new tick).

2.3.4　Renko, Range, Kagi, and Point & Figure charts

Renko, Range, Kagi, and Point & Figure charts are price-based rather than time-based, and draw new bars based on price movement instead of time elapsing. All of them use a "block" size, which you set using the Inputs tab. This defines the minimum price movement which is required before the chart changes. It can be set either to a price amount (e.g. 0.0010), or a value in pips (e.g. 10), or to a percentage change (not applicable to P&F).

- Range charts: a new bar is drawn each time that the price rises or falls by the block size. The Mini Chart indicator also offers stacked range charts, where consecutive bars in the same direction are combined into a single bar.
- Renko charts: similar to range charts, but the price must reverse by two whole blocks before a new block is drawn in the opposite direction to the current trend. The Mini Chart indicator offers a variant on standard Renko charts which draws the "tails" on each bar, i.e. the movement in each bar against the trend.
- Kagi charts: the chart changes direction when the price reverses by the block size from the previous high/low. Each additional movement in the direction of the current trend extends the Kagi line, and therefore, unlike range or Renko charts, Kagi highs and lows are not aligned to a grid.
- Point and Figure charts: similar to range charts, but traditionally drawn in a different way, with consecutive movements stacked rather than displayed as separate bars, and with a reversal rule where a new bar is not drawn in the opposite direction until the prices reverses by three units.

2.3.4.1 Reversal factor

For Range and P&F charts you can also set the "reversal" amount which is required before the chart changes direction. If left at zero, then Range charts will use a reversal factor of 1 – i.e. the threshold for a new block in the opposite direction is the same as for a continuation – and P&F charts will use the standard P&F reversal factor of 3 – i.e. the price must reverse by 3 units before a new column is drawn on the P&F chart.

2.3.4.2 Base timeframe for Range, Renko, Kagi, and P&F charts

When the Mini Chart indicator loads, it will create historic data for Range, Renko, Kagi, and P&F charts using the price history in the trading platform.

By default this creates the history from M1 data. If you use a large block size (e.g. 1 whole cent, price change of 0.01, on EUR/USD), then there may not be many historic blocks over the period covered by the M1 data in the platform.

To go further back in time you can choose a longer base period such as M30 or H1. The disadvantage of longer timeframes is that the Mini Chart cannot be certain what happened inside each historic bar. It can only "see" the high and low. If a historic bar covers a price range such as 0.04, and the block size is 0.01, then the Mini Chart does not know, and has to guess, whether the price went up/down in four simple sequential blocks rather than bouncing up and down within the bar, creating several historic blocks.

2.4   Data transformations

The Mini Chart indicator provides popular transformations of the bar data:

- Heikin Ashi
- Three Line Break
- 2-bar average (i.e. each bar is the average of itself and the previous bar)
- 3-bar average

(Transformations are different to chart types such as Kagi or Renko. With a chart type such as Kagi, there is a price-based rule for when/how to draw each new bar, i.e. a rule which is not simply based on time such as H1 or S30. A transformation such as Heikin Ashi takes bar data such as H1 and applies averaging to it. A Heikin Ashi chart has an underlying timeframe, such as H1. A Kagi or Renko chart does not.)

2.5   Drawing style and colours

You can use the Inputs tab to change the style and colours. The Mini Chart offers a range of drawing styles:

- Candles
- Bars (i.e. a central high-low bar with open and close horizontal markers)
- A line showing each close price
- Close points (i.e. dots at each close price, without a line)
- Lines showing the high and low (but not the close)
- A filled channel showing the high and low, with a line showing the close inside the channel
- No drawing – the bars themselves are not drawn, and only indicators are displayed.

Please note: the drawing style is fixed for tick-lines, Kagi, and P&F charts. Changing the style setting has no effect for these types of chart.

2.6   Minimum, maximum, and grid

2.6.1   Maximum and minimum

By default the Mini Chart will automatically select a high and low range to draw based on the bars which are visible (as MT4 itself does). You can use the Inputs tab to tell the Mini Chart to include any indicator values in the high-low. Otherwise, as in MT4, indicator values may be invisible off the top or bottom end of the chart.

You can also set a fixed maximum and/or minimum price for the chart using the Inputs tab.

2.6.2   Horizontal grid

By default the Mini Chart will automatically draw horizontal grid lines. It will choose the nearest power of 10 (e.g. 0.01, 0.001) which does not create an excessive number of visible lines.

You can set a specific grid size using the Inputs tab, setting the parameter to a price amount such as 0.0020, or you can turn off the grid entirely by setting the parameter to zero.

2.6.3   Vertical grid

By default the Mini Chart will automatically draw vertical grid lines based on the chart timeframe/type which you select. You can change the vertical grid lines, or turn them off, using the Inputs tab.

Please note: for chart types such as Renko and Kagi which are based on price movement rather than time, the vertical grid lines will not be evenly spaced.

2.7   Size and position

You can use the Inputs tab to set the indicator's initial position within the MT4 chart. You can define a position in terms of pixels (replacing the default values of -1) from a specific corner of the chart.

The Mini Chart is both draggable and resizable, in the usual way by pressing and holding the mouse over the sub-window's title bar or border. By default the indicator will then choose a corner of the chart to "dock" itself to. For example, if you drag the sub-window close to the bottom-right corner, the indicator will then dock itself to that corner of the chart. If you resize the chart window, the indicator will automatically re-position itself so that it maintains the distance from the edge(s) of the chart. You can manually override the docking using the setting on the Inputs tab.

You can also change the following settings for the chart:

- The zoom level, i.e. how large each candle/bar is
- The amount of space (in pixels) at the top and bottom of the chart

- The amount of space (in pixels) at the right of the chart (i.e. equivalent to the chart-shift on MT4's own chart)
- The height of the bar which shows the time and price corresponding to the position of the mouse. You can turn off this information bar entirely by setting the height to zero.

2.8   Indicators

You cannot add MT4 indicators (e.g. moving averages) to a Mini Chart, but you can use the Inputs tab to configure the display of popular indicator calculations. This includes drawing lines at fixed prices, i.e. the equivalent of drawing a horizontal line on a main MT4 chart.

You can define up to 10 indicator calculations. For each one, you can choose a drawing style and a colour.

For some indicators, you can change the parameters and/or or the type of price – close, high, low etc – which is used in the indicator calculation. In other words, the meaning of the Parameter A and Parameter B values on the Inputs tab depends on the type of indicator, as described below.

2.8.1   Moving averages (SMA, EMA, SMMA, LWMA)

The Parameter A value defines the period for the moving average calculation. You can also choose which price to apply the average to. Parameter B is unused.

2.8.2   Bollinger® bands

The Parameter A value defines the period for the average (the mid-point of the bands). The parameter B value defines the number of deviations for the bands, from the mid-point. You can also choose which type of price to use in the calculation.

2.8.3   Envelopes (SMA and EMA)

The Parameter A value defines the period for the moving average (the mid-point of the envelope bands). The Parameter B value defines the % for the envelopes, e.g. 0.1% from the moving average mid-point. You can also choose which type of price to use in the calculation

2.8.4   D1 high and low

Draws horizontal lines at the D1 high and low. The Parameter A value defines the offset, and the Parameter B value defines the number of D1 bars to include (defaulting to 1 if left at zero).

For example, Parameter A = 1 and Parameter B = 3 means "the high and low of the 3 D1 bars starting yesterday".

2.8.5   H1 high and low

Same as the <u>D1 high and low</u>, with the same meaning for the Parameter A and Parameter B values, but using H1 data rather than D1 data.

2.8.6   Linear regression

Draws a line showing the linear regression of the last N bars, defined by the Parameter A value. You can choose which type of price is used in the calculation (e.g. linear regression of the highs rather than the closes). The Parameter B value is unused.

2.8.7   Fixed price

Draws a horizontal line at the fixed price specified by Parameter A, i.e. the equivalent of manually drawing a horizontal line on an MT4 chart. You can also use the Parameter B value to draw a second line at a different price.

2.8.8   Current bid price

Draws a horizontal line at the current bid price (i.e. constantly changing). The Parameter A and B values and the price-type are not used.