Charting User Guide

Technical analysis focuses on market action — specifically, volume and price. Technical analysis is only one approach to analyzing stocks. When considering which stocks to buy or sell, you should use the approach that you're most comfortable with. As with all your investments, you must make your own determination as to whether an investment in any particular security or securities is right for you based on your investment objectives, risk tolerance, and financial situation. Past performance is no guarantee of future results.

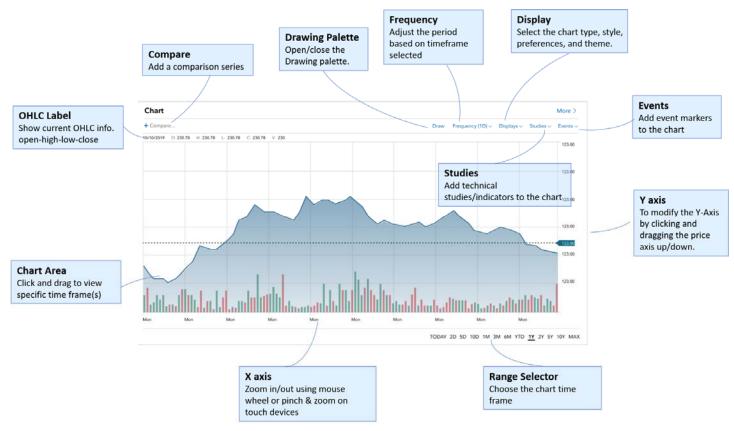
Any screenshots, charts, or company trading symbols mentioned are provided for illustrative purposes only and should not be considered an offer to sell, a solicitation of an offer to buy, or a recommendation for the security.

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provide a side-by-side look at different instruments. Comparison series are plotted over the same time frame, using the same periodicity as the main series, but are displayed in a different style or color. Your chart can include numerous comparisons.

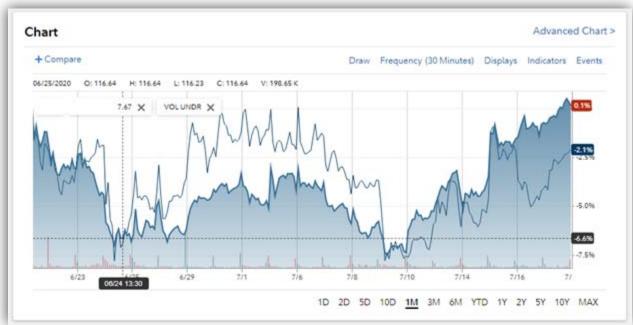
Comparisons

Note: Comparisons change the chart y-axis values to percentages. The time series plots and the y-axis are adjusted so that all plots start at 0% (at the left side of the chart). Succeeding data is plotted as the relative change from 0%. When all comparison series are removed from the chart, the y-axis reverts to its normal type of values.

Comparison series are plots of instruments in addition to the main chart series. Comparisons

To compare an instrument to the main chart series:

- 1. Select the compare icon (upper left corner of the chart)
- 2. Enter the instrument's symbol in the symbol input:



A plot for the instrument is drawn on the chart (blue line):

Figure: Comparison series overlaid on chart

4

+ Compare

lease input the symbol and press Enter

You can see information about the comparison in the upper left corner of the chart:

Chart

+ Compar	e				
06/25/2020	O: 117.15	H: 117.23	L: 116.63	C: 116.65	V: 192.19 K
	17.	.63 🗙 🕚	OLUNDR)	×	
1				Λ Λ	. / /

To remove the comparison, select the \mathbf{X} next to the instrument's current price.

Draw Drawing palette

The drawing palette contains a wide variety of drawing tools along with a collection of controls used to configure the palette and manage drawings. (See <u>Drawing palette controls</u> and <u>Drawing tools</u>.)

Select **draw** in the navigation bar to open the drawing palette.

Create a drawing

To draw on a chart or study:

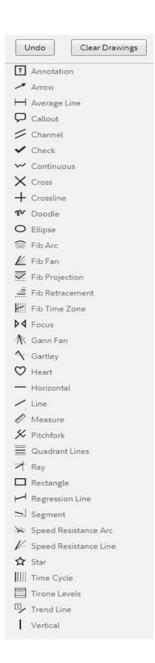
1. Select a tool from the palette.

On desktop browsers, crosshairs appear, indicating the position of the tool.

2. Click or press to begin the drawing. (Release the mouse button or lift your finger or stylus from the screen.)

On touch devices, crosshairs appear, indicating the starting point of the drawing; the crosshairs are positioned slightly up and to the left of your finger or stylus.

- 3. Move the mouse or your finger or stylus to the endpoint of the drawing.
- 4. Click or press to end the drawing.



Drawing modes

Drawing is accomplished in one of two ways (or modes) depending on your system's configuration:

- **Default mode** As described above in "Create a drawing," the default drawing mode uses clicks or presses to begin and end the drawing process. Default mode gives you precise control over the placement and size of drawings. In addition, default mode enables the creation of complex drawings, such as channels, that are defined with more than two clicks or presses.
- **Drag to draw** Drag to draw mode enables you to create drawings by clicking or pressing, holding, and dragging; like drawing in most paint programs. Drag to draw is familiar to most users but lacks the precision of default mode and does not support multiple-point drawings.

Manage drawings

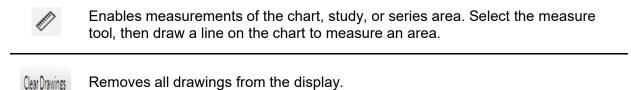
Drawings can be repositioned and resized by drag-and-drop interactions. Drag and drop a drawing to move it to another location. Drag the start and end points of a drawing to change the drawing's shape and size. To reveal the start and end points of a drawing, hover your mouse over the drawing; on touch devices, tap the drawing.

Note: Drawings scale across different periodicities.

To edit or delete a drawing:

On desktop browsers

• Delete Drawing — Right click to remove the drawing from the display



Undo Restores all drawing settings to their default values.

Drawing tools

Text

Т	Annotation
Q	Callout
Ţ∕	Trend Line

Statistics

H	Average Line
	Average line drawings can be applied to any rendered series or study line, not just the primary series.
	To draw an average line using a mouse:
	 Hover over a series or study line (for example, the Jaws of an Alligator study)
	Click the line and release the mouse button to mark the starting point of the average
	3. Move the mouse left or right
	4. Click the mouse to mark the endpoint of the average
	To draw an average line on mobile devices:
	 Tap a series or study line on the screen to mark the starting point of the average
	2. Tap elsewhere on the series or study line to mark the endpoint of the average
	Quadrant Lines
I	Regression Line (NEW v7.1 Option to show 1st, 2nd and 3rd standard deviation lines on the regression drawings)
	Tirone Levels
Technicals	
木	Gann Fan
4 .	Gartley
×	Pitchfork

) Sec	Speed Resistance Arc
V	Speed Resistance Line
	Time Cycle
Lines	
11	Channel
~	Continuous
+	Crossline
ş	Doodle
—	Horizontal Line
/	Line
7	Ray
1	Vertical Line

Fibonacci



Fibonacci Retracement

$\overline{\mathbf{v}}$	Fibonacci Projection
(((Fibonacci Arc
K	Fibonacci Fan
1	Fibonacci Time Zone
1	Segment

Markings

0	Ellipse
	Rectangle
~	Arrow
~	Check
×	Cross
۵ ۹	Focus
\heartsuit	Heart
☆	Star

Crosshairs +

Follow the mouse to show horizontal and vertical lines. Crosshairs enable you to easily identify values on the x and y axes.



Figure: Crosshairs on chart

All \sim

Frequency menu

The amount of time represented by a data point (for example, a candle on a candle chart) is the periodicity of the chart.

Select the chart periodicity from the **Frequency** menu. Periodicity can be minutes, hours, days, weeks, months, or years.

Frequency (Daily)

1 Minute 5 Minutes 10 Minutes 15 Minutes 30 Minutes 1 Hour 4 Hours Daily Frequencies below will change timeframe Weekly Monthly Quarterly Yearly

Display menu

Chart Style

The charting library supports a variety of chart styles and types. Select a style or type to change the presentation of the time series data.

Chart styles are the various ways that a chart can visually represent data; for example, as a candle, line, or mountain graph.

Chart types are charts that display data that has been modified through aggregation or recalculation; for example, Heikin Ashi, Kagi, and point and figure charts.

In some cases, a chart type includes a chart style. For instance, a point and figure chart aggregates data while requiring a specific display style. You can switch between chart styles and types without disturbing the chart state. For example, drawings and studies are maintained as you change chart styles and types.

To customize a chart type:

- 1. Select the gear icon next to the chart type name.
- 2. Enter values in the dialog box that appears. For example, for Kagi charts:

Kagi	\times
Reversal Percentage	
Apply Cancel	

CHART STYLE

Candle	0
Bar	0
Colored Bar	0
Line	0
Vertex Line	0
Step	0
Mountain	0
Baseline	0
Hollow Candle	0
Volume Candle	0
Colored HLC Bar	0
Scatterplot	0
Histogram	0
Heikin Ashi	0
Kagi	00
Line Break	
Renko	•
Range Bars	•
Point & Figure	Q ()

Select the **Apply** button to let the chart determine the setting.

For more information on chart styles and types, see the *Studies* guide.

Chart Preferences

You can set a variety of preferences to display your charts just the way you want them.

CHART PREFERENCES Extended Hours

To set a preference, select the check box next to the preference name.

Extended Hours

The time range of intraday charts is expanded to include pre- and post-session trading for US equities. The pre- and post-sessions are highlighted using background shading. This is particularly useful to capture trading activity during earnings season.



Indicators menu

Indicators (Studies) are technical indicators that you add to charts from the **Indicators** menu. For a complete list of the indicators, see the <u>Indicator List</u>.

To add an indicator to a chart, select the indicator from the **Indicators** menu.

Note: To quickly find an indicator, enter the indicator name in the search field. As you enter the name, the list of indicators is reduced to just those names that include the characters you entered.

INDICATORS	Boll
Bollinger %b	
Bollinger Band	S
Bollinger Band	width

Indicators can overlay charts or appear in panels above or below charts. By default, some indicators appear as overlays; some, in panels.

Overlays (and underlays, such as the Volume Underlay indicator) are indicators that are superimposed on charts.



Figure: Alligator indicator overlaid on chart



Indicators can appear in panels to separate the displays of multiple series.

Figure: ADX, Aroon, and ATR Bands indicators in panels

The vertical size of panels can be changed by dragging the panel top and bottom borders.

Panels include a toolbar that can be used to reposition or delete the panel or modify the indicator by click the tool bar.

ADX (14,14,Y,N) 28.52 18.73 18.48

Secondary panel toolbar controls

Expands the panel and hides any other panels. Or, if the panel has been expanded, returns it to its former size and reveals all hidden panels.

Closes the panel and destroys the indicator.

Indicator legends

A list of the indicators applied to a chart can be included in a menu or overlaid on the chart as a legend. The list of active indicators is contained in the CURRENT INDICATOERS section of the **Indicators** menu,

CURRENT INDICATORS	
ATR Bands	×
Aroon	×
CLEAR ALL	

CURRENT INDICATORS enable you to delete indicators.

In CURRENT INDICATORS. Delete an indicator by selecting the **x** icon next to the indicator name. Delete all indicators by selecting **CLEAR ALL**.

Events

The Events menu enables you to display visual indicators of time-based events such as stock splits, dividend dates, earning reports, and more.

The indicators mark the date and time of an event. You can then select the indicator to see a description of the event.

To display event indicators, select one of the choices in the **CHART EVENTS** section of the menu:

 Dividends — Dividends are represented by a square with a "D". Move your cursor over a dividend square to see the date of the dividend payment and the per share dollar amount.

CHART EVENTS
Dividends
Earnings
Splits
Support and Resistance
Stops 🗌
None

- Earnings Earnings are represented by a square with a "E". Move your cursor over a earning square to see the date of the earning and the per share dollar amount.
- Splits Splits are represented by a square with an "S". Move your cursor over a split circle to see the date and type (e.g., 2 for 1, 3 for 1, 1 for 2, etc.) of the split.
- Support and Resistance Support and Resistance Lines are displayed within the main price pane. These lines are calculated on a daily basis by Recognia, using their proprietary methods based on the security's prior close
- Stops— Stops are also displayed within the main price pane. Stops are also calculated on a daily basis by Recognia, using their proprietary methods based on the security's prior close.
- None Turns off event indicators.

Range Selector

1D 2D 5D 10D 1M 3M 6M YTD 1Y 2Y 5Y 10Y MAX

The range selector (lower right corner of the chart) enables you to select various time periods for the chart — from one day to all of the data available for the instrument.

Each selection automatically sets an appropriate periodicity so that the chart is filled with data. For example, if you select the **1D** time frame, the periodicity is set to 1 Minute; **6M**, Daily; **MAX**, Monthly; and so forth.

Navigation

In general, navigation of the chart is easily done using direct manipulation or using controls provided.

Zooming

The mouse or touchpad is the primary interface for zooming a chart.

Zooming either the x- or y-axis can be accomplished by grabbing either axis with the mouse and moving to the desired zoom level.

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Any screenshots, charts, or company trading symbols mentioned are provided for illustrative purposes only and should not be considered an offer to sell, a solicitation of an offer to buy, or a recommendation for the security.

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