

The **Chart** window offers a full range of features that can be customized to your specifications.

TOOLBAR GUIDE

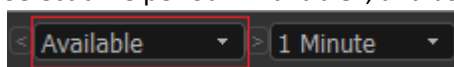


- 1 Symbol Entry** – allows entry of symbol to be displayed
- 2 Symbol Search** – opens symbol search dialog
- 3 Time Period** – allows selection of time period for the chart
- 4 Frequency dropdown** – allows selection of frequency of ticks within time period for the chart
- 5 Frequency icon** – allows selection of additional settings for the chart
- 6 Go** – enters symbol and/or time period / frequency
- 7 Add** – add a new panel or add a symbol to existing panel
- 8 Compare** – allows definition of an additional symbol chart to compare to primary symbol chart
- 9 Change** – allows changing of the selected symbol
- 10 Delete** – allows deletion of the selected symbol, study or line
- 11 Views** – allows the current view to be saved or the selection of a previously defined view
- 12 Studies** – allows the selection of a study to add to chart based on the currently selected symbol or study
- 13 Drawing Toolbar** – allows selection from a range of drawing tools to be used on the chart
- 14 Zoom In / Zoom Out** – zoom in or out on charts time period and frequency
(only available using time period “Available”)
- 15 Expand/Collapse Drawing Toolbar** – switch between drop down menu and toolbar for drawing tools
- 16 Fields** –
- 17 More** – displays menu of actions that can be taken to change the current chart display
- 18 Plot Type** – allows changing of the plot type (Bar, Candlestick, Line, Area, Band, Dot, Level, Histogram, Heikin Ashi, Kagi, Renko and Three Line Break)

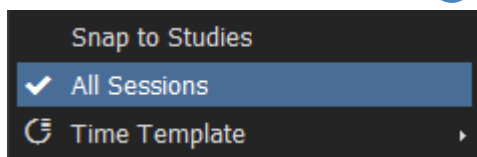
- 19 **Color** – allows changing the color of the selected symbol, study or line from chart
- 20 **Alter** – allows definition of an alternate color for bar plot chart which alternates on break in period (i.e. day, month etc.)
- 21 **Data View** – turns on / off the display of data window in chart
- 22 **Scale** – toggles y-axis scale from absolute to percent values
- 23 **Edit** – Edit an existing custom field
- 24 **Markers** – Allows event markers to be displayed (Split, Last Opinion, Recognia, Dividend, Earnings, 52 Week High/Low, Positions, Options, Orders and Executions)
- 25 **Remove All Analytics** – Clears all studies and drawing objects from the chart view
- 26 **Buy/Sell** – Prefills trade window with selected symbol and action

TIME PERIOD AND FREQUENCY

- Select time period from time period **3** drop down in toolbar
- Select frequency of quotes within time period from frequency drop down **4** in tool bar
- To view **extended hours quotes**
 - Select time period **“Available”**, and use any frequency of 60 minutes or less



- Right click the chart or select **More** **17** and select **All Sessions**

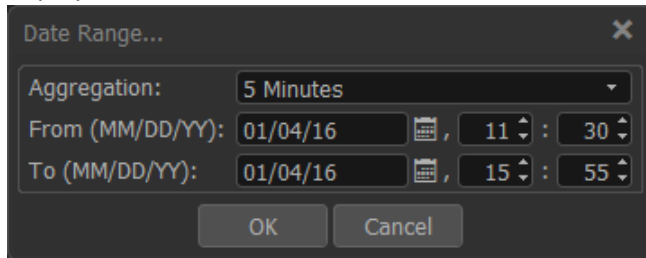


- To turn off extended hours quotes, right click the chart or select **More**, and unselect **All Sessions**
- To shade extended hours session in different colors, right click and select **Display Properties**, then under **General** check the box **Extended Hours**, and select a color for each session.

Additional time period and frequency options:

- Select the frequency icon **5** to reveal additional frequency options.
- Tick, Second, Volume, Price change and Range only apply to data points drawn after the section is made.
 - Tick: Draws a chart data point for every trade (1T), or every 10 trades (10T), etc.
 - Second: Draws a chart data point for every second (1S), every 5 seconds (5S), etc.
 - Minute: Draws a chart data point for every minute (1), every 5 minutes (5), etc.
 - Volume: Draws a chart data point for every 1000 shares/contracts traded (1000V), or for every 5000 shares/contracts traded (5000V), etc. (only applies to trades occurring after symbol and frequency is selected)
 - Price change: Draws a chart data point for every 2 price changes (2P), or for every 3 price changes (3P), etc. (only applies to trades occurring after symbol and frequency is selected)

- Range: Draws a new chart data point each time a trade occurs above or below the specified range (1R = \$1)
- Daily: Draws a chart data point for each trading day
- Weekly: Draws a chart data point for each week
- Monthly: Draws a chart data point for each month
- Right click the chart or select the **More** icon and select **Date Range** to select a specific date/time range to be displayed



Right click the chart or select the **More** icon and select **Time Templates** to choose to display data only from specific times of a day

- With frequency set to **“Available”**, the following additional options will be available
 - **Zoom in/Zoom out** buttons **14** – select Zoom in and highlight an area of the chart to examine. Select Zoom out and click the chart to zoom back out
 - Drag body of chart or use left/right arrow keys or mouse scroll wheel with pointer in main pane to scroll the chart horizontally
 - Drag time scale or Ctrl + left/right arrow keys or mouse scroll wheel with pointer over time scale to compress/expand chart
- You can also type in specific values for time period and frequency that are not available on the drop down menus, using the following format
 - Time period
 - ❖ number+d = days e.g. 2d
 - ❖ number+y = years e.g. 3y
 - ❖ DD.MM.YYY HH:MM-DD.MM.YYY HH:MM (time is optional) e.g. 01.04.2016 09:30-01.04.2016 16:00
 - Frequency
 - ❖ #T = Tick (replace # with number of ticks to include in each data point)
 - ❖ #S = Seconds (replace # with number of seconds to include in each data point)
 - ❖ number only = minutes e.g. 195
 - ❖ D = Daily
 - ❖ W = Weekly
 - ❖ M = Monthly
 - ❖ #V = Volume (replace # with volume of shares/contracts to include in each data point)
 - ❖ #R = Range (replace # with price range in dollars to include in each data point)
 - ❖ For Tick, Seconds, Volume and Range, frequency will only apply to data points plotted after selection is entered

Example: Period: 4 days / Frequency 195 minutes

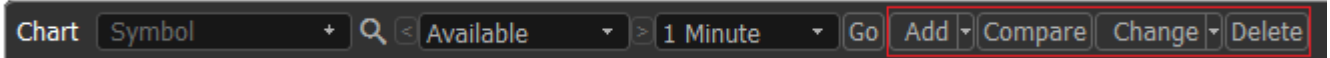


A dark-themed control panel with two dropdown menus. The first dropdown shows '< 4d' and the second shows '> 195'. Both dropdowns have small triangles on their right sides.

Permissible period / frequency combinations:

Period	Frequency
1 – 29 days	1 – 1440 minutes
30 – 59 days	15 – 1440 minutes
60 – 90 days	60 – 1440 minutes
14 – 179 days	Daily
180 – 365 days	Daily or Monthly
1 – 10 years	Daily or Monthly
11 – 40 years	Daily or Monthly

COMPARING SYMBOLS



A dark-themed control panel for a chart. It includes a 'Chart' label, a 'Symbol' input field with a search icon, a dropdown menu set to 'Available', a '1 Minute' dropdown, a 'Go' button, and four buttons: 'Add', 'Compare', 'Change', and 'Delete'. The 'Add', 'Compare', 'Change', and 'Delete' buttons are highlighted with a red border.

The chart window will allow you to overlay multiple symbols in a single chart window. This is done via the **Add**, **Compare** and **Change** buttons. In the symbol entry box, enter the symbol to be overlaid, and click the **Add** button to add the symbol to a new pane. The pulldown menu on the Add button provides options to overlay the symbol in an existing pane with either its own scale, or the existing scale. The **Compare** button adds the symbol as an overlay in Pane #1.

Alternatively, you can enter multiple symbols separated by a comma (,) which will default to a percentage based scale.

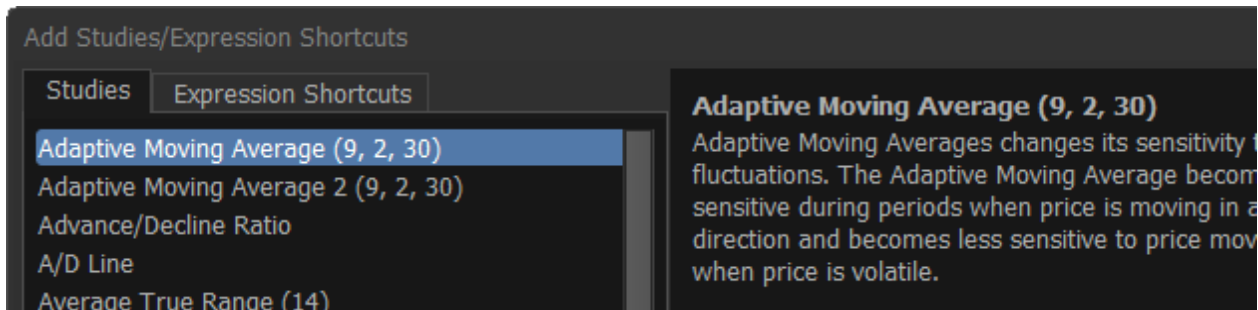
To change an existing symbol in a chart with multiple symbols, enter your new symbol in the symbol entry box and use the **Change** menu to select an existing symbol to replace.

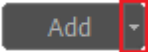
To delete a symbol from a chart with multiple symbols, click the symbol from the legend or its plot and use the **Delete** button.

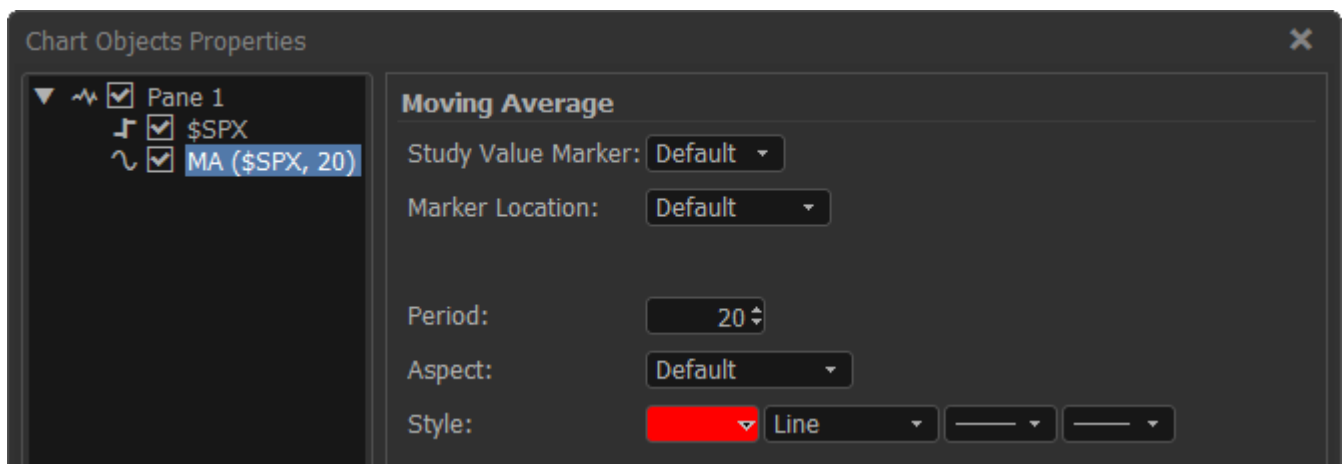
TECHNICAL STUDIES

Reference the [study list](#) for available studies and usage details.

- To add a new study
 - Select the symbol or study from the chart/pane header or plot display that the study will be applied to
 - Select the **Studies** button **12** from the toolbar to open the studies dialog. The study dialog displays the available studies along with a brief description of the study.



- Select a study from the list
 - Select **Add** button to add study to default location, or use the dropdown arrow on the add button  to select study location.
- Customize an existing study
 - Right click on study and select **Study Properties**, or double click on the study to open the properties dialog



- Edit the study parameters and select **OK** (applies changes and closes dialog), **Apply** (applies changes and leaves dialog open) or **Cancel** (closes dialog with no changes)
 - ❖ Note that the **Period** corresponds to the currently defined frequency of the chart e.g. daily, minutes.
- Study value markers can be customized between Default, Value, Arrow and None. Markers can be positioned to the left or right of the price scale. These are useful settings when dealing with multiple studies and/or symbols on a chart.

To choose default settings, as well as define settings for symbol value markers, right click on the chart or select **More > Display Properties > Data Info**. Settings can be customized for Symbols and Studies independently.

- Delete an existing study
 - Select study in the chart legend or plot display
 - Right click on study > and click **Remove**, or click **Delete** ¹⁰ from the toolbar
- Delete all studies
 - Right click on Chart or select **More > Remove all Analytics** or select remove all analytics icon ²⁵
 - Drawing objects will also be removed

EXPRESSION SHORTCUTS

The chart window can display mathematical expressions. An expression uses one or more symbols, numerical constants, and simple mathematical operators (+, -, *, /). Expressions can also use the currently displayed symbol as a variable. Expressions can be entered into the symbol entry box, or managed using **Expression Shortcuts**.

Creating and managing expression shortcuts

From **Tools > Expression Shortcuts**, use the **Add** button to add a new expression. Expressions can also be edited, copied, deleted, exported and imported.

Name (required):

Choose a name for your expression.

Expression (required):

Expressions must begin with an equal sign (=)

Symbols that contain spaces or other special characters in their symbol, must be enclosed in single quote marks ('). You may use the mathematical operators +, -, *, /, as well as parentheses. Standard mathematical order of operations applies.

1. Parentheses
2. Multiplication/Division
3. Addition/Subtraction

When using a symbol, you can specify the price field that is used (if omitted, Last is Default). This is done by using the dot (.) operator. Valid fields are:

- Open
- High
- Low
- Last
- Volume
- Ask (Tick frequency only)
- Bid (Tick frequency only)

Use the variable **#IN** within the expression to represent the currently displayed symbol

Examples:

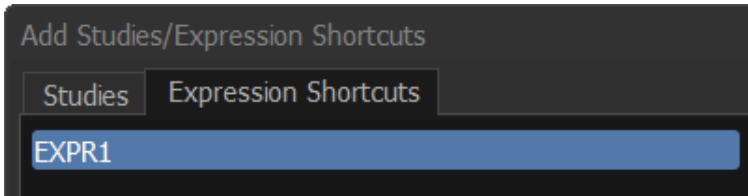
=ABC / XYZ	Plots ABC divided by XYZ
=‘ABC/PL’ – ABC	Plots ABC/PL – ABC
=(#IN.HIGH + #IN.LOW + #IN.CLOSE) /3	Plots average of high, low and close for current symbol
=#IN.LOW / #IN.HIGH	Plots value of low – high of current symbol

Category, Description and Notes (optional):

You can type in a category, description and/or notes for your expression.

Add an expression Shortcut to a Study

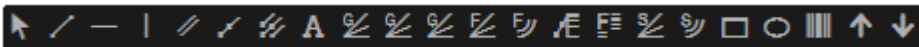
To add an expression Shortcut to a Chart, go to the Studies window and choose the Expression Shortcuts tab:



Highlight the desired expression and use the **Add** button at the bottom of the screen to add the expression to the chart. The expression appears as a new pane on the chart.

Expression shortcuts without the #IN variable can also be added to various other windows that accept symbols e.g. Detailed Quotes and Watchlists using the expression name.

DRAWING TOOLS



Choose chart drawing tools from the Drawing Toolbar, displayed above in expanded format (select **15** to toggle display format). Reference [drawing tools help](#) for available drawing tools and usage.

HOLDINGS AND ORDERS

Select **Markers** to control chart indicators for the following:

- Positions – line with marker representing the quantity and unrealized gain/loss for a held position
- Orders – line with marker representing quantity and order type for any open Stop, Limit or Stop Limit orders
- Options – display line(s) at strike price with marker representing quantity and unrealized gain/loss for option positions of underlying symbol shown in chart
- Executions – marker representing execution of an order for the security

Detailed settings can be found from right click menu > **Display Properties** > **Trading**


TRADING

The Buy and Sell buttons will pre-populate the trade ticket with the selected symbol and action. Additional defaults for order type, duration and quantity can be chosen from the trade window – right click in the trade window and select trade defaults and properties.


The following additional quick trade entry points are available from chart display:

- Right click on data point above current price for an Equity Buy Stop Quote or Sell Limit order
- Right click on data point above current price for an Option Buy to Open Stop Quote, Buy to Close Stop Quote, Sell to Open Limit or Sell to Close Limit order
- Right click on data point below current price for an Equity Buy Limit or Sell Stop Quote order
- Right click on data point below current price for an Option Buy to Open Limit, Buy to Close Limit, Sell to Open Stop Quote or Sell to Close Stop Quote order
- Change an open order
 1. Select an open order marker located to the left, and hold down mouse button
 2. Drag marker up or down on chart to desired new price
 3. Drop marker and you will be prompted to continue or cancel change request. Continue will open up trade ticket in change mode with the new price. Click Preview Order followed by Place Order to submit the change.


ADDITIONAL FEATURES


- **Cursor tracking** (right-click on chart or select **More** > **Tracking**)
 - Bar tracking: display a vertical line that moves over the chart as you drag/click your mouse pointer
 - Cross tracking: display a crossbar that moves over the chart as you drag/click your mouse pointer
 - No tracking: Cursor tracking will be disabled
 - Global tracking: Cursor tracking will be linked to all active chart windows
 - Sticky tracking: Cursor tracking will not move with mouse pointer (click chart to change position)
- **Data view** – display charts point data in a moveable data box
 - Right click on the chart or select **More** > **Data View**, or select the Data View icon  from the toolbar to turn on or off
 - You can adjust color and transparency of data view from Right Click / **More** icon > **Display Properties** > **Data View**
- **Snap / Snap to Studies**
 - By default, trendlines (for example, the line option in drawing tools) snap to bar highs and lows or to studies when trendlines are added to a chart. To turn this function off, right click chart or select **More** > and uncheck the **Snap / Snap to Studies** option


- **Gapless Intraday charts**
 - Eliminates empty spaces between bars/candlesticks/dots caused by absence of trading during those times (affects intra-day charts only)
- **Price Scale** (right-click on chart or select **More > Price Scale**)
 - Auto scale: selects the appropriate scale based on the range of price data being displayed
 - Percentage scale: display the scale as a percentage with the 0 line being placed at the price level at the far left side of the chart
 - Logarithmic scale: divides the chart logarithmic scale (i.e. 1, 10, 100, 1000) which can aid visualization when the chart covers a large range of values
- **Chart Data Table**
 - Provides a history of prices and study values in tabulated format
 - Right click on chart or select **More > Chart Data table**
 - Data can be exported to CSV
- **Plot types** (right-click on chart or select **More > Plot Type** , or select plot type icon 18)
 - Bar
 - Candlestick
 - Candlesticks may not be visible with default settings with lower screen resolutions. To improve candlestick visibility, reduce time period, or increase frequency, or adjust candlestick outline color from plot properties.
 - Line
 - Area
 - Band
 - Dot
 - Level
 - Histogram
 - Heikin Ashi
 - Renko
 - Kagi
 - 3 line break
 - Right click on plot and select **Plot Properties**, or double click on plot to adjust properties of plot
 - ❖ Settings are available to modify colors, size, shape and outline depending on plot type
 - ❖ Up/Down based on Previous Close (Bar/Candlestick only) – check to have up/down color for bar/candlestick be based on change from close of previous bar/candlestick. When unchecked (default) up/down color is based on change from open to close of current bar/candlestick.
- **News**
 - Right click on chart and select **View News** to view news for that day
- **Preferences**
 - Select the **Views** icon 11 and Save Current View As to save current settings for future use
 - The **Views** icon also allows previously saved settings to be applied to the existing chart
 - Right click chart or select **More > Defaults > Save Chart Properties as Default** to make current settings default for new charts
- **Tabs**
 - You can have up to 10 tabs
 - To turn off tabbed display, **Tools > Preferences > Appearance > Select “Hide if single tab”**

- To rename tabs, right click the tab and select **Rename Tab**
- **Markers**
 - Click the **Markers Icon**  to turn on and off markers denoting significant events
 - Markers are available for Splits, Last Opinion, Recognia Bearish Events, Recognia Bullish Events, Dividend (ex-date), Earnings announcement date, 52 week high, and 52 week low, and Lots.
 - Note that Lot markers only show currently open lots

WINDOW LINKING


Select the **right** linking icon  to adjust window linking settings for security symbols

- With “Link to All” enabled, window will receive symbols selected from Snap Quotes, Watchlist, Holdings and other windows set to broadcast symbols (default)
 - Symbols do not feed to none visible tabs by default. To change this behavior, click the linking icon  at the lower right of the chart.
- With “Symbol Broadcast Source” enabled, window will send entered symbols to other symbol based windows
- Colors: If selected, window will only send/receive symbols from windows set to the same color or link to all in link settings
- Portfolio Link: Use in conjunction with Portfolio Analysis window. When Portfolio Link is enabled, the chart window will display the historical value for any workspace or linked watchlist with entry dates/prices defined that is selected from the Portfolio Analysis window.

Select the **left** linking icon  to link or unlink account based information such as positions and orders with the main account selector.

WINDOW OPTIONS

Select the options icon  to adjust window options

- **New** - Creates a new window. Select the window type, then select the position of the new window, or choose “In this window” to replace existing window with the new window.
- **Show Window Title** – Un-selecting this option hides the window description. Re-check to display window description.
- **Maximize/Restore** – Only displayed if window does not fill entire page. Maximize expands the window to fill the current page. Restore will set back to original size.
- **Show Titlebar** - Un-selecting this option hides the title bar that is displayed at the upper left. To show the title bar again, move cursor up to the top of the window until the cursor pointer turns to a hand, then right click and re-check Show Titlebar, or from main menu select View > Show Title Bars (this will restore all hidden title bars)
- **Show Titlebar description** – Display custom description as defined using Customize Titlebar Description
- **Customize Titlebar Description...** – Replaces default description and titlebar controls with a customizable description. For symbol specific windows, use #sym to insert currently selected symbol into custom description. Click anywhere on the titlebar to restore default description and titlebar controls.
- **Show Footer** - Un-selecting this option hides the footer. Re-select to display the footer again.
- **Copy Out** (displayed when window is docked) – Copies this window as a floating (stand alone) window. This action can also be performed using the Copy Out icon 
- **Attach** (displayed when window is un-docked) – Moves a floating (stand alone) window inside the active page
- **Cut Window** - copies the window to the clipboard, and removes the window from the workspace. Once copied, click Edit > Paste Chart to add the window to the workspace using default settings for adding a new window (use View > Preferences > Workspace > Open new window by default to change how new windows are added to the workspace)

- **Copy Window** – copies the window to the clipboard, with all settings. Once copied, click options icon and choose Paste Chart, then choose a position for copy of window. Or click Edit > Paste Chart to add the window to the workspace using default settings for adding a new window
- **Copy Window Image** – copies an image of the window to the clipboard, which can then be pasted into an email, document or image editing application
- **Send Image by E-mail...** - creates new email message using default email client with screenshot of current window attached
- **Take Custom Screenshot** – drag mouse to define an area to copy, then paste into image editor
- **Print** – Prints this window
- **Help** – loads this help file
- **Display Properties**
 - Text & Colors – font setting for display elements and symbol watermark settings
 - ❖ Includes Alternate Background Color setting which will separate market sessions using an alternate color as defined below:

For time periods set to 1, 2, 3, 5, 10, 14, 20, 30 or 50 days: alternate colors will be daily. For time periods set to 100, 120, 150, 180 days, or 1, 2, 3, or 5 years: alternate colors will be monthly. For time periods set to 10, 20, or 25 years: alternate colors will be yearly.

With time period set to Available, if frequency is 1, 5, 10, 15, 30 minutes: alternate colors will be daily. If frequency is Daily: alternate colors will be monthly. If frequency is Weekly or Monthly: alternate colors will be yearly.
 - Plot Colors – define default chart element colors
 - Data View – define display settings of data view
 - Legend – control display of chart legend
 - Data Info – define display of study/price value markers and format of chart markers
 - Gridlines – display and color of gridlines
 - ❖ Includes option to separate market sessions using vertical lines. Rules follow same pattern as alternate background color
 - Formatting – define precision of displayed values
 - Defaults – define chart display defaults on initial load
 - Trading – controls display of holdings and orders
- **Empty** - (displayed when window is docked) – removes the window and leaves an empty space in which a new window can be added
- **Close** – removes the window. Any remaining windows will be adjusted to fill empty space

Options involve risk and are not suitable for all investors. Certain requirements must be met to trade options. Before engaging in the purchase or sale of options, investors should understand the nature of and extent of their rights and obligations and be aware of the risks involved in investing with options. Prior to buying or selling an option, clients must receive the options disclosure document [“Characteristics and Risks of Standardized Options.”](#) Call the Investment Center at 1.877.653.4732 for a copy. A separate client agreement is needed. Multi-leg option orders are charged one base commission per order, plus a per contract charge.

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