[6000] Technical Chart

1. Overview of Screen

→Chart Type/Technical Indicator/Signal Search/Strength and Weakness/System Trading' menus are arranged on the left side of the chart to increase accessibility of different menus.

→Overall chart graphics have been improved, minimizing distortion of indicators from zooming. This allows for more precise chart analysis.

→Numerical value inquiry window and mini-quote are provided to view prices on the chart.

→This chart was developed as a chart for system trading, and display of signal, strength and weakness can be set freely. Therefore, various functions other than trading can be used on the chart without having to use system trading.

→Strong automatic analyses such as 'automatic trend line, automatic pattern analysis, candle pattern analysis and price change line analysis' are supported.

→The user can select between 'change stock/add stock' modes, viewing charts for multiple stocks at the same time on a single chart.

→'Automatic stock view' function is included, allowing the user to easily view all desired stocks in short time.


※ Among supplementary indicators on the chart, volume owned by institutions is a relative value based on the base date (600 days ago) because absolute value of stock volume owned by institutions is unknown. This may

result in a negative value.
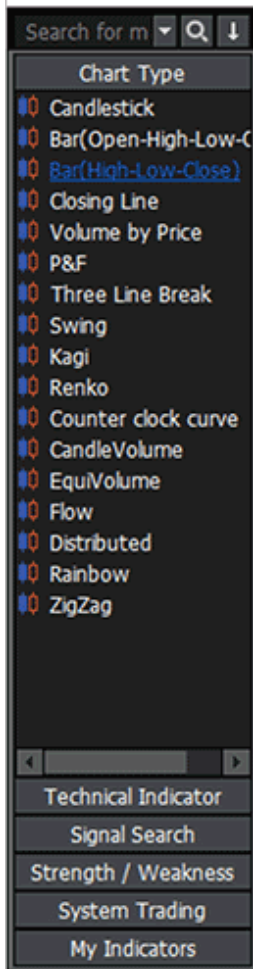

2. Details of Screen

[6000] Technical Chart screen is divided into 6 parts including 'Top Menu and Basic Quote, Left Menu, Mini-Quote, Bottom Menu, Data Table, and Chart Toolbar'.
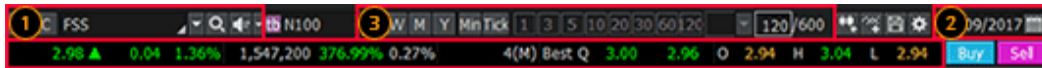
1 Top Menu and Basic Quote

The top menu is provided to select the stock to be viewed, set period of view, and select day/week/month and minute/tick chart. Basic quote shows basic quote information including last, change, percent change,

turnover, and open/high/low.

Chart Type
- Candlestick
- Bar(Open-High-Low-C
- Bar(High-Low-Close)
- Closing Line
- Volume by Price
- P&F
- Three Line Break
- Swing
- Kagi
- Renko
- Counter clock curve
- CandleVolume
- EquiVolume
- Flow
- Distributed
- Rainbow
- ZigZag

Technical Indicator
Signal Search
Strength / Weakness
System Trading
My Indicators

The left menu includes 'Chart Type, Technical Indicator, Signal Search, Strength/Weakness, System Trading'. Click an item from each menu to be applied to the chart immediately. Users who are not familiar with the chart can easily use various indicators and trends on the chart.

❶ Chart Type: Various analysis charts including common candlestick type are available.

❷ Technical Indicator: Various technical indicators generally known as supplementary indicators are available under different categories like 'Trend, Volatility, Momentum, Market Strength'.

❸ Signal Search: Buy/sell signals can be selected using various trading strategies.

❹ Strength/Weakness: Various technical indicators can be used to indicate strength and weakness of an industry or stock.

❺ System Trading: A system trading strategy can be selected and applied to the chart using various technical indicators.

※ Click [🔳] button to hide the left menu.

❶ Click [▼] button to select a target area to be viewed between 'Stock/Industry'. A stock or industry in the selected target area can be selected.

❷ View date and number of data can be set. Number of viewable data is about 900. Click [▨] button on the side to increase the number of view (for 3 months). Number of data to be viewed on the screen can be entered. Also, view date can be selected by clicking [📅] .

❸ Day/week/month/minute/tick chart and chart cycle or time unit can be selected.

2 **Left Menu**
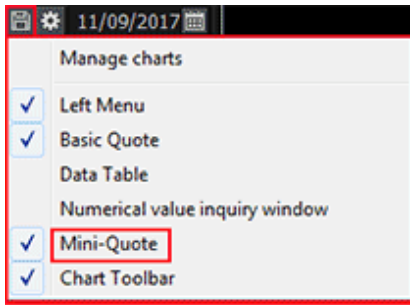
3 **Mini-Quote** Mini-Quote is a function that views 5-step bid/offer of a stock on the chart. To view mini-quote, click ⊟ at the top right corner of the chart and select 'Mini-Quote' or click on the chart.

Scroll bar: Scroll the chart to left and right to view the chart for previous data.

Move left and right to zoom into/zoom out of the chart.

4 **Bottom Menu** A scroll bar to view current and previous charts, chart zooming bar, and various function buttons are available at the bottom of the chart.

『Tool Buttons』

▦ : Tool buttons displayed on the chart can be edited on the 'Edit Chart Tool Buttons' pop-up window.

⚙ : Chart type, color and functions can be set on the 'Chart Settings' pop-up window.

⩔ : An indicator can be selected for display on the 'Add/Change Indicator-Technical Indicator' pop-up window.

⊡ : Quote data for time/date where the mouse cursor is located can be viewed on the 'Data' pop-up window.

⩘ : This is 'Screen Max/Min Setting' button. Click this button to open the 'Screen Max/Min Setting' pop-up window. The user can set value type and maximum and minimum values to be displayed n the chart.

⊼ : Click this button to draw 'Cross/Horizontal Line/Vertical Line' on the chart.

🔍 : This is 'Magnify' button. Click this button and move the mouse cursor on the chart to magnify the area

covered by the mouse cursor.

`─ ＋ A` : Click these buttons to sequentially 'Zoom Out/Zoom In' on the chart. 'Number of Screen Display' and 'View All' can be executed.

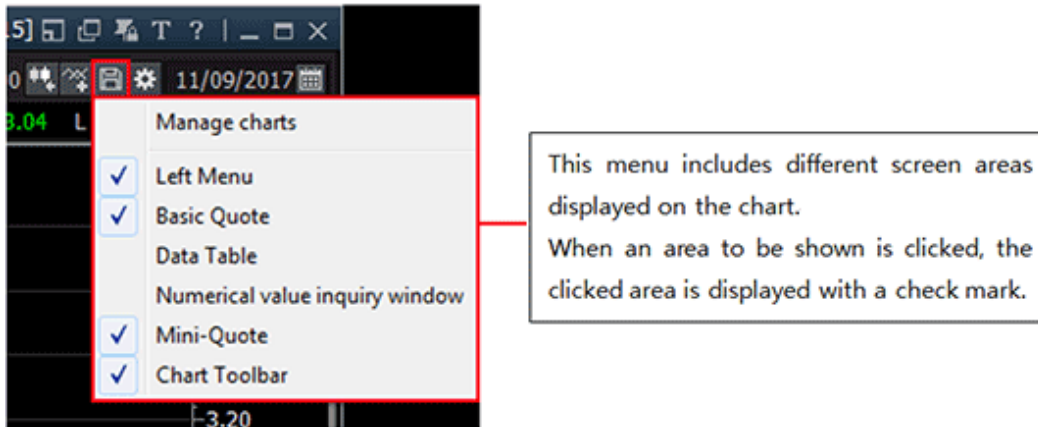**5** **Data Table** Daily data of the stock shown on the chart can be viewed. Available data include quote information such as open/high/low/close and daily trend of technical indicators set for the chart.

This menu includes different screen areas displayed on the chart.
When an area to be shown is clicked, the clicked area is displayed with a check mark.

❶ Click this button after selecting data items to be saved among data of the stock shown to save ''daily/hourly' data.

❷ Click this button to close the data table.

6 **Chart Toolbar**

This is a toolbar that contains tools for chart analysis. Various analysis tools can be used to draw trend lines, insert geometric figures, and view analysis data such as automatic trend line, price pattern and candle pattern.

Click [icon] to open the 'Edit Chart Tools' pop-up window. Icons to be applied to the chart toolbar can be selected for three areas, 'Chart Settings/Analysis Tools/Chart Type'.

[[- Chart Settings -]]

→ [icon] Switch

Click this button to switch from toolbar 1 to toolbar 2.

→ [icon] Edit Chart Tools

When this button is clicked, the toolbar edit window appears.
This window can be used to add, delete and edit toolbar 1 and toolbar 2 as wanted by the user

→ [icon] Return to Basic Chart

When this button is clicked, the chart area is reset to the initial settings.
The initial settings are comprised of price chart, 5 price moving average lines, and volume.

→ [icon] Chart Settings

When this button is clicked, the chart settings appear as a pop-up window.
General properties of the chart can be configured on the chart settings window.

→ [icon] Chart Type Setting

When this button is clicked, the price chart type setting appears as a pop-up window.
Properties of each price chart type can be set.

→ [icon] Add Indicator

When this button is clicked, the indicator list appears as a pop-up window.
Select an indicator from the indicator list to add the indicator at the bottom of the chart area.

→ Add Signal Search

Click this button to open the condition search list pop-up window.

Select a search condition to indicate the date that satisfies the condition with an arrow in the chart area.

→ Add Trading Strategy

Click this button to open the strategy list pop-up window.

Select a strategy from the strategy list to indicate the trading strategy with an arrow in the chart area.

→ Add Strength/Weakness

When this button is clicked, the conditional search list appears as a pop-up window.

Select a condition to search to indicate dates that satisfy the condition in the price chart area using arrows.

→ Add Trading Strategy

When this button is clicked, the strategy list appears as a pop-up window.

Select a strategy from the strategy list to indicate the trading strategy in the price chart area using arrows.

→ Add Bull and Bear

When this button is clicked, the bull and bear list appears as a pop-up window.

Select a type of bull and bear to distinguish between bull and bear in the chart area using background colors.

→ Formula Manager

When this button is clicked, the formula manager appears as a pop-up window. The user can create unique descriptive indicators and functions. User indicators under Descriptive Indicator tab and user functions under User Function tab can be edited, but descriptive indicators and basic functions cannot be edited.

→ Magnifier
When this button is clicked, the mouse pointer is enlarged and displayed as a magnifier.

→ Automatic Trend Line

When this button is clicked, direction of stock price is automatically determined to draw a trend line using wave turns configured by the user.

→ Automatic Pattern Analysis

When this button is clicked, specific patterns are automatically displayed on the chart.
Supported patterns include the following.
- Head and Shoulders Top / Bottom
- Double Top / Bottom
- Symmetrical / Upward / Downward Triangle

→ Candle Pattern Analysis

When this button is clicked, all candle patterns are indicated on the chart using arrows. Place the mouse pointer on an arrow to display date and pattern name in a balloon tip. Double click an arrow to display the candle pattern pop-up window comprised of mini chart and description.

→ Numerical Value View Window

When this button is clicked, the data pop-up window appears. Numerical values are shown on the data window based on movement of the mouse.

→ Text Window

→ Data Table

When this button is clicked, a data grid is generated at the bottom of the chart. All data on the chart appear in the grid, and data can be saved.

→ Base Line Setting

When this button is clicked, the base line setting window appears.
Value entered by the user on the setting window is displayed as a line in the chart area.

→ Variable Optimization

→ Indicator Optimization

→ Time Optimization

[[- Analysis Tools -]]

→ Cancel Trend Line Creation

When a trend line is selected and added in the analysis tools, continuous copying is done. This button changes the mouse cursor performing continuous copying into a mouse pointer.

→ Linear Trend Line

A linear trend line can be added. The linear trend line can find out a trend (up, down, flat) by connecting two low points or two high points.

→ Copy Trend Line

→ Fibonacci Arc

This refers to the Fibonacci arc. Drag from a point selected by the user (high point or low point) and drop at another point (low point or high point) to create an arc trend line. Trend is analyzed based on position of the arc and stock price (resistance, support, breakthrough) from the right side of the center line.

→ Fibonacci Fan Line

This refers to the Fibonacci fan. Drag from a point selected by the user (high point or low point) and drop at another point (low point or high point) to create a Fibonacci line in the form of a right-angled triangle. A line is created on the vertical edge of the right-angled triangle at ratios of 23.6, 38.2, 50 and 61.8. Trend is analyzed based on position of this line and stock price (resistance, support, breakthrough).

→ Fibonacci Time Zone

Progress of time is displayed using the Fibonacci sequence.

→ Fibonacci Retracement

This refers to the Fibonacci retracement. Drag from a point selected by the user (high point or low point) and drop at another point (low point or high point) to create a zone line. This line is used to calculate Fibonacci target price. This function can identify retracement that corresponds to 23.6%, 38.2%, 50% and 61.8% compared to rise (or fall).

→ Automatic Trine Lines

Trine lines can be added.

→ Automatic Quadrant Lines

Quadrant lines can be added.

→ Trine Lines

Trine lines can be added.

→ Quadrant Lines

Quadrant lines can be added.

→ Linear Regression Line

When high point and low point formed on the chart are connected, parallel lines appear inside the connected area. These parallel lines indicate trend inside the selected area.

→ Linear Regression Channel

When high point and low point formed on the chart are connected, three parallel lines in the connected area are displayed as a channel. The top line is the resistance line, the bottom line is the support line, and the

center

→ ⬚ line is the trend line.

Support and Resistance Lines Support and resistance lines are added.

→ ⬚ Cycle Section

A cycle section is added.

→ ⬚ Gann Angle

A Gann angle is added.

→ ⬚ Adjusted Percentile

An adjusted percentile is added.

→ ⬚ Andrew's Pitchfork

This is called Andrew's pitchfork and is comprised of three parallel trend lines. Based on the leftmost point, two points to the right indicate support and resistance for the first point. To use Andrew's pitchfork, the user selects a meaningful low point or high point (which must be in the leftmost position) and then selects second and third points that are on the right side of the first point. Three parallel trend lines are created. If the second point is a low point (high point), the third point must be a high point (low point).

→ ⬚ Elliott Wave Line

Elliott wave line is displayed in the chart area. When the line is double clicked, the user can decide general settings for the wave line.

→ ⬚ Cross Lines

Cross lines are added.

→ ⬚ Delete Trend Line

When this button is clicked, the latest trend line added is deleted one by one.

→ ⬚ Delete All Trend Lines

When this button is clicked, all trend lines are deleted.

→ ⬚ Horizontal Line

A horizontal line is added.

→ ⬚ Vertical Line

A vertical line is added.

→ ⬚ Rectangle

This button is used when stock price is in a box area or by adding a rectangle to emphasize a part.

→ ⬚ Ellipse

An ellipse is added for emphasis.

→ ⬚ Acceleration Resistance Fan Lines

This is a concept that expands the Fibonacci lines. Drag from a point (high point or low point) selected by the user and drop at another point (low point or high point) to create fan lines. The fan lines create right-angled triangles that are symmetric to one another using the line connected by the user at the center (forming a rectangle). Each right-angled triangle can be analyzed in the same way as the Fibonacci lines.

→ ⬚ Acceleration Resistance Arc

This arc is based on a thought that rise or fall of stock price can be adjusted by the Fibonacci ratio.

→ ⬚ Gann fan

A Gann fan is added by selecting a point on the chart, selecting an angle, and dragging and dropping the mouse pointer. This Gann fan was designed based on the relationship between time and price, showing 9 angles. The 9 angles include (1×8(82.5 degrees) 1×4(75 degrees) 1×3(71.25 degrees) 1×2(63.75 degrees) 1×1(45 degrees: Positioned at the center. Point of drag & drop becomes the position of 45 degrees.)

2×1(26.25 degrees) 3×1(18.75 degrees) 4×1(15 degrees) 8×1(7.5 degrees)). Angle above 45 degrees indicates a bull market, and angle below indicates a bear market. They mean support and resistance. Trend is said to have been changed when leaving this angle range.

→ [icon] Textbox

A text is added.

→ [icon] Gann line

A Gann line is added.

→ [icon] Price Change Line

This is a function to count price data of a chart. When the user selects an area on the chart, number of candles, average price and percent change are displayed based on the base candle.

→ [icon] Pencil

When this button is clicked, the user can freely draw a line on the cart.

→ [icon] Insert Figure

When this button is clicked, text and various icons can be added.

[[- Chart Type -]]

→ [icon] Candle Chart

→ [icon] Bar Chart (Open, High, Low, Close)

→ [icon] Bar Chart (High, Low, Close)

→ [icon] Close Line Chart

→ [icon] Area Chart

→ [icon] P&F Chart

→ [icon] Three Line Break

→ [icon] Swing Chart

→ [icon] Kagi Chart

→ [icon] Renko Chart

→ [icon] Counter Clock Curve

→ [icon] Candle Volume Chart

→ [icon] Equi Volume Chart

→ [icon] Flow Chart

→ Distributed Chart

→ Rainbow Chart

→ Zigzag Chart

1 View

View allows the user to select basic parts of the [6000] Technical Chart screen or set additional screen configuration. Screen configuration can be selected by clicking the button at the top right corner of the screen.
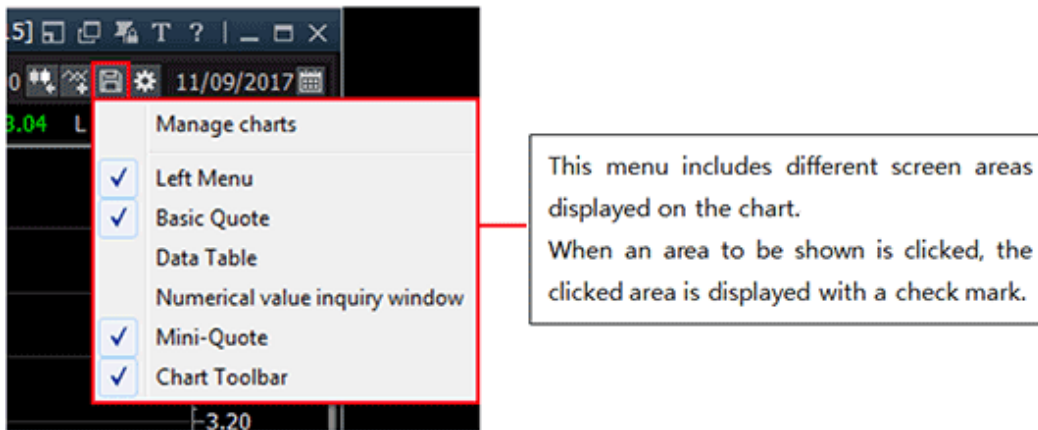
→ **Save/Delete Chart Frame**

Current chart settings can be saved/deleted as a chart frame. If chart settings are saved as a chart frame, the user can view a desired chart simply by loading a saved chart frame without having to configure new chart settings. This chart frame save function allows the user to utilize charts more efficiency by saving and loading different settings appropriate for various stock market situations and stocks.
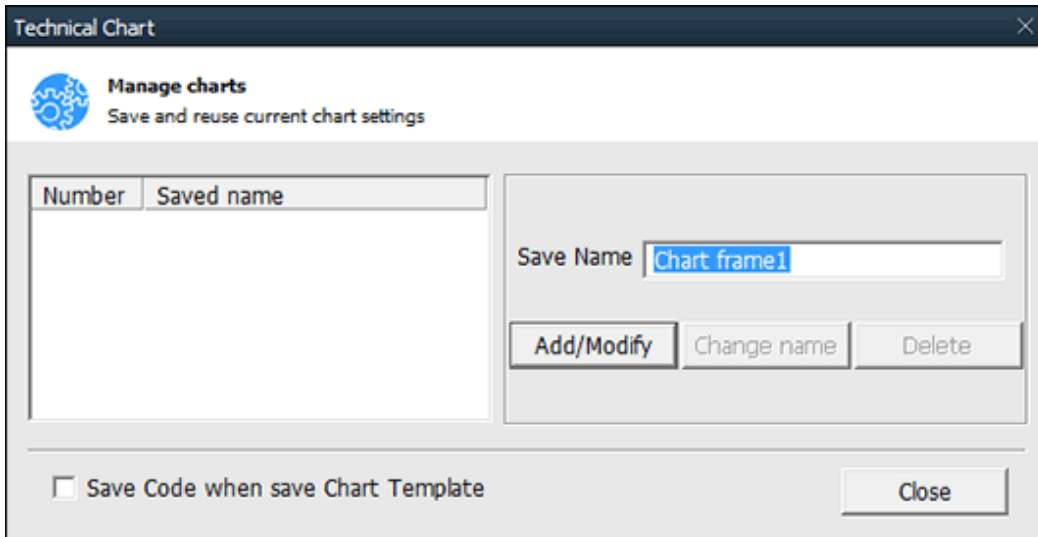
Save: Click to open the 'Chart Frame Save/Delete' pop-up window. Enter name of the chart frame into Save Name field on the pop-up screen and click 'Add' button.

Delete: List of saved chart frames can be viewed at the top of the 'Chart Frame Save/Delete' window. Select chart frames to be deleted from this list and click 'Delete' button.

Change name: To change name of an existing chart frame, select a chart frame to be renamed from the chart frame list at the top. Enter new save name into Save Name field and click 'Change name' button.
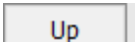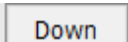
2 **Edit Chart Tool**

The chart toolbar is a toolbar that contains a group of tools used for chart analysis, located on the right side of the chart screen. Click [icon] at the top of the toolbar to open the 'Edit Chart Tool' pop-up window.
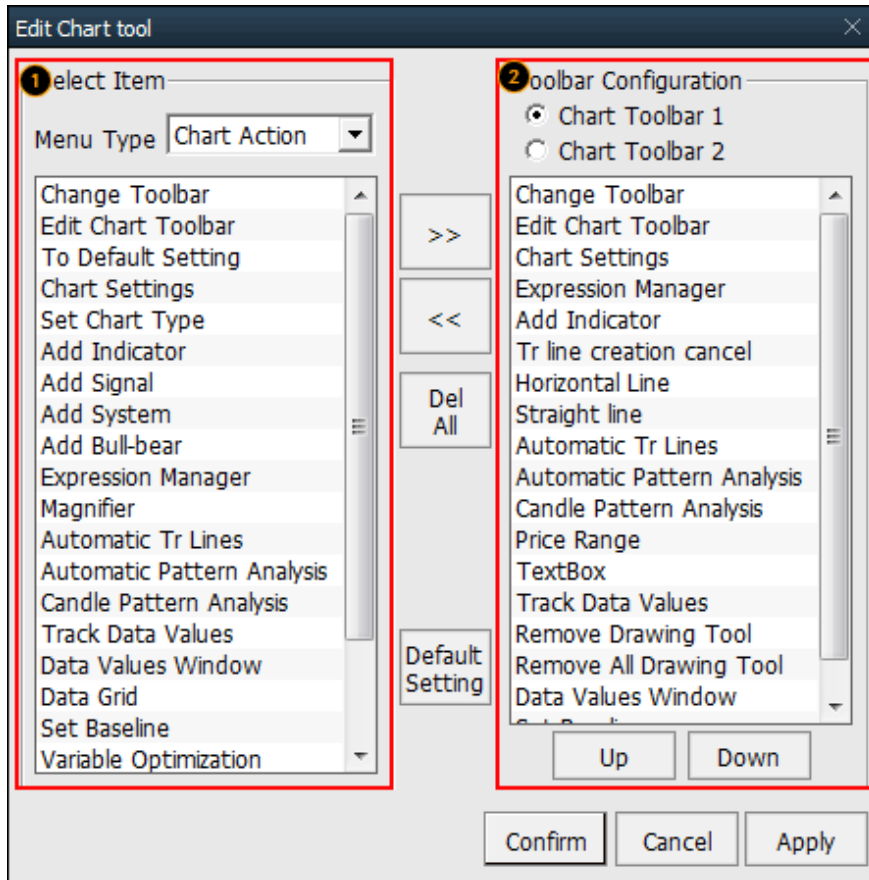
1 Select items to be displayed on the chart toolbar. Items to be displayed on the chart tool bar may include chart analysis tools and be selected by the user among 'Chart Action, Analysis Tool and Chart Type. Select Chart Action, Analysis Tool or Chart Type under 'Menu Type' to view detailed items in the area below. Double click items to be added to the chart toolbar or click to select items and then click button.

2 List of items on the chart toolbar can be viewed. There can be two chart toolbars called 'chart toolbar 1 and chart toolbar 2'. Therefore, time of chart analysis can be shortened by differentiating between chart toolbar 1 and chart toolbar 2. To delete a specific item, click the item to select it and then click button.

To delete the entire toolbar, click [Del All] button.

※ Order of chart toolbar Items of the toolbar can be adjusted from the toolbar list. Click to select an item to be moved and click [Up] [Down] buttons to move the item to desired position.

3 **Add Indicator/Overlap/Change**

This is a function to add, overlap or change an indicator. To use this function, put the mouse cursor on the chart, click the right mouse button and then select 'Add/Overlap/Change Indicator'.
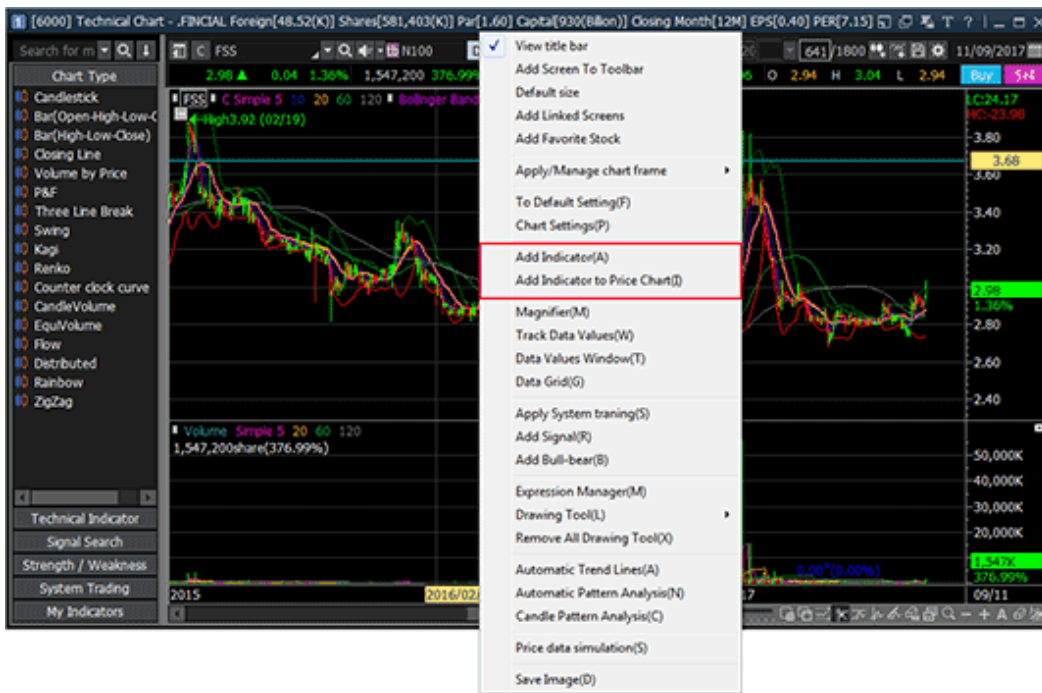
Add Indicator: This adds an indicator by creating a new area on the chart.

Overlap Indicator: This adds a new indicator in the existing indicator area to overlap two indicators in an area.

Change Indicator: This changes an existing indicator to a new indicator.

How to add/overlap indicator

Put the mouse cursor on the chart, click the right mouse button and select 'Add/Overlap/Change Indicator' to open the following 'Add/Change' pop-up window.
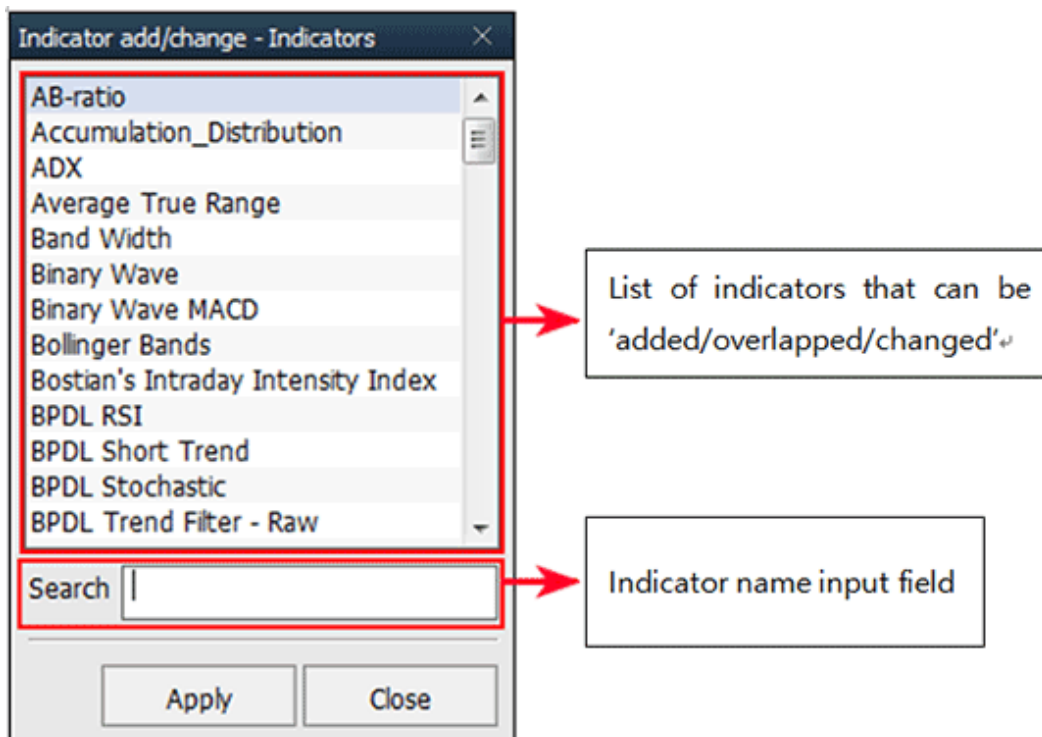
❶ Click an indicator to be added, overlapped or changed from the 'indicator list' or directly enter name of the indicator into 'Search' field.

❷ Click 'Apply' button.

❸ The indicator is 'added/overlapped/changed' on the chart according to the function selected by the user among 'Add Indicator', 'Overlap Indicator' and 'Change Indicator'.

<Add Indicator>

<Overlap Indicator>

<Change Indicator>

※ For 'Overlap Indicator', select an indicator to be overlapped and select an area to display value of the new indicator being overlapped on the existing indicator on the 'Y Axis Show' window. Then click 'Confirm' button.
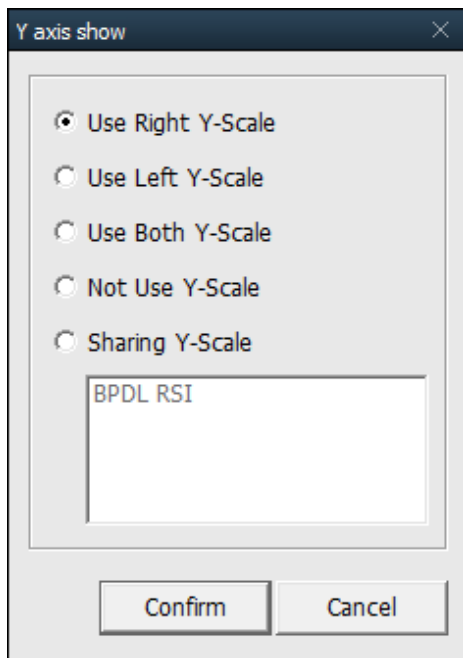
4 Chart Setting

(1) Chart property settings

Chart properties can be configured to efficiently arrange various functions and data on the chart. The user can find

out price flow and important information through the chart in addition to chart analysis.

Chart setting

Chart | Screen

❶ Blank Settings
- ⦿ Right Blank — 5 Char(s)
- ○ Candle Interval — 5 Top/Bottom

❷ Price
- ☑ Use Adjust Price   ☐ Save Trendline
- ☑ Ex-div/Ex-right   ☐ Keep Candle Count (When resize)
- ☑ Show Last Close
- ☑ Show Close(%)   ☐ Based on Prev
- ☑ High/Low ☐ UpDown ☐ Corret Gap(M/T)

Candlestick — High9,640 (01/12) — LC:31.03 HC:-7.57
Face value merger,Exrights(2.00%) 8,910 -2.62%
Low6,800 (12/17)
2003/12 | 2004/01 | 01/12

❸ Display
- ☑ Indicator Name   ☐ Highest / Lowest with candle   ☐ Keep Scale
- ☐ Indicator value   ☑ Candle Top   ☐ Keep Candle size
- ☑ OHL
- ☐ Rate Chart ☑ Show   ☑ Filled Volume   ☐ Show bar Ceil/Floor
- ☐ Invert(Reverse Color)   ☐ Show Volume %

Etc
- Tooltip Type Auto
- Show Crossline Both ☐ Width
- ☐ Show always ☐ When mouse clicked
- ☑ Signal search arrow lap

❹ Style [ ] Save Delete   Confirm Cancel Apply

❶ Blank settings
Right blank margin of the chart can be set. Right blank of the chart can secure enough space to draw a trend line or enter a text for estimation of future price or show text.

❷ Price
Use of adjust price, ex-div/ex-right, show last close, show percent change of close, and high/low can be selected. ※ Adjust price: Stock price of a company indicates change of capital. In other words, if there is a cause that affects capital of a company such as capital increase without consideration and capital reduction without refund, stock price is artificially adjusted by considering change in volume of capital. However, such artificial adjustment is not reflected on charts and various data, causing errors in stock price and various indicators during actual stock investment. Especially in charts, this greatly affects judgment of investors by influencing daily candle and various indicators. Adjust price is a price recalculated by accounting for factors of capital increase and capital decrease to prevent such distortion of stock price and indicate accurate price flow.

❸ Display

A Display
- ☑ Indicator Name
- ☐ Indicator value
- ☑ OHL
- ☑ Rate Chart ☑ Show
- ☐ Invert(Reverse Color)

B
- ☐ Highest / Lowest with candle
- ☑ Candle Top
- ☑ Filled Volume
- ☐ Show Volume %
- ☐ Keep Scale
- ☐ Keep Candle size
- ☐ Show bar Ceil/Floor

C Etc
- Tooltip Type Auto
- Show Crossline Both ☐ Width
- ☐ Show always ☐ When mouse clicked
- ☑ Signal search arrow lap
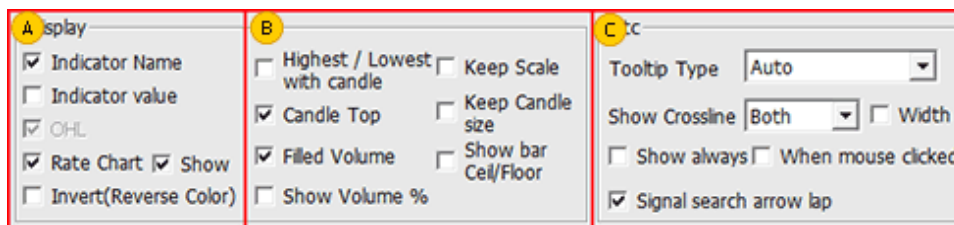
Ⓐ Items to be displayed on charts such as 'Indicator Name/Indicator Value/Rate Chart' can be selected.

Ⓑ Method of visual display on graphics and charts such as 'Highest/Lowest with Candle/Candle Top/Filled Volume' can be selected.

C Options for efficient use of charts such as 'Tooltip Type/Always Show Cross Line/Show Cross Line When Mouse Clicked' can be set.

※ Indicator Value/Rate Chart

Select 'Indicator Value' to show various indicator values including moving average lines of stock price and volume on the chart. Select 'Rate Chart' to show percent change (%) based on base price instead of stock price on the vertical axis (Y axis) of the chart.
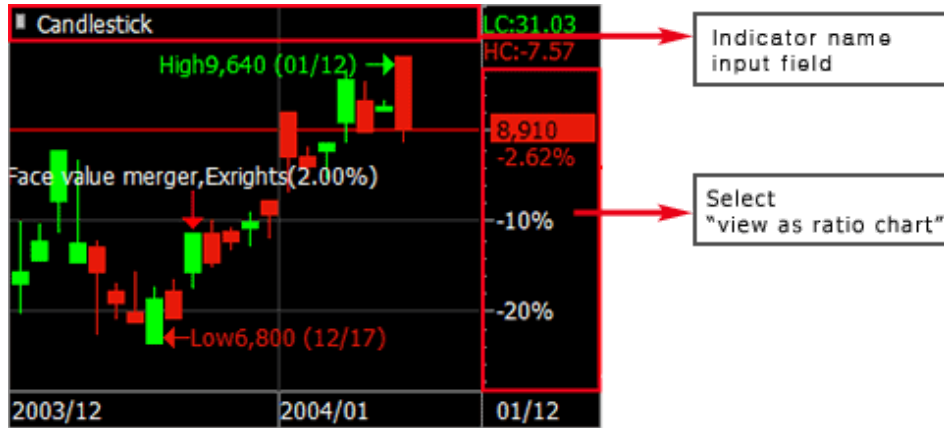
D A style to be applied to the chart can be selected among 'Default Style/Empty Candle Style/Fill Candle Style/Black Style/White Style'.

<Default Style>

<Empty Candle>

<Fill Candle>

<Black Style>

<White Style>

(2) Chart screen settings

Chart screen settings can set background color, type and color of different lines, and font color and size of each area by largely dividing the chart into 'Chart Area', 'Scale Area' and Basic Font'. If chart background, line and font are configured efficiently on this screen, users who use computer for long time can greatly lessen stress of eyes and understand shapes of various indicators in greater details.
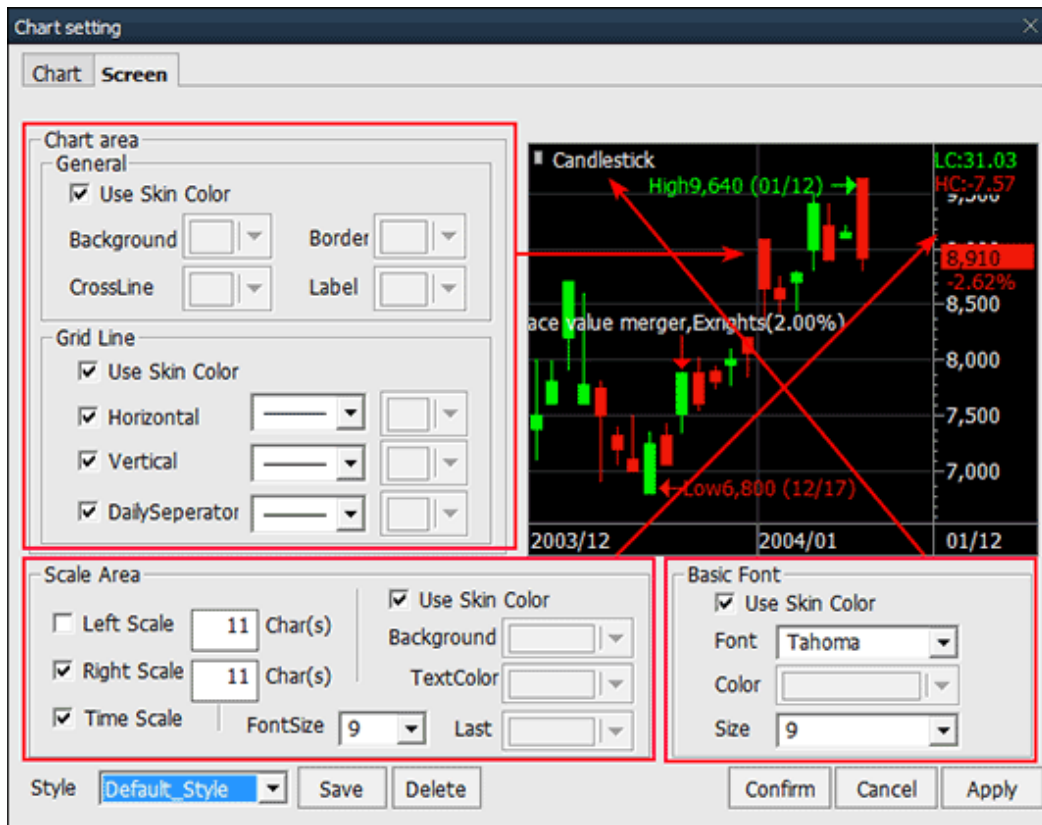
Click [▼] button of each item to set color, line style and font. **Color settings**
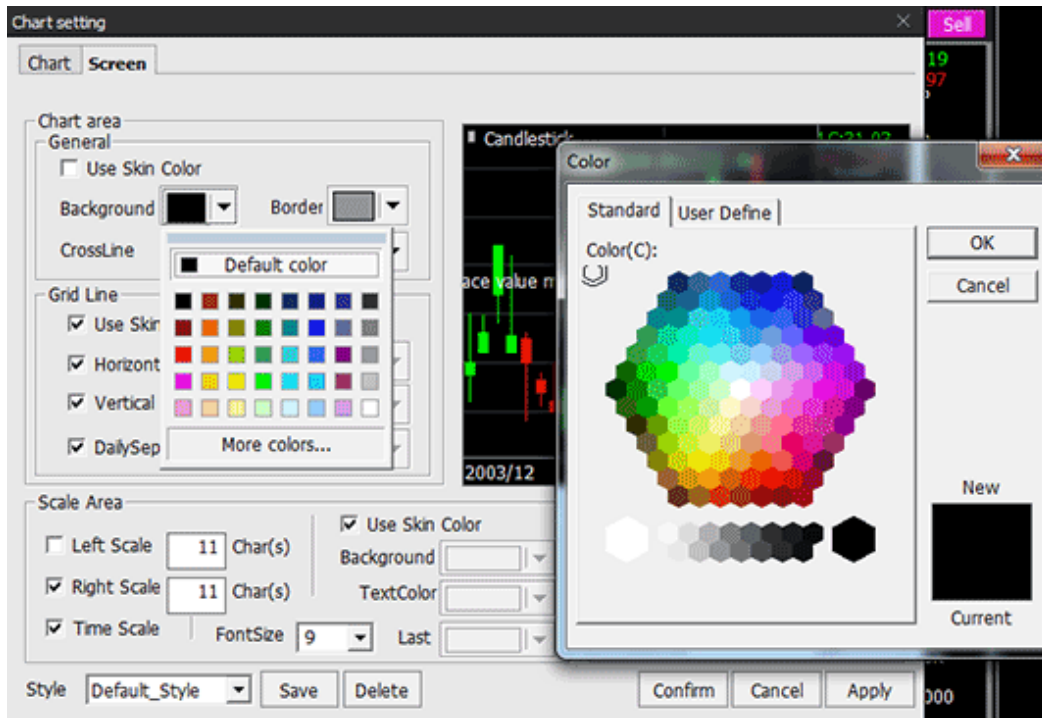
① Click [▼] button of each item to open a pop-up color table.

② Double click the color to be used among basic colors. To use a different color, click 'More colors' button.

③ Color can be selected under 'Standard' tab and 'User Define' tab. A color can be selected from the standard color table of Korea under 'Standard' tab. In 'User Define' tab, the user can create a color to be used.

5 Chart Settings

(1) Magnifier

Click the right mouse button and select magnifier function to magnify daily candle of stock price at the position of the mouse cursor. The magnifier function is not only a function for users with poor eyesight but has an ultimate purpose of further increasing success of trading through chart analysis by allowing more detailed observation of narrow price movement on the chart. In other words, trend line or support/resistance line can be drawn more accurately on the chart for detailed chart analysis. To cancel, click the right mouse button and uncheck the magnifier function.

(2) Track Data Values

Click the right mouse button and select 'Track Data Values' to open a pop-up data window on the chart. This window views various indicator values of the chart including date and price at the position of the mouse cursor. To cancel, click the right mouse button and uncheck 'Track Data Values'.

(3) Data Values Window

Click the right mouse button and select 'Data Values Window' to open the data values pop-up window on the chart. This window views daily price information (open/high/low/close and various indicators) of the stock. In addition, data can be copied onto Excel or clipboard to create a user database.
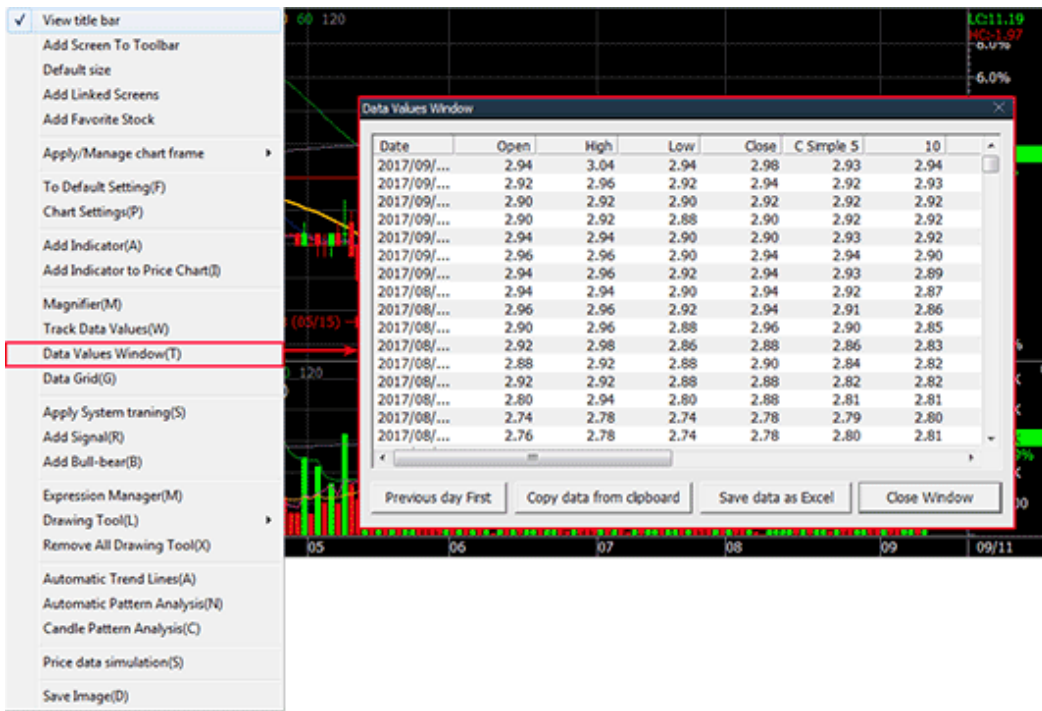
(4) Data Grid

Click the right mouse button and select 'Data Grid' to create a data grid at the bottom of the chart and view daily price information (open/high/low/close and various indicators). Difference from the data values window is that the data grid cannot copy data onto another program to make a database, whereas the data values window can. However, since the data grid can view daily price information while viewing the chart at the same time, it allows for more detailed chart analysis by correcting error and inaccuracy during analysis of trend line and support/resistance line.

1 Drag & Drop

Drag & Drop function of HERO FSS is used in two parts, 'Chart Zoom' and 'Overlap Indicator'.

(1) Chart Zoom

Click the mouse button from the starting point to the ending point of the section to be zoomed in on the chart. Drag from left to right and drop to zoom into the selected part. The screen can be zoomed out to view the entire chart by dragging and dropping from right to left. Double click the chart to return to the immediately previous screen size.

(2) Overlap Indicator

❶ Set two or more indicators on the chart.

❷ Click the left mouse button on the indicator to be overlapped and drag & drop it onto another indicator.

❸ Select a method of showing two indicators in a single indicator area on the 'Y Axis Show' window and click 'Confirm' button.
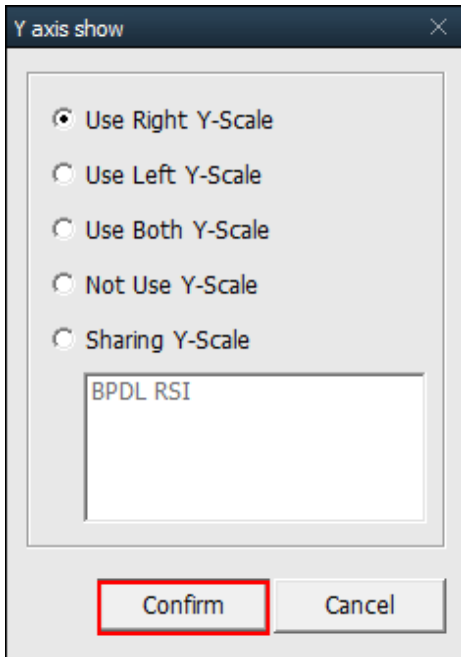
④ Two indicators are shown in one area.

2 **Automatic Trend Line**

The automatic trend line function is a function that automatically draws a trend line by analyzing the trend during a period selected by the user among 'short-term/mid-term/long-term' trend lines. This removes error and inaccuracy of trend line drawn by investors on their own, allowing the user to easily draw trend lines in the most objective and scientific way.

❶ To run automatic trend line, click [AUTO] button on the chart toolbar on the right side of the screen or click the right mouse button on the chart and select 'Automatic Trend Lines'
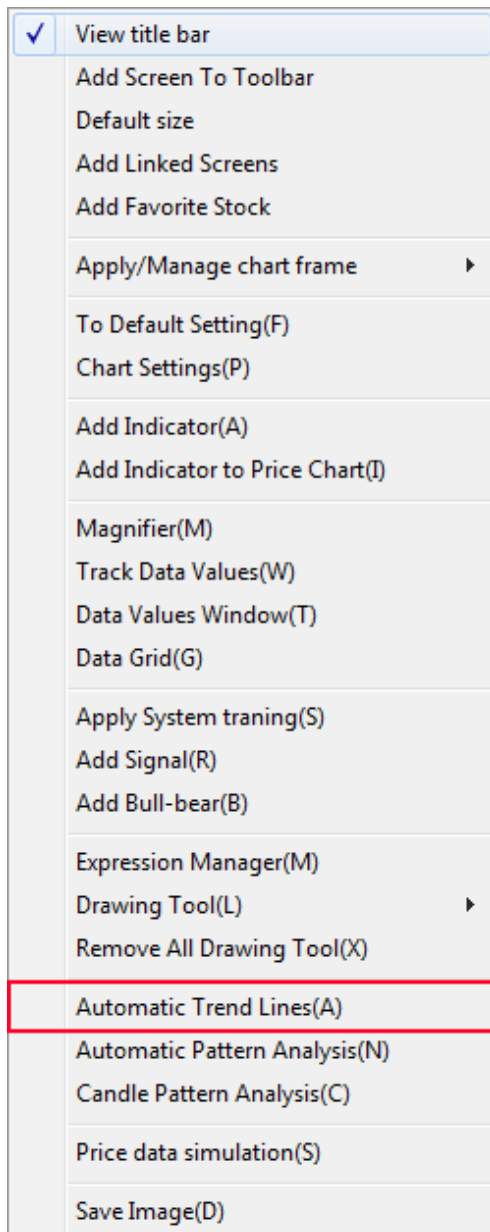
2 The 'Set Auto Trend Line' window will pop up. Select the term of the trend line, number of candles and color of the automatic trend line. After selecting, click 'Confirm' button.
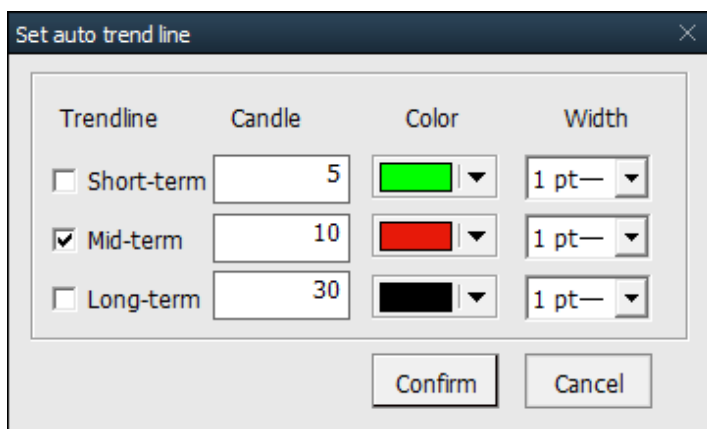
Type of trend line: Check the trend line to be applied. Two or more types can be selected.

Color: Click [▼] button to select a color for each trend line.

Click ![AUTO] button on the chart toolbar once again or click the right mouse button on the chart and uncheck 'Automatic Trend Lines' to remove the trend line drawn

3 The chart drawn with the automatic trend line for the set period can be viewed.

Type of trend line: Check the trend line to be applied. Two or more types can be selected. **Color:** Click [▼] button to select a color for each trend line

Click ![AUTO] button on the chart toolbar once again or click the right mouse button on the chart and uncheck 'Automatic Trend Lines' to remove the trend line drawn.

Color: Click [▼] button to select a color for each trend line.

3 **Automatic Pattern Analysis**

Technical analysis has significance among different analysis methods because of the assumption that stock prices repeat flow shown in the past. Among technical analysis methods, the pattern analysis method is one of the most effective methods of explaining movement of stock price. Automatic pattern analysis is a function that automatically analyzes stock price pattern among various methods of analyzing previous flow of stock price.

1 To run automatic pattern analysis, click ![icon] button on the right side of the screen or click the right mouse button on the chart and select 'Automatic Pattern Analysis'.

✓	View title bar
	Add Screen To Toolbar
	Default size
	Add Linked Screens
	Add Favorite Stock
	Apply/Manage chart frame ▶
	To Default Setting(F)
	Chart Settings(P)
	Add Indicator(A)
	Add Indicator to Price Chart(I)
	Magnifier(M)
	Track Data Values(W)
	Data Values Window(T)
	Data Grid(G)
	Apply System traning(S)
	Add Signal(R)
	Add Bull-bear(B)
	Expression Manager(M)
	Drawing Tool(L) ▶
	Remove All Drawing Tool(X)
	Automatic Trend Lines(A)
	Automatic Pattern Analysis(N)
	Candle Pattern Analysis(C)
	Price data simulation(S)
	Save Image(D)

❷ Pattern of previous price flow is analyzed automatically as shown in the figure.

4 **Candle Pattern Analysis**

Candle pattern analysis is one of the most basic parts to be learned during early stage of stock investment. In reality, many investors start learning technical analysis with candle pattern analysis. However, as investors learn about candle analysis, they become doubtful about its efficiency compared to time required for learning because there are numerous candle patterns according to positions of rise, fall, unchanged, ceiling and floor and number of candle combinations.

❶ To run candle pattern analysis, click ⎣∿⎦ on the chart toolbar on the right side of the screen or click the right mouse button on the chart.

✓	View title bar
	Add Screen To Toolbar
	Default size
	Add Linked Screens
	Add Favorite Stock
	Apply/Manage chart frame ▶
	To Default Setting(F)
	Chart Settings(P)
	Add Indicator(A)
	Add Indicator to Price Chart(I)
	Magnifier(M)
	Track Data Values(W)
	Data Values Window(T)
	Data Grid(G)
	Apply System traning(S)
	Add Signal(R)
	Add Bull-bear(B)
	Expression Manager(M)
	Drawing Tool(L) ▶
	Remove All Drawing Tool(X)
	Automatic Trend Lines(A)
	Automatic Pattern Analysis(N)
	Candle Pattern Analysis(C)
	Price data simulation(S)
	Save Image(D)

❷ Candle patterns are displayed on the chart.
Double click an arrow next to a candle to find out candle pattern analysis.

The following 'Candle Pattern' window pops up to show typical shape of the selected pattern on the left side and name and interpretation of the pattern on the right side.
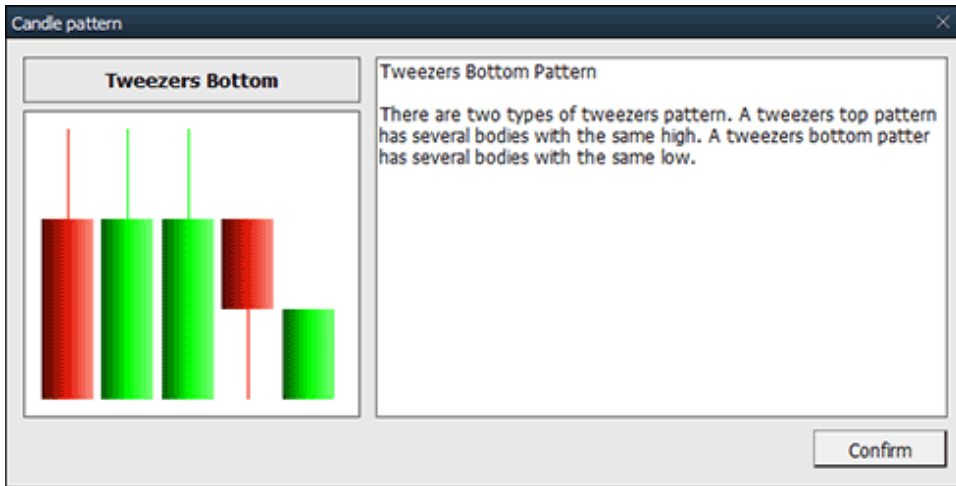
5 Change/Add Stock

Charts on HERO FSS show 'Change Stock' mode. The change stock mode changes the chart into the chart of a new stock by entering a stock code.

To view several stock charts at the same time, click this button to switch to 'Add Stock' mode.

Enter code of another stock in 'Add Stock' mode to add the chart of the newly entered stock to the existing stock chart.

※ Click → on the bottom menu of the chart to change the chart into vertical shape

6 Price change is a function that displays the number of candles or days and change of price on the chart when the user clicks the mouse button and moves the cursor from a point to another point on the chart.

This function is convenient when verifying or checking a theory related to time or period among technical analyses using a chart. It is especially useful when interpreting Ichimoku cloud.

System Trading

To use system trading, "Chart Type", "Technical Indicator", "Signal Search", "Strength/Weakness" and "System Trading" menus must be used on the left side of the chart. Especially, "System Trading" menu can be used for system trading. Other menus are used to show various indicators and signals that can be used as reference trading information by the user.

Chart Type

1 **Apply Chart**

Click a chart type item selected or drag & drop an item into the chart to change existing chart to the selected chart type.

❶ Chart Type

→ Candle Chart

Candle chart is a so-called Japanese chart that is comprised of open, high, low and close. Body of a candle is comprised of open and close, and tail of a candle is comprised of high and low. Body color of a candle generally uses red when daily close is higher than open and blue when daily close is lower than open.

→ Bar Chart

Bar chart is a so-called American chart that is only comprised of open, high, low and close. Maximum and minimum of a bar indicate high and low of the bar. Open is expressed by the left branch of the bar and close is expressed by the right branch of the bar. As a default setting, the bar uses red color when price increases and blue color when price decreases.

→ Closing Line Chart

Closing line chart is a linear chart simply made by connecting close prices, and it also called a line chart. The user can change color of the chart.

→ Volume by Price Chart

This is a bar type chart that shows volume by price, used to analyze area. Area analysis chart has a variable called [Volume by Price] unlike other price charts mentioned above. This is a variable that creates volume of area by dividing price by value of the variable.

→ P&F Chart

P&F chart is a chart that slightly breaks away from the concept of time. This chart is used to analyze trend focusing on rise and fall of price. X is marked in red when price rises above base price, and O is marked in blue when it falls below base price. The concept of time is excluded here. It moves by one slot, only when changing between X and O. Variables of P&F chart are [slot change] and [slot size], and they allow the user to create customized P&F.

✦ Three Line Break

Three line beak has a similar concept as P&F. When price changes by more than the slot change variable, the chart is changed to blue or red. It is expressed in red when price increases and blue when price decreases. Variable is changed to slot change variable. ✦ Swing Chart

✦ Kagi Chart

✦ Renko Chart

✦ Counter Clock Curve

Counter clock curve is a price chart that shows the correlation between price and volume. Volume is shown on the X axis and stock price on the Y axis. Price and volume are averaged based on the number of days that correspond to the variable (moving average) and displayed on the chart. It is called the counter clock curve because it rotates counterclockwise. Variable can be changed to moving average line value. A 20-day average line or 25-day average line is used in general.

✦ Candle Volume Chart

✦ Equi Volume Chart

Equi volume chart is a concept that combines candle and volume. This chart shows horizontal width of a candle as the ratio of volume of the candle to total volume. Therefore, width of a candle increase as its volume increases. Chart settings include color for price rise/fall similar to the candle chart and area filling. ✦ Flow Chart

✦ Distributed Chart

✦ Rainbow Chart

✦ Zigzag Chart

2 Price Chart Settings

Double click the price chart to open the chart type setting pop-up window.

❶ Type

Color, style and variable of each price chart type can be set.

② Properties

Price chart settings - FSS

Type | **Properties** | Baseline

Min/Max
- ⦿ High-Low Scale
- ○ Ceiling-Floor Scale
- ○ User defined
  - Max `3.2`
  - Min `2.66`

Chart Display
- ☐ Zoom in Low Price Scale
- ☐ Invert

Show Option
- ☐ Rate of high price compared to low price(LH)
- ☐ Rate of low price compared to high price(HL)
- ☑ Rate of current price compared to low price(LC)
- ☑ Rate of current price compared to high price(HC)

[Confirm]   [Cancel]
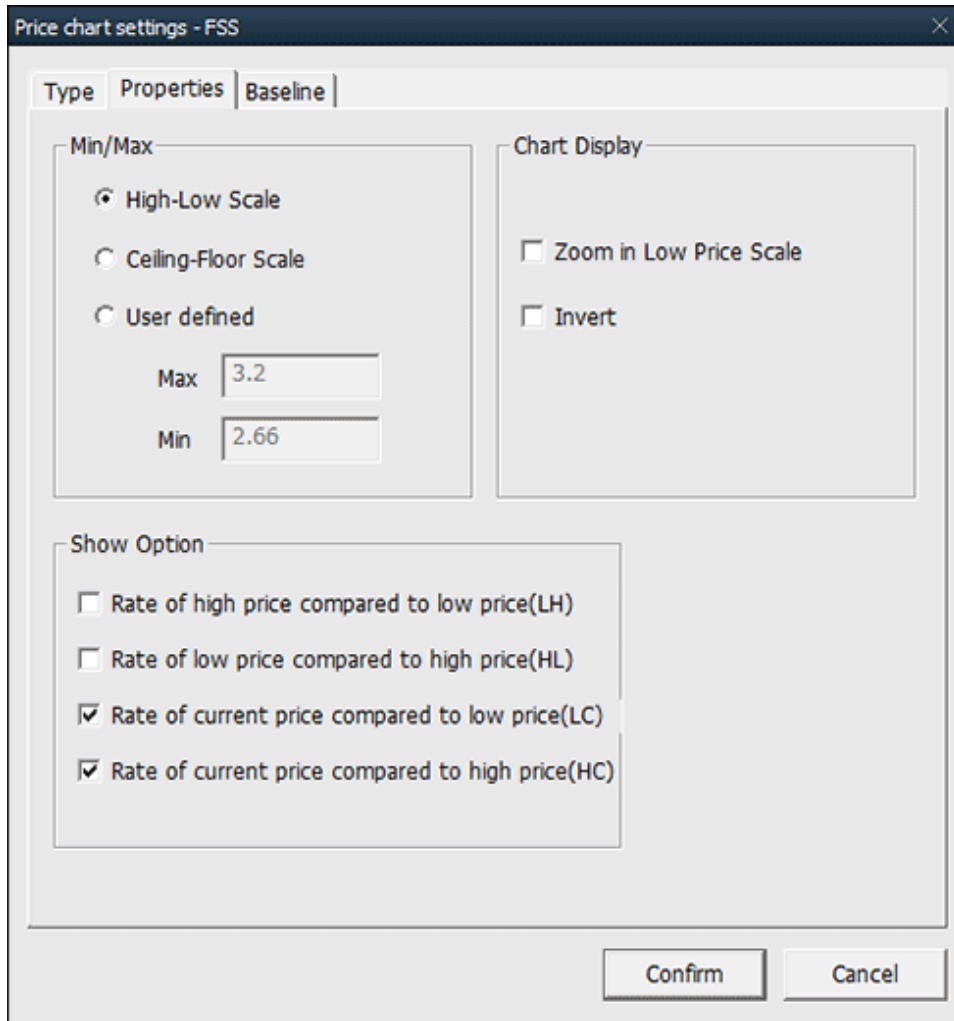
→ **Min/Max:** Min/max scale of the Y axis (price) can be set. Min/max are configured based on date shown on a screen. Overall setting is done based on all data viewed, and user defined setting configures min/max of the Y axis according to values entered by the user.

→ **Show Option:** Rate of high price compared to low price, rate of current price compared to low price and rate of current price compared to high price are displayed in the Y axis area on the left side of the price chart.

→ **Change Y Axis:** Log or invert can be applied to the Y axis of the price chart.

③ Baseline

Prices of today and previous day shown on the chart, pivot, demark and use defined colors can be

selected.
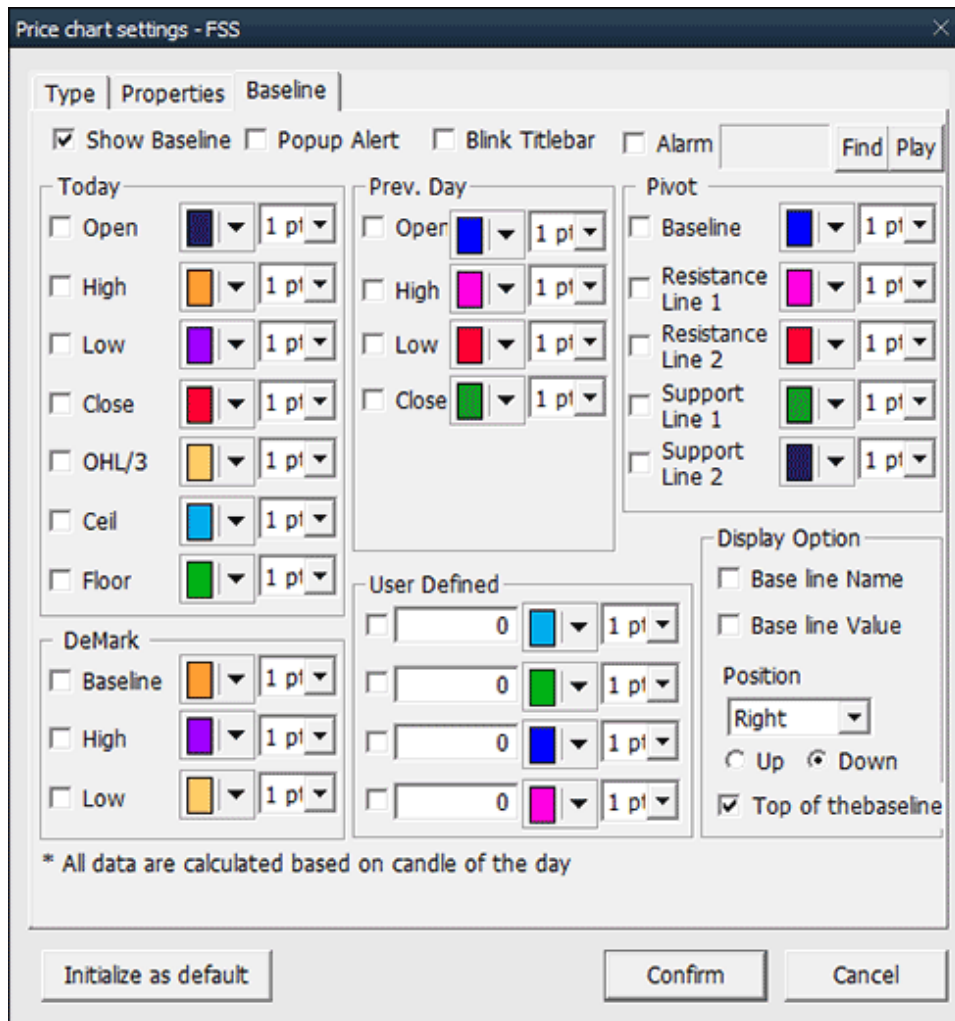
System Trading

1 **Indicator Application**

1 Click
Select an indicator from the list of technical indicators and click to add the indicator at the bottom of the chart.

2 Drag & Drop
Drag an indicator from the list of technical indicators and drop it to a position on the chart. The selected indicator will be added at the dropped position. To overlap the indicator onto an existing indicator, drop the mouse cursor on the existing indicator. Here, the Y axis show window appears as pop-up. This window configures the relationship between the existing indicator and Y axis. Select Y axis relationship to show the existing indicator and selected indicator in the same area.

2 **Indicator Composition**

1 Click
Indicators include basic indicators (6 categories) and user indicators.

2 User indicators created and saved by the user through Formula Manager (refer to analysis toolbar on the left side of the chart area) appear as a list.

3 **Indicator**

Click an indicator on the chart to open the indicator setting pop-up window.

1 Indicator setting

Indicator variables can be changed under description tab. To use the variables permanently, check "Save as default" item at the bottom and click Confirm button.

Indicator setting	×

Indicator Name | Moving average price

Symbol Name | FSS ▼

| Function | **Description** | Line Style | Baseline | Scale | Description |

Conditions

Period1	5	Price	C ▼
Period2	10	MaType	Simple ▼
Period3	20		
Period4	60		
Period5	120		

☐ Save as default   [Confirm]   [Cancel]

2 Line style tab

Number of lines created is equal to number of functions. Color, type, style and thickness can be configured for each line. If line type is line, overheat and recession can be set. If line type is bar, rise

and fall can be set for comparison (baseline, previous close, current price, etc.).

Indicator setting ✕

Indicator Name | Moving average price

Symbol Name | FSS ▼

Function | Description | **Line Style** | Baseline | Scale | Description

Line

☑ C Simple 5

☑ 10

☑ 20

☑ 60

☑ 120

Chart Style

Type | Line ▼ | Width | 1 pt —— ▼
Color | [magenta] ▼ | Style | —— ▼
Overheat | [peach] ▼ | Ref. Value |
Recession | [light blue] ▼ | Ref. Value |

☐ Save as default | Confirm | Cancel
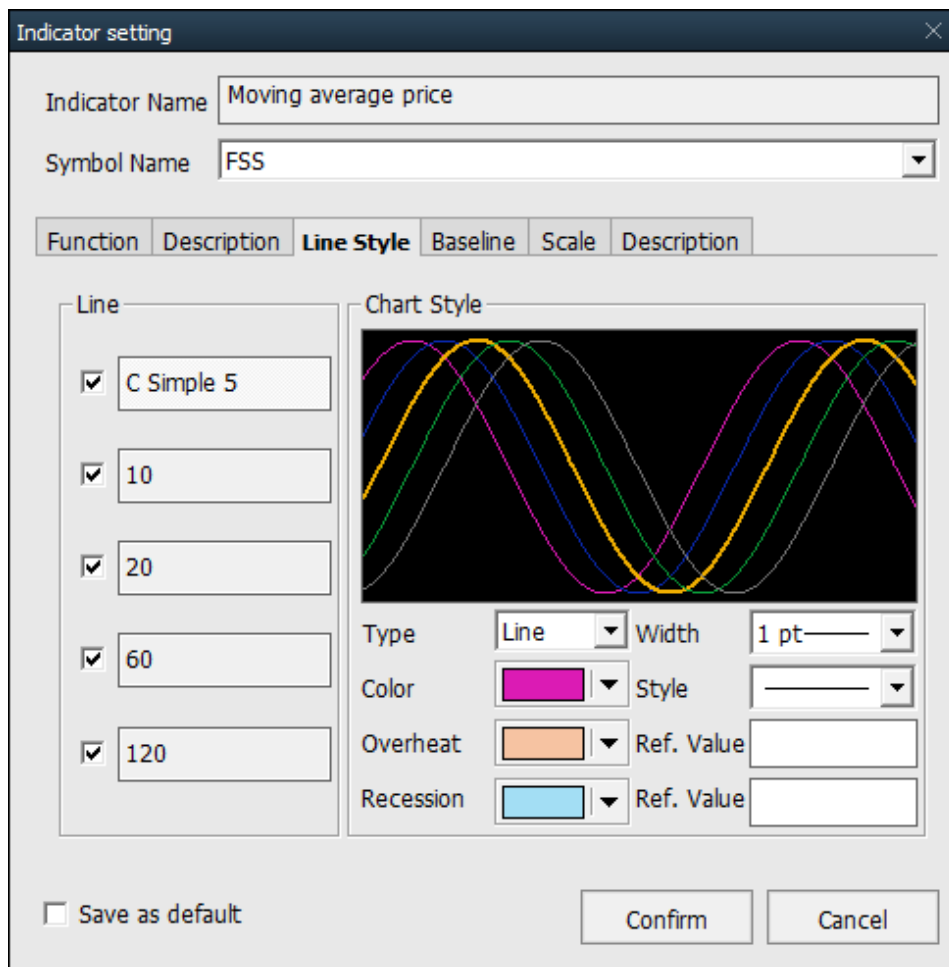
❸ Function tab
Indicator functions can be viewed. Up to 5 functions are supported.

Indicator setting

Indicator Name | Moving average price

Symbol Name | FSS

| Function | Description | Line Style | Baseline | Scale | Description |

| Function 1 | Function 2 | Function 3 | Function 4 | Function 5 |

Name | %Price% %MaType% %Peri

MA(Price, Period1, MaType)

Read Only

☐ Save as default   Confirm   Cancel

4 Baseline tab

The user can add, delete and change setting of baseline.

Indicator setting

Indicator Name | Moving average price

Symbol Name | FSS

| Function | Description | Line Style | **Baseline** | Scale | Description |

+ Add Base Line

- Del Base Line

Delete All

Base Line Settings

Color

Style

Width | 1 pt

☐ Save as default

Confirm   Cancel
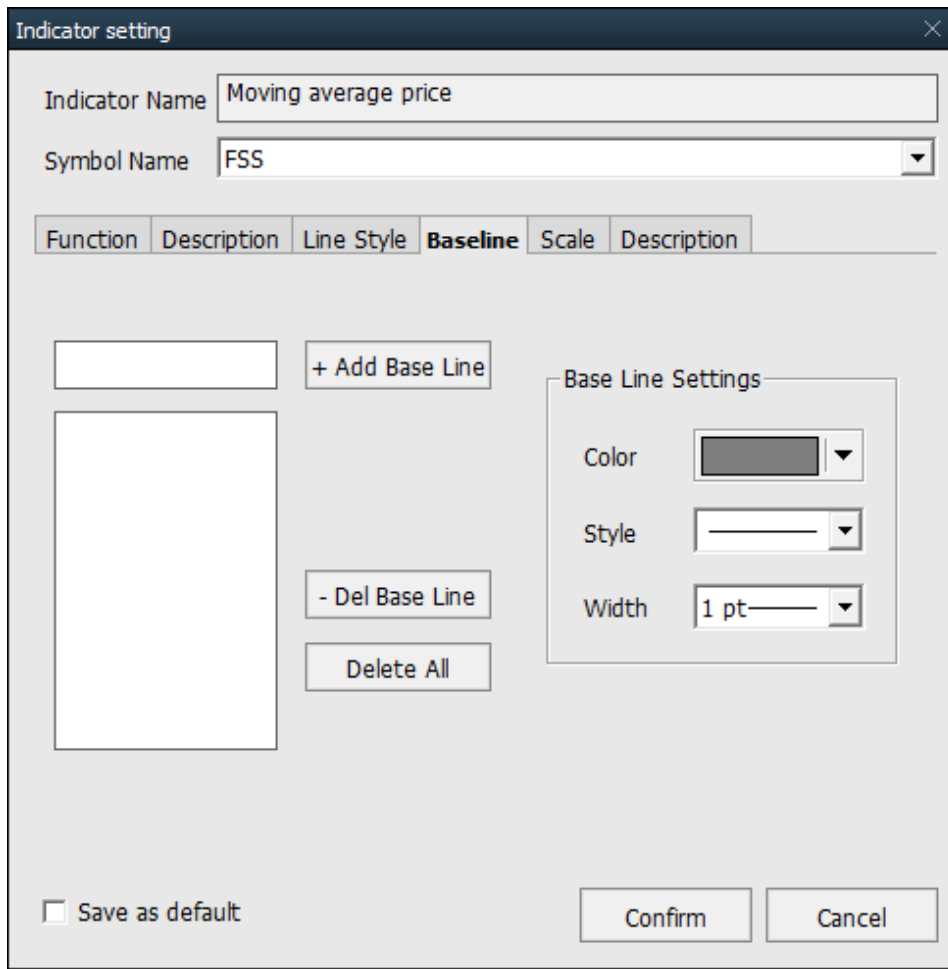
5 Description tab
Description of the indicator is provided.

Indicator setting ✕

Indicator Name | Moving average price

Symbol Name | FSS ▼

Function | Description | Line Style | Baseline | Scale | **Description**

Moving average price

[Outline]

- Moving average analysis is the most index-following method among technical indicators, and there are 2 analysis methods, using support and resistance in a relationship with the stock price and moving average and the correlation between arrangements of stock price
- Moving average and security price has a relationship somewhat like the gravity, so if there is a sudden drop in price, then there exist tendency for the price and moving average to come closer to each other.

[Interpretation]

- Use of Crossover
  If the security price breaks above a certain-day moving average, it is a buy signal and if it breaks below, then it can be interpreted as a sell signal.
- Moving average position

☐ Save as default | Confirm | Cancel |

Signal Search

1 **Signal Search Application**

1 Click or Drag & Drop
After selecting an item from the list of search conditions, click the mouse button to display the condition search signal in the price chart area.

2 **Set Signal Search**

1 Function tab
Signal search functions can be checked to configure color and display settings of signal.

Set signal search

Search name | Inside Day Buy

Function | Indicator valiable | Description

```
high(2) > high(1)
 &&
low(2) < low(1)
 &&
H(1) <= C
&&
C <= H(1) *1.001
```

Read Only

Color [🟩] ▼

Display | Buy ▼

☐ Save as default

☐ Notify by sound [   ] Find | Play | Confirm | Cancel
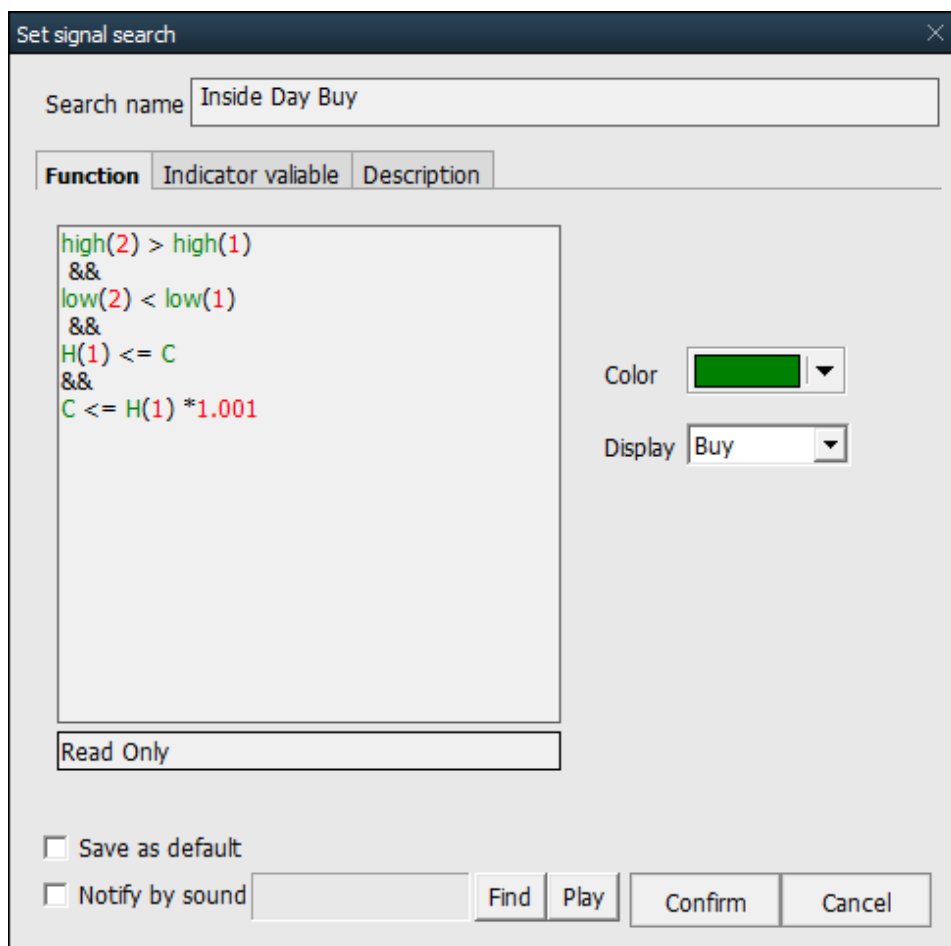
❷ Indicator variable tab
   Variables of signal search can be set.

Set signal search

Search name | Boomers Buy

Function | **Indicator valiable** | Description

Conditions

period | 14

level | 25

☐ Save as default
☐ Notify by sound | | Find | Play | Confirm | Cancel

❸ Description tab
Description is provided.

Set signal search ×

Search name | Boomers Buy

Function | **Indicator valiable** | **Description**

Boomers Buy

Boomers
We have seen cases where rising stock prices that have stopped rising
from the high and hesitate time to time. But stock price does not fall
either. Conversely, there are cases where the stock price does not
decrease anymore from the low and stay there. These cases are mostly
because of resistance during increase and support during decrease.
However, states of resistance and support do not last long. In most of
the cases, they go back into the previous trend, where significant
amount of revenue arises while trend returns. This strategy with low risk
and high revenue, as well as having an advantage of easy trading occurs
very rarely. So you capture this trading opportunity through continuous
search and attention

iß Buy
¨ç ADX must be over 25 and either PDI is bigger than MDI and RSI value
mush be over 25.
¨è High of the first day during the time of resistance must be either

☐ Save as default

☐ Notify by sound [   ] Find | Play | Confirm | Cancel
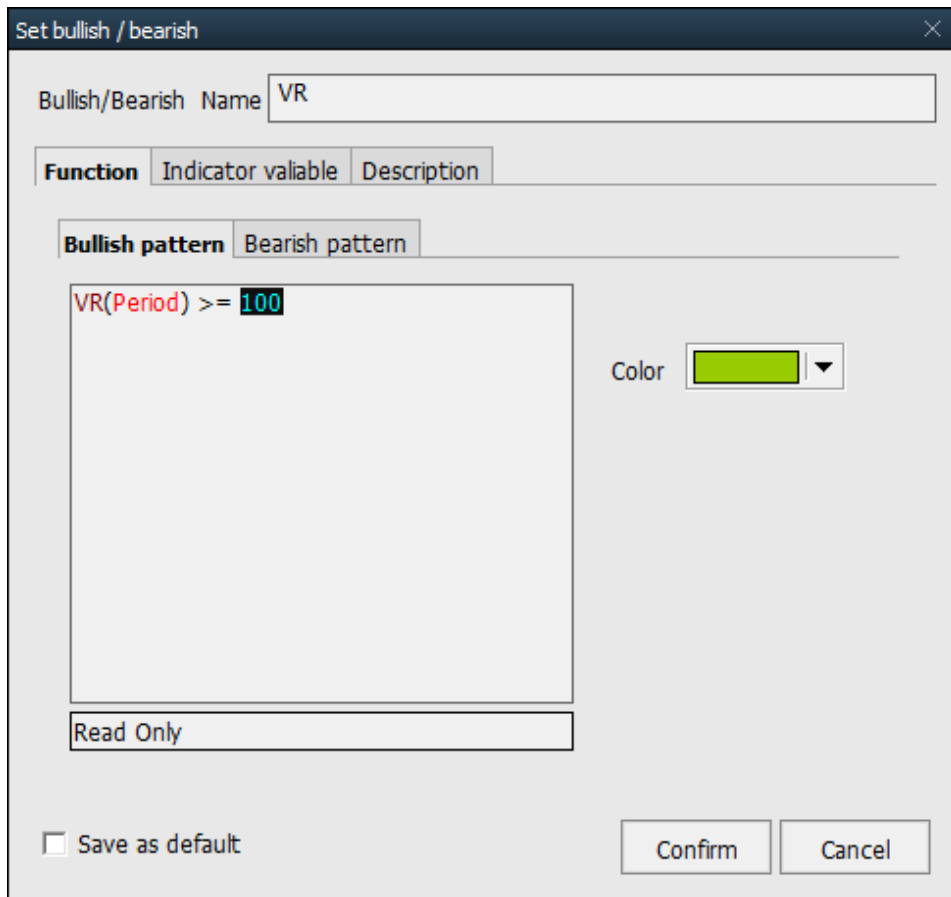
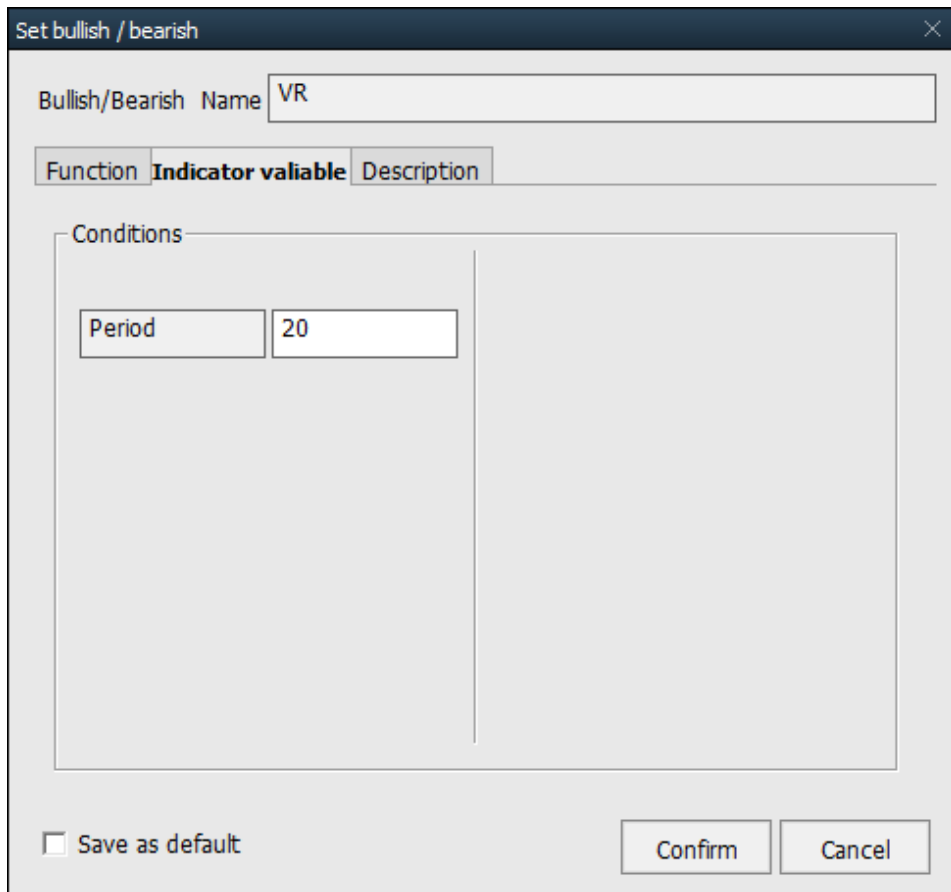## Strength/Weakness

1 **Strength/Weakness Application**

❶ Click or Drag & Drop
Select an item from the strength/weakness list and click the mouse button to display strength/weakness
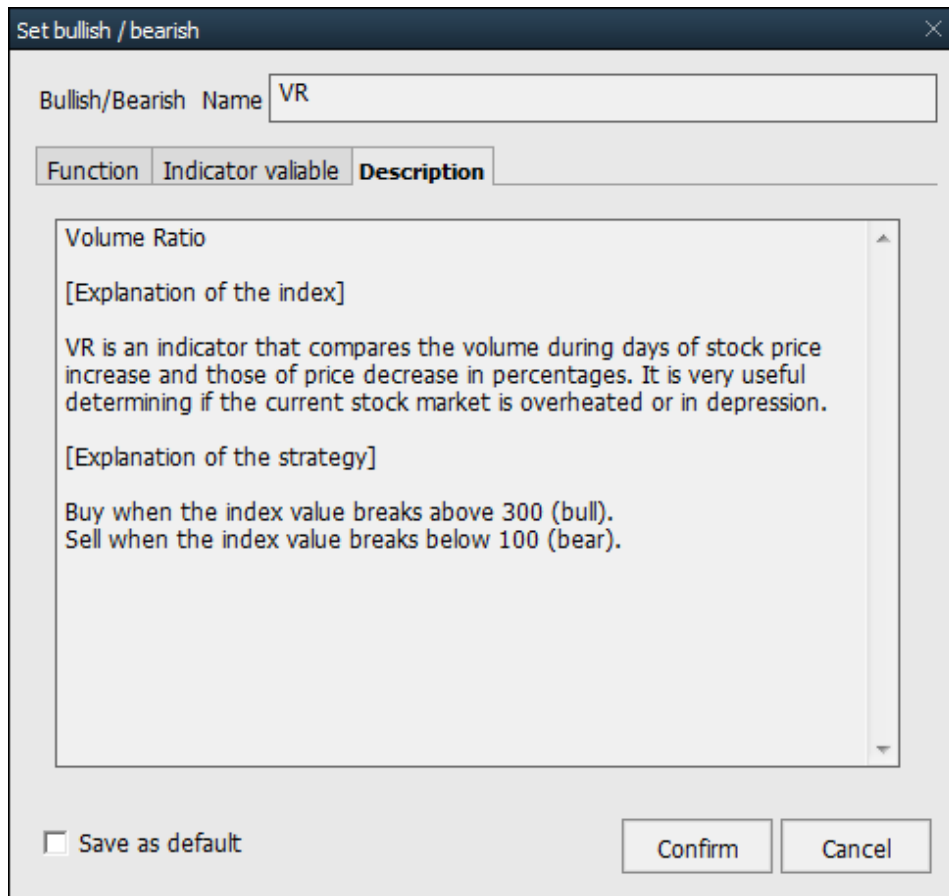signal.

2 **Bullish/Bearish Setting**

❶ Function tab
Functions for bullish and bearish patterns can be checked.

❷ Indicator variable tab
Variables can be changed.

3 Description tab

Description is provided.

Set bullish / bearish   ✕

Bullish/Bearish Name VR

| Function | Indicator valiable | **Description** |

Volume Ratio

[Explanation of the index]

VR is an indicator that compares the volume during days of stock price increase and those of price decrease in percentages. It is very useful determining if the current stock market is overheated or in depression.

[Explanation of the strategy]

Buy when the index value breaks above 300 (bull).
Sell when the index value breaks below 100 (bear).

☐ Save as default   Confirm   Cancel

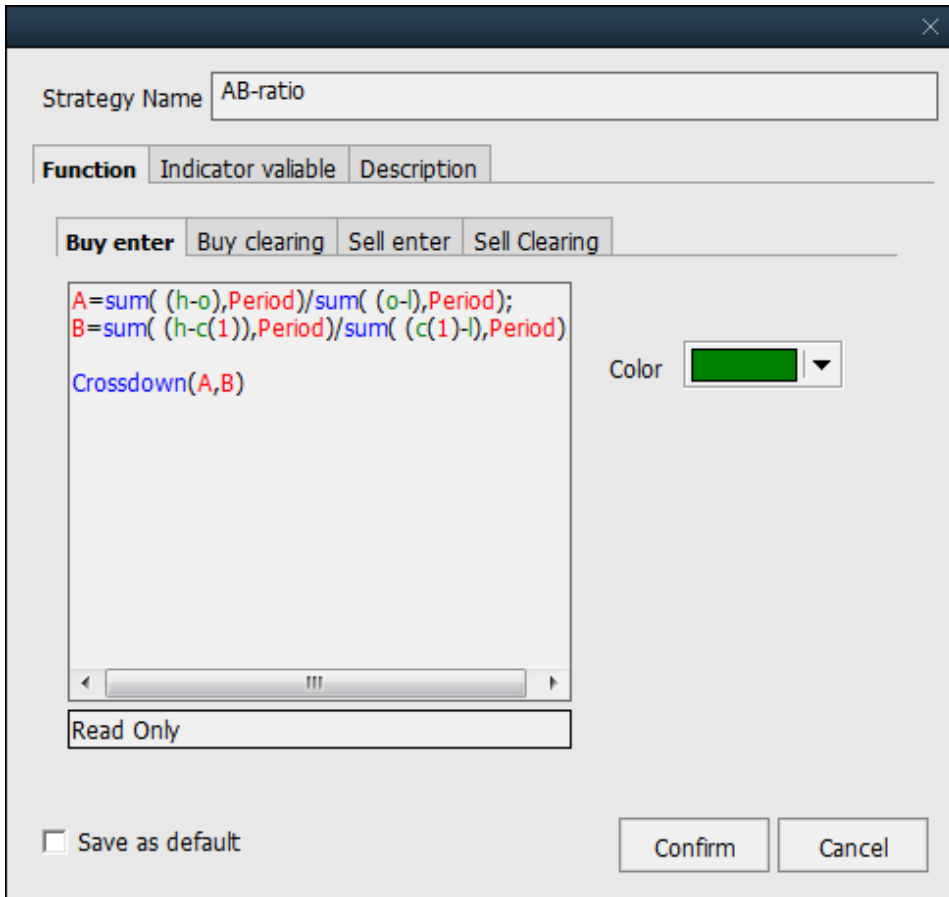## System Trading

1 **System Trading Application**

1 Click or Drag & Drop

Select an item from the trading strategy list and click the mouse button to display trade strategy signal.
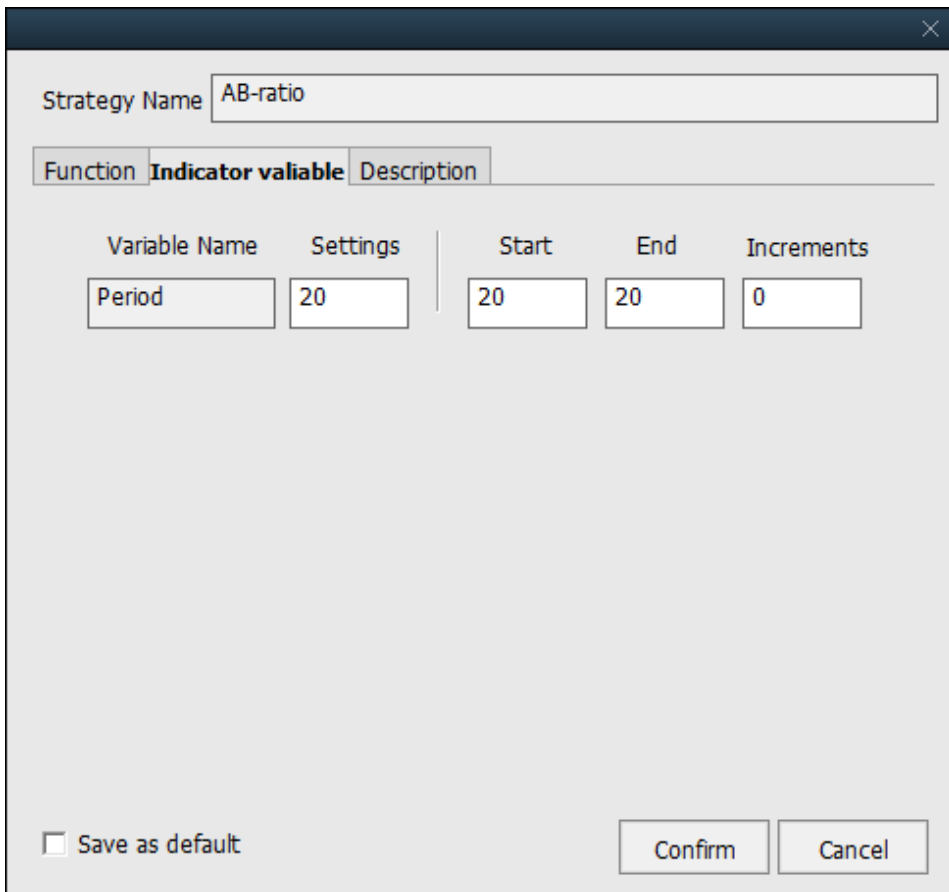
2 **System Trading Setting**

1 Trade strategy condition setting

When trade strategy is applied, the trade strategy condition setting window pops up. Position, order

and stop loss settings can be configured.

2 Trade strategy function tab

Functions of trade strategy can be checked.

Strategy Name: AB-ratio

Function | Indicator valiable | Description

Buy enter | Buy clearing | Sell enter | Sell Clearing

```
A=sum( (h-o),Period)/sum( (o-l),Period);
B=sum( (h-c(1)),Period)/sum( (c(1)-l),Period)

Crossdown(A,B)
```

Color

Read Only

☐ Save as default   Confirm   Cancel

❸ Indicator variable tab
Trade strategy variables can be changed.

Strategy Name: AB-ratio

Function | **Indicator valiable** | Description

Variable Name	Settings	Start	End	Increments
Period	20	20	20	0

☐ Save as default   Confirm   Cancel

4 Trade strategy description tab

Description of trade strategy is provided.

Strategy Name | AB-ratio

Function | Indicator valiable | **Description**

AB-Ratio

[Outline]

AB-ratio shows the movement of a stock price as a struggle between strong and weak energy, and predicts movement by identifying changes in the balance of each side.
In figuring out the strong and weak energy, 2 different base price has been set up, which means that A ratio has used the open of a day as the base price and B ratio used the close of previous day as the base price.

Strong energy is defined as a range of price fluctuation from the base price to the high of a day and weak energy is defines as a range of price fluctuation from the low of a day to the base price. The ratio of strong and weak energy is AB ratio which is normally smoothed over a certain time period (normally 20 days) to use as analysis indicator rather than use daily ratios.

☐ Save as default

Confirm | Cancel