TRADING TECHNOLO

PS Trader User Manual

Version 2.3.1

Trading Technologies International, Inc.

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PS Trader Overview

PS Trader is an add-on application to X_TRADER® that allows a trader to submit "entry-style" OCO orders with trailing stops through a custom user interface. The application enables the trader to submit Market, Limit, Stop Limit, Stop Market, and OCO orders with the option to have the stops trail. In addition, Virtual Stops, which are held on the client machine until the Stop Price is triggered, can be placed.

Installation

1. Verify that both X_TRADER and the X_TRADER API are installed.

2. Double-click on the installation file (i.e. PS Trader Install.exe). This opens the PS Trader installation wizard.

3. Click the Next button through all of the screens of the installation wizard, changing the default User Information and Destination Folder if desired.

4. The application will be installed. The last screen will display a message that PS Trader was successfully installed.

5. Click the Finish button. A PS Trader shortcut icon will be added to the Desktop. The computer does not need to be rebooted.

Product Features

PS Trader Basics

6. PS Trader can be launched by double-clicking the PS Trader desktop icon after X_TRADER is started. Users with X_TRADER 6.13 or higher can launch PS Trader from the Plug-ins button off of the X_TRADER Control Panel.

7. Upon launching, PS Trader will automatically load up the last saved configuration. If there is no previously saved configuration, a label appears in the center of the application that states "**Drag & Drop Contracts**". This application will not take any action until contracts are dropped into the application from X_TRADER's Market Grid window.

8. A contract is the combination of a Gateway, a Product, and the Expiration of the contract. Ex. CME-A ES Jun04. PS Trader supports Futures contracts, exchange traded Spreads, and Options.

9. The user can run numerous instances of PS Trader on their computer, but a single application will allow access to unlimited contracts.

10. Closing the PS Trader application will <u>not</u> delete any resting orders that were entered through PS Trader, but will decouple any OCO orders leaving a disconnected stop and limit order. The user can cancel these orders prior to closing the application. In addition, any Virtual orders will be saved as locally held orders if PS Trader is closed.

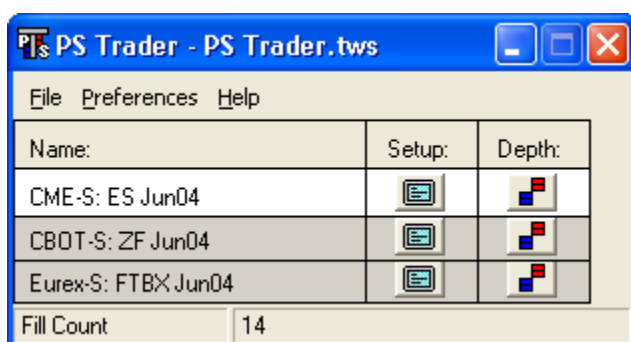## PS Trader – Main Window

Figure 1. PS Trader Main Window

11. The PS Trader window contains three columns:
    - Name: Name of the contract
    - Setup: Launches the Setup window for the contract
    - Depth: Launches the Depth window for the contract

12. Multiple futures contracts can be dropped from X_TRADER's Market Grid window to PS Trader. Newly dropped contracts will be added as a row item to the end of the list.

13. PS Trader's main window will automatically resize to display up to 10 different contracts. If more than 10 contracts are added to the list a scroll bar will appear and the list will still contain all contracts that the user will be allowed to access via PS Trader.

14. Multiple configuration files can be saved by choosing the File->Save As menu item. The current contract layout and settings are saved with the workspace. Choosing File->Open will allow the user to open a previously saved configuration file. For simplicity, the last saved configuration will be launched on open.

15. The PS Trader main window is the main control panel that is used for managing and launching the different depth windows. Closing this main window closes the whole application and all windows associated with it.

16. By default, the name of each depth window is the name of the contract in the TT Display format. However, the user can edit the name from within the Setup page of each contract.

17. The Fill Count will be displayed at the bottom of the screen. The Fill Count represents the number of fills for all exchanges that X_TRADER is currently logged into. This value will continue to update as more fills come in.

PS Trader – Menu Options
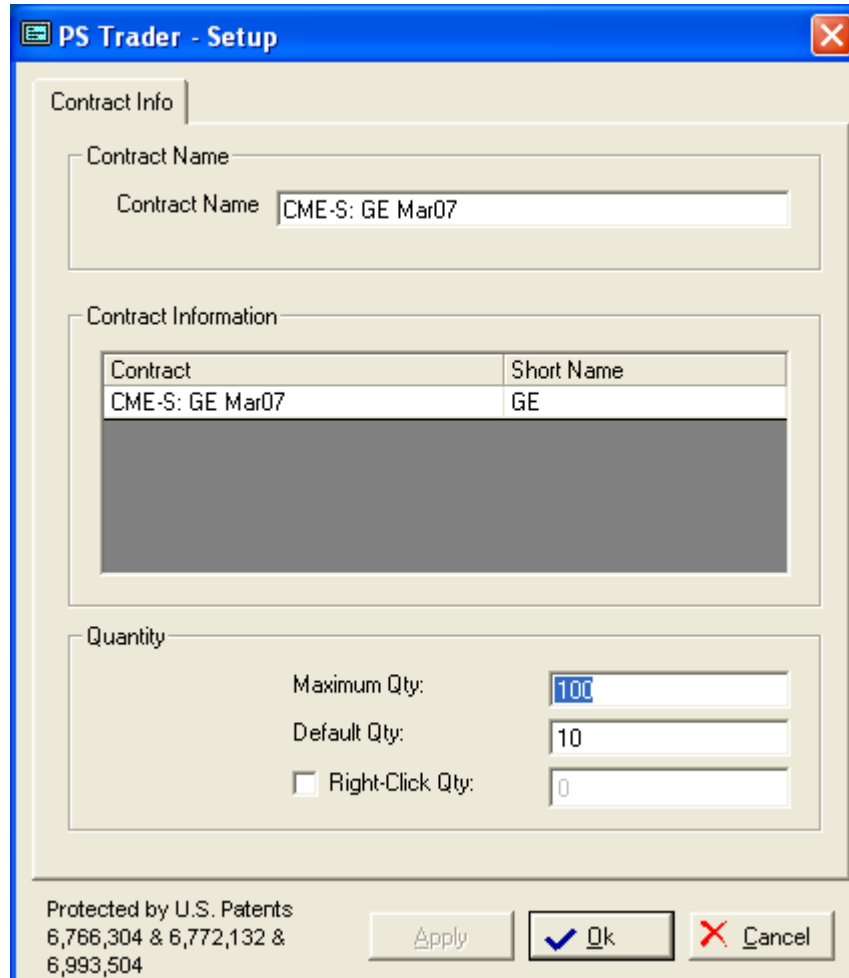
18. Within the *File* menu there are five menu items:

   - *Open*:   Opens an existing PS Trader workspace
   - *Save*:   Saves the workspace. The default name is PS Trader.tws
   - *Save As:*   Saves the workspace with the current/new name
   - *Clear:*   Clears all of the contracts out of the current workspace
   - *Exit:*   Exits the PS Trader application

19. Within the *Preferences* menu there are nine menu items:

   - *Default Settings*:   Opens the Default Settings Setup window to specify default values for new contracts added to the workspace
   - *Global Re-centering:*   Enable/Disable re-centering of all Depth windows when any window is re-centered
   - *Detached Quantity Pad*   Set the position where the Quantity Pad will display. By default it is accessible by clicking on the Quantity field in the top left corner. If checked it displays along the left side of the PS Trader – Depth window.
   - *Quantity Pad Tracks Market*   This Preference is enabled only if Detached Quantity Pad is selected. If checked the Quantity Pad position along the Depth window will move vertically up/down with the market trends.
   - *Include Implieds:*   Include/Exclude the exchange supplied implied values with the market depth
   - *Show LTQ:*   Show/Hide the Last Traded Quantity Pane
   - *Confirmation Messages*   Select if order confirmation windows should be displayed. Select Add Order Confirmation, Delete Order Confirmation, and/or Change Order

	Confirmation if a confirmation window should be displayed before adding, deleting, and/or changing an order. Select Cancel Button Default if the Cancel button should default on the confirmation window. Not selecting it means the Confirm button will default.
• *Order Pane:*	Select either: No Delay, ½ Sec. Delay, 1 Sec. Delay, Center Click Active, or Hide Order Pane. See item #80 of the Order Pane section.
• *Order Handling Mode*	Select either: LTP Mode or Inside Market Mode. This mode is used to determine whether the Last Traded Price or Last Traded Bid/Ask is used for trailing stops and to trigger a Virtual Stop

20. Within the Help menu there are two menu items:

• *Contents*:	Displays the PS Trader Read Me Document
• *About PS Trader*:	PS Trader version information

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PS Trader – Setup Window

Figure 2. PS Trader Setup Window

21. PS Trader contains a default Setup window, accessible from the Preferences menu, which can be used to specify default values for new contracts added to the workspace. In addition, there is a Setup window associated with each contract. Properties specified for one contract can be different than those of another contract.

22. The Setup window for an individual contract can be launched by either clicking the Setup button on PS Trader's Main window, or by right-clicking in the price column on the contract's depth window and choosing Setup.

23. The Maximum Quantity field must be a numeric value from 0 to 999,999,999. This value must be greater than 0 for orders to be entered in the Depth window.

24. The Default Quantity is the order quantity that will be entered on launch and after every order is submitted. This value must be less than or equal to the Maximum Quantity.

25. The Right-Click Quantity is the order quantity that will be entered when the user right-clicks on a contract. This value can only be set and active if the corresponding checkbox is selected.

26. Clicking on the Apply button saves the properties and leaves the Setup window open. Clicking the Ok button saves the properties and then closes the Setup window. Clicking the Cancel button closes the Setup window without saving any changes.
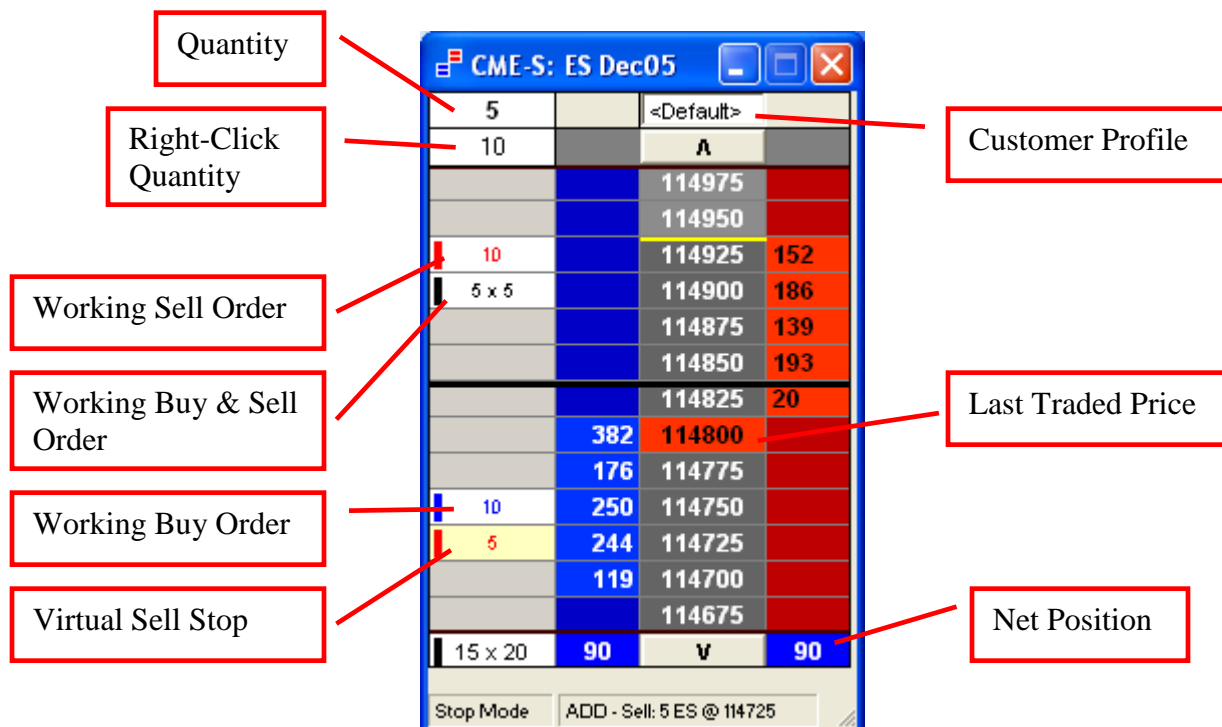
PS Trader – Depth Window

Figure 3. PS Trader – Depth window

27. The Depth window will open with the Contract Name as the name of the window.

28. The Depth window default display separates the Working Buy and Working Sell orders. The user can choose a different display format by right-clicking on the depth window and selecting one of the following options: "Right Justify Price", "Split Buy / Sell Orders" and "Hide Status Bar".

29. Re-centering the grid can be performed by clicking the middle mouse button, double-clicking the price column, or by pressing the space bar. Clicking the down or the up arrow buttons will scroll the window by one whole pane. After re-centering, a dark black line separates the top half from the bottom of the grid.

30. The font size for the Depth window can be increased or decreased by pressing the "Shift + Left Arrow" or "Shift + Right Arrow" key combination, respectively. Then the font size of the Order Pane window and the Quantity Pad will also re-size accordingly.

31. The yellow bar in the price column denotes the High of the day. The red bar in the price column denotes the Low of the day. All prices in-between these two bars are a darker gray showing that this is where trading has occurred. Outside of these two bars prices are lighter gray.

32. The Last Traded Price will be displayed in the Price column by highlighting the cell. The background will be green if the price went up. It will be red if the price went down, and white if it remained the same.

33. <Default> is the default customer profile name. Clicking on the field will display a list from which a single customer profile can be chosen. Once selected, all orders will be submitted using this customer profile.

34. Each column can be made wider by grabbing the vertical bar on the right side of the header row of each column and dragging it to the appropriate width. To minimize a column, simply slide the handle all the way to the left. To redisplay hidden columns, right-click on the depth window and choose the appropriate display.

35. Dragging the height of the depth window automatically re-centers the grid and will dynamically add or remove rows. The maximum number of rows is limited by the size of the screen. There is no minimum number of rows.

36. The top left cell of the Depth window is the Default Quantity. After each order this value will be replaced with the default quantity selected from the Setup window. When the Depth window is active, typing a number anywhere will

add to the value. Right-clicking on this quantity field will reset the value with the default value.

37. Directly beneath the Default Quantity is the Right-Click Quantity. This value can be edited directly on the Depth window or by opening the Setup window.
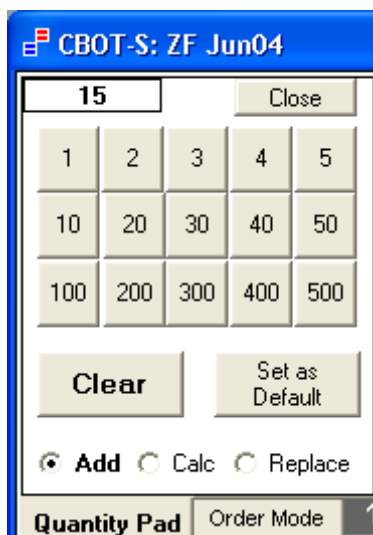
Quantity Pad

Figure 4. PS Trader Quantity Pad

38. If Detached Quantity Pad is not selected from the Preference menu, when the user clicks on the quantity cell, the quantity pad displays as in Figure 4 and 5. There are two tabs within the quantity pad: Quantity Pad and Order Mode. The last used tab is remembered and displayed when the quantity pad is accessed. Moving off the quantity pad or clicking the "Close" button will close the quantity pad. See #63 for the detached version of the Quantity Pad.

39. The value that is displayed in the upper left hand of the quantity pad will be the quantity of the order that will be submitted next unless it is changed.

40. Right-clicking on the quantity, will re-seed it with the default quantity. Clicking the "Set as Default" button will save the current value as the new default quantity.

41. Clicking on the Clear button will reset the quantity to 0.

42. The numbers on the Quantity pad can be overwritten by right-clicking on a number, entering the desired number and hitting Enter. If a number was in the

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thousands, it will put a decimal between the thousand values and the non-thousand values and add a "K". Ex. 2,500 = 2.5K. The same applies to millions except with an "M".

43. The value of the quantity cannot exceed the maximum value specified in the Setup window for each contract. If a number does exceed this value it will stop at that maximum number. (Ex. Max Quantity = 25 and user adds 20 and then adds 30, then it will display 25).

44. **Add** – Selecting this option will add the quantity to the button that has been clicked. It will add the values "1" & "2" & "10" = 13.

45. **Calc** – Selecting this option treats the quantity pad like a calculator within Microsoft Windows. It will concatenate the string "1" & "2" & "10" = 1210.

46. **Replace** – Selecting this option replaces the existing quantity with the newly selected button. The result of pressing "1" & "2" & "10" = 10.

47. Clicking on the Order Mode tab will display the quantity pad in Order Mode. By default the Limit button is selected.
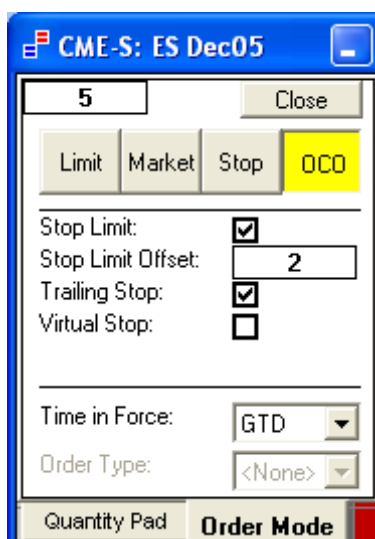

Figure 5. PS Trader Quantity Pad - Order Mode

48. **Limit** – Clicking on the Limit button allows the trader to submit a Limit order. The Time in Force and Order Type fields are enabled.

49. The Time in Force field will allow the trader to designate for how long the order is valid. The default selection is GTD: the order is valid only for the

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current trading session. Selecting GTC indicates that the order is valid until the trader cancels the order or the contract expires.

50. The Order Type field will allow the trader to designate if the order should be of type "Fill or Kill" (FOK), "Immediate or Cancel" (IOC), or "Market Limit Market" (MLM). By default the Order Type will be <None> indicating it is not a "Fill or Kill", "Immediate or Cancel", nor "Market Limit Market" order. IMPORTANT: MLM orders are only available on the SFE gateways and will not show up for any other.

51. **Market** – Clicking on the Market button allows the trader to submit a Market order. After clicking, the Time in Force and Order Type fields are enabled and the cursor changes to a yellow arrow with the letters MRT.

52. Clicking anywhere in the Bid column will place a Buy Market Order. Clicking anywhere in the Offer column will place a Sell Market Order.

53. **Stop** – Clicking on the Stop button allows the trader to submit a Stop order. The Stop Limit, Trailing Stop, Virtual Stop, and Time in Force fields are enabled. The cursor changes to a yellow arrow with the letters STP.

54. The Stop Limit field determines if the order should be a Stop Limit or Stop Market order. Checking the Stop Limit checkbox means that a Stop Limit is placed while leaving it unchecked means a Stop Market order will be placed. By default the checkbox will not be checked indicating that a Stop Market order will be placed.

55. If the Stop Limit checkbox is checked, the Stop Limit Offset field becomes enabled. The Stop Limit Offset field allows the trader to set the number of ticks the stop limit price is from the stop entry price.

56. The Trailing Stop field allows the trader to designate that the stop order should trail with the market. If LTP Mode is selected as the Order Handling Mode from the Preferences menu, the Trailing Offset equals the distance the stop was entered away from the last traded price and the stop will trail the LTP. If Inside Market Mode is selected as the Order Handling Mode, for a Buy Stop the Trailing Offset equals the distance the stop was entered from the Best Offer and the Buy Stop will trail the Best Offer. For a Sell Stop the Trailing Offset equals the distance the stop was entered from the Best Bid and the Sell Stop will trail the Best Bid.

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57. The Virtual Stop field allows the trader to place a virtual stop, which is saved on the client machine until triggered, instead of a Stop order which is submitted to the exchange.

58. If LTP Mode is selected as the Order Handling Mode (from the Preference Menu), once the Last Traded Price equals the Stop Price the virtual order will be submitted into the market as either a Market or Limit order.

59. If Inside Market Mode is selected as the Order Handling Mode, for a Buy Stop once the Best Offer Price is greater than or equal to the Stop Price the order will be submitted. For a Sell Stop once the Best Bid Price is less than or equal to the Stop Price the order will be submitted. If Stop Limit is not checked, a Market order will be placed. If Stop Limit is checked, a Limit order will be placed based on the specified Stop Limit Offset.

60. If the contract being traded is on the SFE gateway, users will be allowed to select "Market Limit Market" (MLM) orders in the Order Type field.

61. **OCO** – Clicking on the OCO button allows the trader to submit a One-Cancels-Other (a.k.a. Order-Cancels-Order) order so that if one gets filled, the other will be canceled. The Stop Limit, Trailing Stop, Virtual Stop, and Time in Force fields are enabled. The cursor changes to a yellow arrow with the letters OCO.

62. An OCO can be either two stops, two limits, or the traditional stop and limit. If the OCO contains stops, one or both of those stops can be set as virtual stops by checking the Virtual Stop checkbox. As in Stop Mode, the Stop Limit field is used to designate if the order should be an OCO Stop Limit or OCO Stop Market order.

63. If Detached Quantity Pad is selected from the Preferences menu a single panel of buttons displays. The default version hides the fields for selecting the mode of the Quantity Pad amounts (Add, Calc, or Replace) as well as the additional fields for entering orders other then Limit orders. The ellipses button can be clicked to view those additional fields.
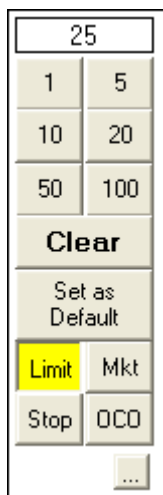
Figure 6. PS Trader Quantity Pad – Detached   Figure 7. PS Trader Quantity Pad – Detached (expanded)

64. The font size of the detached Quantity Pad can be increased or decreased independently of the Depth window. To do so, select the Quantity Pad and press the "Shift + Left Arrow" of "Shift + Right Arrow" key combination, respectively.

Net Positions

65. The Net Position will be displayed on both the Buy side and the Sell side in the last row.

66. Clicking on one of these values will seed the Quantity field with the absolute value of this value. If this value is greater than the Maximum quantity, it will seed the quantity with the Maximum quantity.

Entering Orders

67. When the user clicks on the blue column in the Depth window they will be sending in a Buy order. When the user clicks on the red column in the Depth window they will be sending in a Sell order.

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68. By default (if the Order Mode has not been changed using the quantity pad) orders submitted through the Depth window will be GTD Limit orders at the Limit price corresponding with the price of the row that was selected.

69. For stop orders, the Stop Price submitted corresponds to the price of the row that was selected and the Stop Limit Price is based on the stop price and the stop limit offset.

70. The cursor will change to yellow along with the letters MRT, STP, or OCO if the user has designated that a Market, Stop, or OCO order should be placed. While entering an OCO order after selecting the first price, the cursor will change to pink. After the second price is selected, the cursor will change back to yellow.

71. For OCO orders, when a partial fill comes in on either of the two orders, the other order will be reduced by the amount that was partially filled. When one order is deleted, the paired order is also deleted.

Working Orders

72. By default both working Buy and Sell orders are displayed on the left hand side of the Depth window. If both a Buy order and a Sell order are resting at the same price, the working orders column will display an "x" between the buy quantity and the sell quantity (i.e., 25 x 25).

73. When the "Split Buy/Sell Order" is selected, working Buy orders display in the left column while working Sell orders display in the right column.

74. Right clicking on any order and dragging it to another price level will adjust that order, changing its Limit Price.

75. Left clicking on the order will delete the order.

76. Left clicking in the total orders field will delete all orders for that contract using Smart Delete functionality. The sequence in which the orders are deleted is based on their position in the market. Orders closer to the market price will be deleted before those which are farther away. This minimizes the chance of getting filled in a fast market before all of the deletes can be processed.

77. Hovering over one order of an OCO order will highlight it yellow along with its corresponding order. If the corresponding order is not currently viewable in the Depth window, the order will instead be highlighted in orange.

78. Virtual Stops have a beige background.

Order Pane

Contract	Qty	Chg	Price	Stop Price	TO	Acct#	Type	Time Stamp	Del
ZF Dec05	10		113055	113045	5	12345	Stop L	1:41:10 PM	X
ZF Dec05	5		113030	113030	NA	12345	Stop L	1:38:45 PM	X
ZF Dec05	5		112315	112315	NA	12345	Stop L	Not In Market	X
ZF Dec05	10		112315			12345	Limit	1:38:20 PM	X
ZF Dec05	5		112305			12345	Limit	1:38:48 PM	X
ZF Dec05	5			113005	NA	12345	Stop M	1:38:56 PM	X

Figure 8. PS Trader Order Pane

79. The Order Pane, when displayed, shows details about the orders that are working. Figure 8 displays an example Order Pane which contains all orders for a given contract.

80. From the Preferences menu the user can choose from five different settings to display or hide the Order Pane: No Delay, ½ Sec. Delay, 1 Sec. Delay, Center Click Active, and Hide Order Pane. The "No Delay" option displays the order pane immediately after hovering over any working order(s) in the Depth Window. The "½ Sec. Delay" and "1 Sec. Delay" options display the order pane after a short delay. The "Center Click Active" option will display the order pane when the center mouse button is clicked on a working order in the Depth Window, clicking anywhere else will re-center the grid. The order pane will stay hidden when the "Hide Order Pane" option is selected.

81. To change the order Quantity, Price(s), and/or Trailing Offset left click or right click the column to decrease or increase the value, respectively. To commit the change(s) click on the "OK" value in the Chg column. A light gray background on an item indicates that this value can be changed. If you change a value and leave the window without confirming "OK", the changes will be lost.

82. To delete an order, click the "X" value in the Del column.

83. The Stop Price, and Trailing Offset columns will only display if they are applicable to the working orders.

84. Orders are highlighted in yellow to indicate that they are part of an OCO order.

85. Orders with a Time Stamp of "Not In Market" are Virtual orders, saved on the client machine.

Order Confirmation window

86. If the Add Order Confirmation preference is checked on the Global Settings menu, a message window will display before any order is placed. See Figure 9 below for an example of the Order Confirmation window for a Stop Limit Order with a Threshold.

87. If the user changes the Order Quantity to a value which exceeds the Max Quantity, upon leaving the cell the Max Quantity is entered.
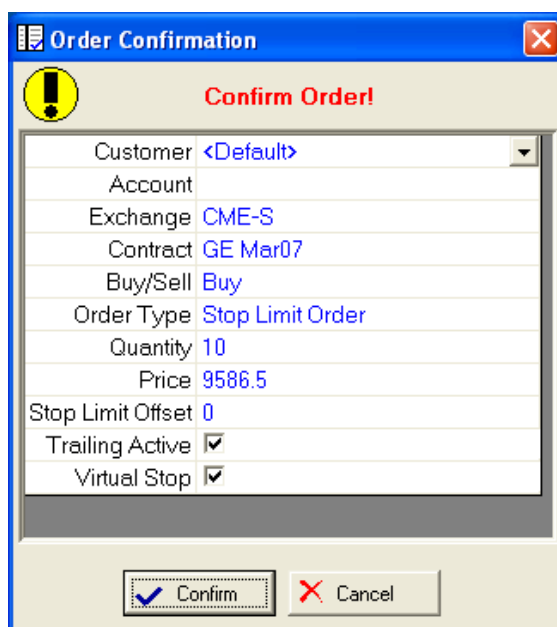

Figure 9. Order Confirmation window

88. Some values for the order can be changed on the Order Confirmation window. The Customer can be changed by selecting a different Customer in the dropdown. A different Account Number, Quantity, Stop Limit Offset, or Threshold can be entered by selecting the cell with the previous value and typing a new one. A Buy order can be changed to a Sell order or a Sell order can be changed to a Buy order by selecting the Buy or Sell value. The Price can be changed by selecting the previous price and left-clicking to reduce the price or right-clicking to increase the price. Trailing can be turned on and off for a Stop order by selecting the Trailing Active checkbox. The Exchange, Contract, and Order Type values cannot be changed. Only the fields applicable for the placed order will display in the Confirmation window. For example, the Stop Limit Offset, Trailing Active, and Threshold values would not display when placing a standard Limit order.

89. Selecting the Confirm button will place the order while selecting the Cancel button will not submit the order.

90. If the Delete Order Confirmation preference is selected, a basic message window will display confirming if you want to Delete your order.

91. If the Change Order Confirmation preference is selected, a basic message window will display confirming if you want to Change your order.

Locally Held Orders

92. If PS Trader is closed while Virtual Stops are working, a message will display. If the user confirms that PS Trader should close, the Virtual Stops will be saved. Upon re-launching PS Trader, the Stops will be in a locally held state and can then either be released as virtual orders or deleted. Locally held orders are distinguished by a peach background. Figure 10 displays the Order Pane with a locally held order.

Contract	Qty	Chg	Rel	Price	Stop Price	TO	Acct#	Type	Time Stamp	Del
ZF Dec05	5		Send	113050	113030	1	12345	Stop L	Held Locally	X

Figure 10. Order Pane – Locally Held Order

93. In order to release a locally held order back into a Virtual order, click on Send in the Rel column of the Order Pane. The order will change from a peach background to a beige background and the Time Stamp column will display Not In Market to indicate the order is again a Virtual Order.

94. In order to instead delete the locally held Order, click the X in the Del column of the Order Pane.

Requirements

This application requires:

- X_TRADER® API
- X_TRADER®