Reward:Risk

Futures

Position Sizer

User Guide

A Custom Sierra Chart Study Developed by

Forgiving Computers



For users of

SIERRA CHART

RISK DISCLOSURE - Trading Futures on margin carries a HIGH LEVEL OF RISK, and may not be suitable for all investors. Before deciding to trade you should carefully consider your investment objectives, level of experience, and risk appetite. The possibility exists that you could sustain a loss of some or all of your initial investment and therefore you should not invest money that you cannot afford to lose! The high degree of leverage associated with trading currencies and futures means that the degree of risk compared to other financial products is higher. Leverage (or margin trading) may work against you resulting in substantial loss, and a sensation similar to getting sucker punched in the stomach. There is considerable exposure to risk in any on Exchange Based or off-exchange foreign exchange transactions, including, but not limited to, leverage, creditworthiness, limited regulatory protection and market volatility that may substantially affect the price, or liquidity of a currency or currency pair. You should be aware of all the risks associated with any type of trading, and seek advice from an independent financial advisor if you have any doubts.

Introduction

> *"Novice Traders trade 5 to 10 times too big. They are taking 5 to 10% risks on a trade they should be taking 1 to 2 percent risks."*
>
> *– Bruce Kovner*

The latest version of the Risk-Based Futures Position Sizer uses the Risk:Reward tool to set up a trade with only 3 clicks.

Consistently risking a small percentage of your account on each trade (like 1–2%) greatly improves your ability to handle drawdowns.

This tool automatically calculates your order size based on your chosen risk percentage, account balance, margin requirements, and stop placement. Up to 5 Targets are set based on multiples of the drawn Target, or multiples of the Stop.

In addition, the Stop, Entry, and Target values can be set to snap to the any bar's Open, High, Low, or Close, with a sensitivity setting and an optional offset.

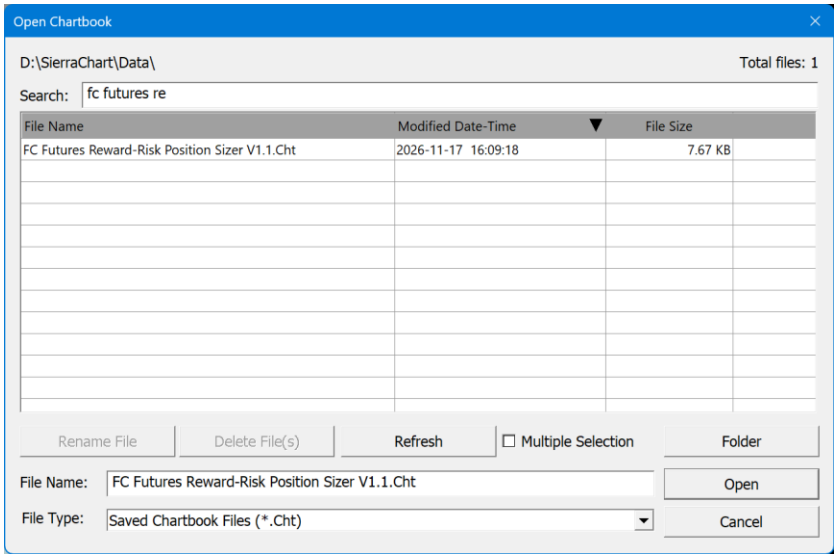
The custom study handles all the calculations, so you don't need to use external websites or spreadsheets to figure out position size. With on-chart trading, you simply place your entries and stops, and the system calculates everything for you—making trade entry quick and easy.

With the Order Size Calculator, you can focus on trading while staying disciplined with your risk management—saving time and boosting productivity.

Installation

After your order is processed and your Sierra Account is authorized, you'll get a confirmation email. Then, close Sierra Chart if it's open and restart it on version 2969 or higher. The DLL and related files will download automatically—just wait about 15 seconds after restarting for the download to finish.

You can then open the sample chartbook: **`FC Reward Risk Position Sizer V1.1.Cht.`**



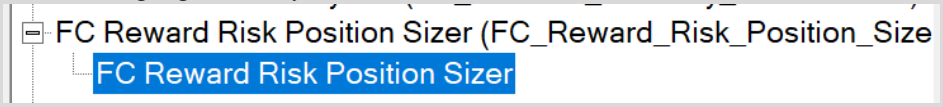
If you don't see any candlesticks, either switch to Sim or do **Edit>>Translate Symbols to Curent Service.**

The following is for a Trade Risk of 1% of a $1,000,000 account ($10K). Relevant Order Information is on the screen. The Order Quantity is the maximum number of contracts that keeps your risk at $10K or less. In this example, if it were the NQ instead of the MNQ, it would be 1 contract. If the Order Quantity for the Micros, is less than 10, then there would be no trade on the Minis.



To Add the Position Sizer to any chart:

1. **Analysis>>Studies>>Add Custom Study**
2. Select the highlighted Study



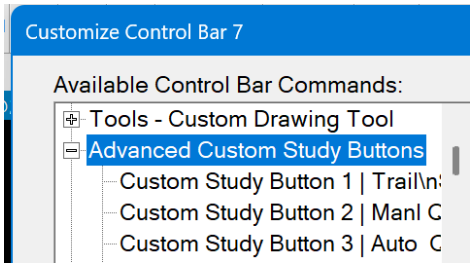
3. Click **Add.**

Setup

Control Bar Buttons (Optional):



1. To add the control bar buttons: **Global Settings>>Customize Control Bars>>Control Bar [n]**
2. On the left side of the Window Expand **Advanced Custom Study Buttons**



3. Locate Custom Study Button 143 and Click Add.
4. Repeat for Buttons 144 and 145
5. Use the Move Up and Move Down buttons to change the Left to Right order of the buttons.
6. Click OK. The text will be filled in by the study.

Study Settings: (Click on Description to Display online)

If you want to return to the pointer or hand tool after using the drawing tool, then do the following:
Global Settings >> Tool Settings >> General >> After Single Use Tool Change To: Pointer Hand etc.

Note: It is recommended that the Reward Risk Drawing Tool be configured properly before use.

The Sierra Chart Auto-Snap feature should be disabled as follows:
Global Settings >> Tool Configs >> Reward/Risk Config >> No Auto-Snap>> Yes</br?

Input Name	Input Description
Click Description for Important Info	See above about Tool Configuration and Auto-Snap.
Enable Auto Position Sizing	Yes: The position size will be automatically calculated based on the risk parameters you set. No: The position size will be determined by the Manual Order Quantity input.
Order Type	Select the order type to use for submitting orders. Automatic: The order type will be determined by the location of the entry price relative to the market. Market: A market order will be submitted. Limit: A limit order will be submitted. Stop: A stop order will be submitted. Stop Limit: A stop limit order will be submitted.
Manual Order Quantity	The number of contracts to trade when Auto Position Sizing is disabled.
Maximum Contracts per Trade	Set this to the maximum futures contracts for each trade.
Risk Method	Select the method to use for calculating risk per trade. Currency ($): Risk is calculated as a fixed dollar amount. Fixed Percent Risk: Risk is calculated as a fixed percentage of the account balance.
Currency Risk Amount ($)	Enter the fixed dollar amount of risk per trade.
Fixed Percent Risk (%)	Percent Maximum Risk of the Available Account Balance for any single trade.
Target Multiplier Method	Drawing: Only the drawn Target is Used without scaling (T1). All other Target Multipliers will be ignored. Multiples of Target: The Target price(s) will be the Drawn Target Multiplied by the factors below.Note: this is consistent with the Sierra Chart Method of Entering multiple targets with the Chart Drawing Properties Multiples of Stop: Target price(s) will be the Drawn Stop (R) Multiplied by the factors below.
Target 1 Multiple	Set the multiple for Target 1. Must be > 0. Ignored if Drawing is selected.
Target 2 Multiple	Set the multiple for Target 2.

Target 3 Multiple	Set the multiple for Target 3.
Target 4 Multiple	Set the multiple for Target 4.
Target 5 Multiple	Set the multiple for Target 5.
Get Account and Available Balances from:	Trade Service: Sierra Gets values from the broker, if supported (Preferred) Input Settings: Enter the Values Below
Available Balance	The Available Balance is your Cash Balance available for new positions.
Initial Margin	This is the amount needed in your account to trade each contract of this chart's symbol. It is used to determine the maximum number of contracts available to trade.
Trade Commission	Enter the commission per trade.
Enable Snap Stop Price To OHLC	Set the stop price to snap to the selected OHLC value. Open: Snap to the Previous Open, if within the Stop Snap Sensitivity. High(Short)/Low(Long): Snap to the Previous High for Short positions or Low for Long positions, f within the Stop Snap Sensitivity. Low(Short)/High(Long): Snap to the Previous Low for Short positions or High for Long positions, if within the Stop Snap Sensitivity. Close: Snap to the Previous Close, if within the Stop Snap Sensitivity. Depending on the Direction, the Stop price will snap to the appropriate High or Low value.
Stop Snap Sensitivity (Ticks)	The maximum distance in ticks that the stop price can snap to the selected OHLC value.
Stop Snap Offset (Ticks)	The number of ticks to offset the stop price from the selected OHLC value when snapping. A positive value will place the stop further away from the market, while a negative value will place it closer to the market.
Enable Snap Entry Price To OHLC	Set the entry price to snap to the selected OHLC value. Open: Snap to the Previous Open, if within the Entry Snap Sensitivity. High(Short)/Low(Long): Snap to the Previous High for Short positions or Low for Long positions, if within the Entry Snap Sensitivity. Low(Short)/High(Long): Snap to the Previous Low for Short positions or High for Long positions, if within the Entry Snap Sensitivity. Close: Snap to the Previous Close, if within the Entry Snap Sensitivity. Depending on the Direction, the Entry price will snap to the appropriate High or Low value. Note: All Snap settings may use the Entry Snap Offset value.
Entry Snap Sensitivity (Ticks)	The maximum distance in ticks that the entry price can snap to the selected OHLC value.
Entry Snap Offset (Ticks)	The number of ticks to offset the entry price from the selected OHLC value when snapping. A positive value will place the entry further away from the market, while a negative value will place it closer to the market.
Enable Snap Target Price To OHLC	Set the target price to snap to the selected OHLC value. Open: Snap to the Previous Open, if within the Target Snap Sensitivity. High(Short)/Low(Long): Snap to the Previous High for Short positions or Low for Long positions, if within the Target Snap Sensitivity.

	Low(Short)/High(Long): Snap to the Previous Low for Short positions or High for Long positions, if within the Target Snap Sensitivity. Close: Snap to the Previous Close, if within the Target Snap Sensitivity. Depending on the Direction, the Target price will snap to the appropriate High or Low value. Note: All Snap settings may use the Target Snap Offset value.
Target Snap Sensitivity (Ticks)	The maximum distance in ticks that the target price can snap to the selected OHLC value.
Target Snap Offset (Ticks)	The number of ticks to offset the target price from the selected OHLC value when snapping. A positive value will place the target further away from the market, while a negative value will place it closer to the market.
Shade Risk/Reward Zones	Yes: The risk and reward zones will be shaded on the chart. No: The risk and reward zones will not be shaded.
Color: Reward	Color for the reward zone of the drawing.
Color: Risk	Color for the risk zone of the drawing.
Transparency	Set the transparency level for the risk and reward zones. 0 = fully transparent, 100 = fully opaque.
Draw Reward/Risk Tool Button	Set the number of the control bar button to use for drawing the Reward/Risk tool. Note: Use this button and not the Reward/Risk drawing tool.
Submit Orders Button	Set the number of the control bar button to use for submitting orders. Use the Order Type Setting above to determine the type of order to submit. Note: This button will function only when there is a valid drawing on the chart.
Erase R:R Drawings Button	Set the number of the control bar button used to erase all Reward/Risk drawings from the chart.

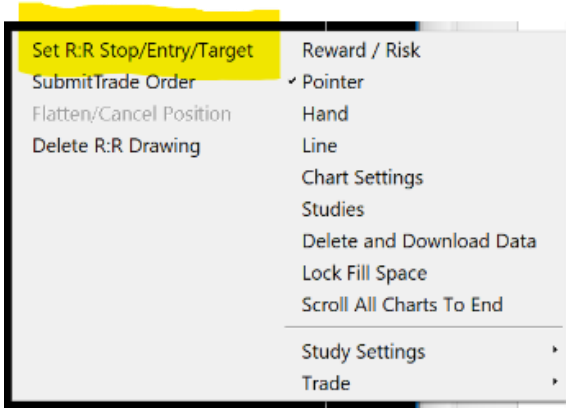
Using the Tool

Setting Up the Trade

1. To Draw the Risk:Reward Tool, either click the button (if configured, see above)



or Right-Click on the chart and select the first item at the top left of the Menu (your right side may look different from mine):



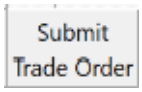
2. Move the mouse pointer to select a Stop Price then Click
3. Move the mouse pointer to select an Entry Price then Click
4. Finally move the mouse to select a target Price and Click.
5. A rectangle is formed outlining the Reward and Risk areas, along with the R:R ratio.



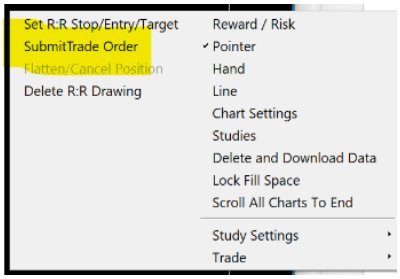
6. The Red Dot is the Stop, the White Dot is the Entry, and the Green Dot is the Target. The Risk and Order Quan

Submitting the Trade

Once you are ready you can either click the button:



Or you can Right-click and select **Submit Trade Order.** Limit and Stop Entry orders are determined based on the direction of the trade.



The Orders are Submitted, and the Target Order Quantities are distributed from the bottom up.



If you want to create a new drawing click on **Set R:R Stop/Entry/Target** and the current one will be removed and you will be in drawing mode. Or you can just delete the drawing.

Snap to OHLC

The Stop, Entry, and Target can be "Snapped" to a value relative to the last bar with an offset. A sensitivity setting determines the maximum distance the mouse price can be from the respective bar value.

For example: For the Stop Snap Price:

1. The Bar associated with the Stop click is the OHLC bar.
2. Set the stop price to snap to the selected OHLC value.

- Open: Snap to the Open, if within the Stop Snap Sensitivity.
- High(Short)/Low(Long): Snap to the Previous High for Short positions or Low for Long positions, if within the Stop Snap Sensitivity.
- Low(Short)/High(Long): Snap to the Previous Low for Short positions or High for Long positions, if within the Stop Snap Sensitivity.
- Close: Snap to the Previous Close, if within the Stop Snap Sensitivity.

Depending on the Direction, the Stop price will snap to the appropriate High or Low value.

For example: For the Entry and Target, the Entry and Target clicks need to be within the sensitivity range of the selected Snap-To price,

Note: If the Click is outside of the sensitity range, then there will not be a snap. You can Click to create a new drawing without needing to delete the first.

Calculating The Order Quantity:

The following information is used to calculate the Buy or Sell Order Quantity.

Inputs:

1. Stop Level
2. Entry Level
3. Available Balance (See below)
4. Risk Tolerance (%)
5. Margin Required per Contract [$]

[*] Note that Account Balance and Available Balance can be obtained in three ways.

Balance Source

1. Trade Service: Sierra Gets values from the broker, if supported. To determine if your broker supports \ this, add the Sierra Study '**Account Balance Text** – **External Service**' to any chart, and if the value returned matches your account balance, then it is supported. If you get a super large number it is not supported. The back test replays do not support this. (Preferred)
2. Input Settings: Enter the Values Below:
    a. Available Balance: This is what is available *when you are already in a position.* You can set this to a number that reflects your typical available balance when already in a trade

FAQ

Q: How do I Clone a Chartbook?

A: The DLL studies that are part of the system makes cloning a chartbook the same as cloning any other chartbook. Use **File>>Save Chartbook As**" to make a copy/clone of the chartbook with a new name.

Q: I am not seeing any Chart Menu

A: If you right-click on the chart and you do not see any of the chart menu items (Set Stop Level, etc.) then use Recalculate to refresh the menus. Go to **Chart>>Recalculate.**

Q: Do I need to enable Auto Trading?

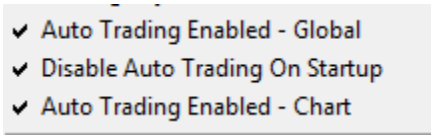
A: Yes. Custom studies that enter trades and move stops, need to have Auto-Trading enabled, even if the system is controlled by you through the Chart Menu. If Auto-Trading is disabled at the Global (ATG) or Chart Level (ATC) then everything is manual and the custom study will not do any order entries or modifications. See the FAQ on how to add Control Bar Buttons to control the various aspects of Auto-Trading and Trade Management. In addition, Trailing Stops (TMS) also need ATG and ATC enabled to function.

1) Enable Global Auto Trading

   This is the Master Switch that turns on and off all (Global) Auto-Trading in all open chartbooks. Note that turning it on the first time will not begin Auto-Trading, it is more like the Master Switch that shuts off any Auto-Trading that is going on. For now, we will turn it on by doing **Trade>>Auto Trading Enabled – Global.**

2) Each Chart can also have its Auto-Trading Enabled or Disabled. The setting for the chart is Auto-Trading Enabled – Chart. This setting is saved with the chartbook. The default is that it is disabled.

   Your Trade menu should look like this:

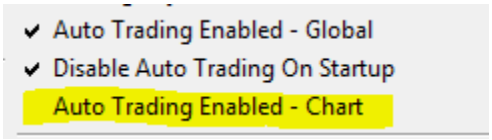


   Any chart that you are OK with Auto-Trading from should have checkmarks for both Auto Trading Enabled - Global and Auto Trading Enabled - Chart. Checking Disable Auto Trading on Startup is normally recommended on Auto-Trading systems that can enter trades without user interaction. Since this tool requires user interaction to enter trades, is not a requirement.

3) Disable Auto Trading from charts you don't want to Auto-Trade from

Any chart you don't want to Auto-Trade from should have "Auto Trading Enabled – Chart" UNCHECKED. Remember, it is a chart specific setting that is saved with the chart.

   Like this:



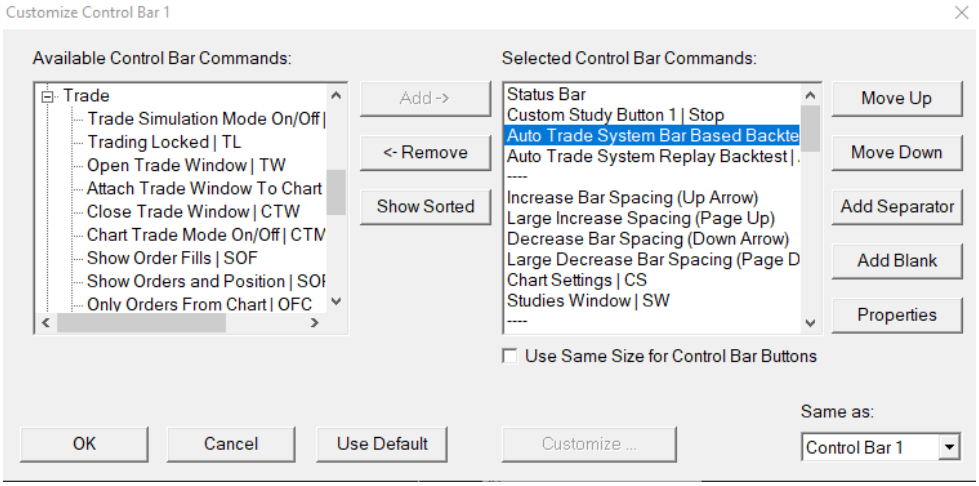
Q: How do I create Control Bar Buttons for Auto-Trade Enable/Disable?

A: To simplify the setting of the Auto-Trade-Global and Auto-Trade Chart, you may want to add a button for each to the control bar. To do this either

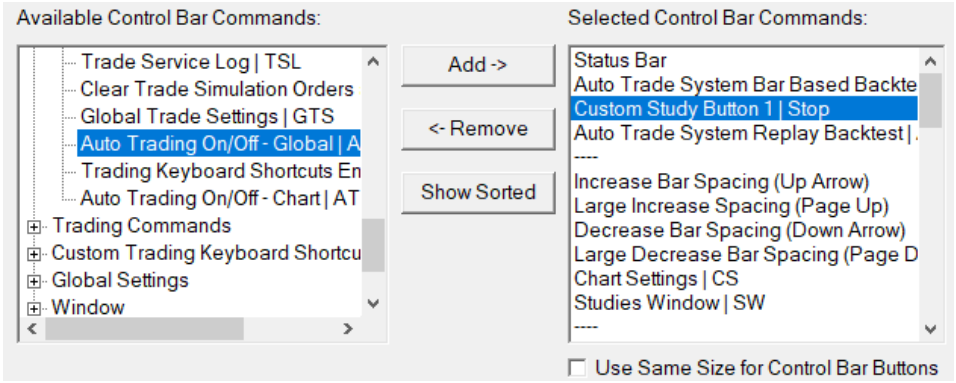
1. Use **Global Settings>>Customize Control Bars>> Control Bar 1** (or whichever one you are using).
2. Right-Click on the unused space of any Control Bar

Auto-Trading Buttons

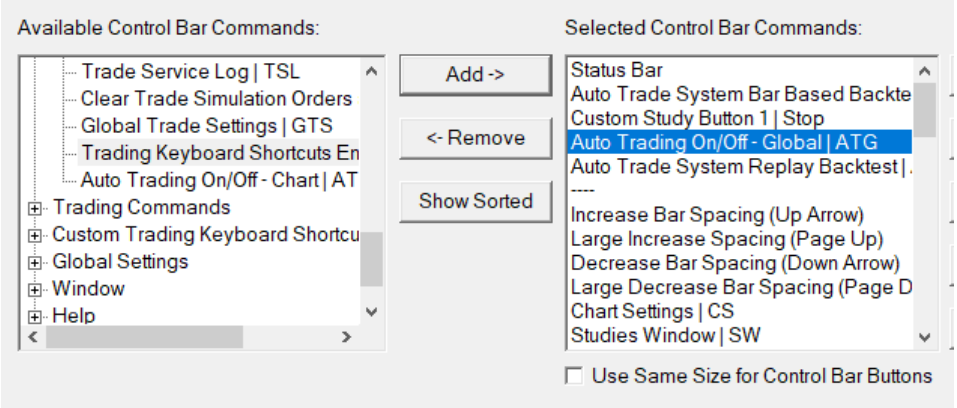
a. On the left scroll down to Trade and click the "+" sign to expand the list:



b. Scroll down to "Auto Trading On/Off - Global|ATG" and select it and click "Add->"



c. You will see the selected item move to the right side:



d. Repeat steps c and d for "Auto Trading On/Off | ATC" and click OK.

e. You should now have two buttons labeled ATG and ATC on your control bar.

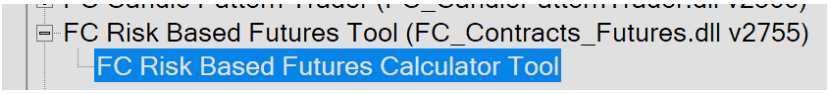


← Note the ATG is Enabled because it appears depressed, the ATC is not enabled. The ATC button will change appearance as you go from one chart to another depending on whether that chart is enabled or not. This is a shortcut to visually check the setting and to change it quickly.

Q: How do I add the study to another Chartbook?

A: If you wish to use the studies in your own chartbook, then you need to add them in the correct order and check the settings for compatibility with your charts.

1. Open the Study Settings Window (**Analysis>>Studies)**
2. Click Add Custom Study
3. Find FC Contract Calculator Plus, click the + sign, select Forex Advanced Position Size Calculator:



4. Click Add.