

CQG Spreader Quick Reference Guide

Creating a Spread QFormula ›

Spread formula components

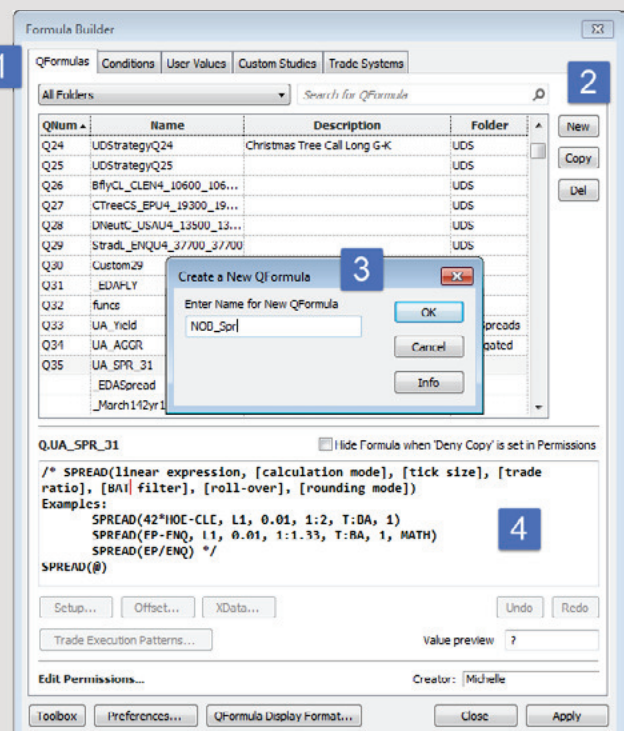
Spread formula = SPREAD (<CQG expression>, <calculation mode>, <tick size>, <trade ratio>, <BAT filter>, <rollover>, <rounding mode>)

- **CQG expression:** Symbols and multipliers for spread.
- **Calculation mode:** How spread is calculated, by legs or currency.
L1, L2, L3, etc. = price based on tick value of leg selected
CUR = price based on full currency values of legs
- **Tick size:** Spread tick size in binary or decimal.
1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/128, 1/256, 1/512, 1/1024, 1/2048, 1/2 1/64, 1/8 1/32, 1/4 1/32, 1/2 1/32
CUR = tick size is greatest common denominator (GCD) of leg tick values or minimum tick value if GCD is not applicable
- **Trading ratio:** Order quantity for each leg in this format: leg1:leg2:leg3. Can be fractional.
- **BAT filter:** Leg bid/ask and trade filter. Separate filter for each leg with a colon, BA:T.
BA = for buy leg, leg ask price is used for spread ask price calculation and leg bid price is used for spread bid price calculation and vice versa for sell legs
T = trades are used for both synthetic spread ask and bid prices calculation
B = leg ask/bid price is used for spread ask/bid price calculation
- **Rollover:** If turned on, when one leg expires, all legs roll over to same month.
0 = same month rollover is turned off
1 = same month rollover is turned on
- **Rounding:** Rounding for fractional lots resulting from fractional trade ratios in complex strategies.
DOWN = always round down
UP = always round up
MATH = round up when fractional part is 5 or greater; round down when fractional part is less than 5

Find additional details at help.cqg.com.

To create a spread QFormula

1. Open Formula Builder, and go to the QFormulas tab.
2. Click the **New** button.
3. Type a name, then click **OK**.
4. Type **SPREAD(** in the editor. The system displays the spread format.
5. Replace **SPREAD (@)** with your formula, then click **Apply**. The system assigns a QNumber that you can enter directly on trading applications.



Setting Trading Parameters ›

Messaging Parameters

These parameters help mitigate messaging:

▼ Messaging Reset ?		
Min Size Increment		1
Lots		<input checked="" type="radio"/>
%		<input type="radio"/>
▼ Active Price Range		
Price Range for Working Orders		Default ▼
Order Action outside active range		
Default		<input checked="" type="radio"/>
Cancel working leg		<input type="radio"/>
Work leg, periodically update		<input type="radio"/>
Work leg, periodically update, and actively move away from MKT		<input type="radio"/>
Min Price Change		Default ▼
Periodic Force Update		Default ▼

- **Min Size Increment:** Working order modified only if quantity available in monitored leg increases by at least this amount. Working order size is always modified down on a decrease when the available quantity on the monitored market decreases.
- **Active Price Range:** Range (from best bid/best offer, whichever is closest) where orders are actively worked.

Range Size: Price increments from best bid/best offer where orders will be worked or modified.

Order Action outside active range: How system handles working legs that are far from best bid/best ask. A working leg order is considered far from best bid/ask by number of price increments specified in Active Price Range. Default = do not override server settings.

Cancel working leg = cancels leg immediately if outside range.

Work leg, periodically update = keep order wherever it is and move it only when time comes for a periodic update (set in Periodic Force Update field).

Work leg, periodically update, and actively move away from MKT = keep order wherever it is, but move order away from the market every time it should be adjusted away, and periodically update it closer to best bid/ask when necessary.
- **Min Price Change:** Working leg order price update in price increments/ticks. System ignores any price changes smaller than this value.
- **Periodic Force Update:** Period of updates to the working leg order in seconds, such that every n seconds, the leg is put where it ought to be placed based upon current prices.

Other Trading Parameters

▼ Spread Properties Reset ?

- **Color:** Background color of trading window.
- **Overfill Management:** Manages overfills.

No selection = Trader manages overfill and system takes no action.

Auto Hedge Overfills = Maintains leg ratio when either the working or leaning leg is overfilled.

Avoid Overfills = Minimizes chance for an overfill to occur by working legs less aggressively.
- **Ignore partial fills in price discovery:** Ignores fill prices on primary order.

▼ How to Work Reset ?

- **Size:** Size of each leg as determined by leg ratio setting.
- **Fractional Lot Size Rounding:** For fractional lots resulting from fractional trade ratios in complex strategies, rounds up, down, or mathematically.
- **Work:** Leg to work: one, all, or neither.
- **Complete Strategy using:** Order type for orders placed on this leg as a result of a working leg fill: limit, limit with offset, or market.
- **Price Level Controls:** Defines if and where Spreader must work quantity that cannot lean onto current best bid/offer (ticks away to work at additional level) and how to work orders considering depth of market.
- **Liquidity Controls:**

Volume Multiplier = Determines size of working orders based on a percentage of resting volume available in queue of monitored leg.

Work Threshold = Tells system to work order if and only if available quantity in monitored leg is and remains greater than this value.

▼ Proportional Execution Reset ?

- **Trigger leaning leg:** Used with ratio spreads. How many contracts (lots or percent) should be filled before second leg order is placed.

▼ Queue Holders Reset ?

- **Min and Max Number of holders:** Minimum and maximum number of orders to include in queue.
- **# of levels:** Number of price levels skipped between orders in queue.
- **Order size restore threshold:** How far the market runs before maximizing size of a recently placed order that is now part of the group of stacked orders. The size of the working order is based on the currently available size in the monitored leg and the size of the orders in the group of stacked orders at the maximum order size. This setting overrides that system behavior in order to cut down on messaging.

Setting Trading Parameters ›

▼ If Incomplete Reset ?

- Replace order to complete strategy by using selected method below:** Determines whether the system should react to incomplete orders. Used with trailing limits and payups to determine how incomplete orders should be handled (the incomplete strategy). If not selected, the system does nothing.
- Execute incomplete strategy if order is not filled in this many seconds:** Amount of time that must elapse from acknowledgement before incomplete strategy is executed. It allows you, for example, to wait a second to see if the market comes back.
- Allow leg to slip this number of ticks:** Maximum number of ticks of slippage for the incomplete strategy. Can be a positive or negative value.

Trailing Limit, same side = Places a trailing limit order that tracks the same side as the incomplete order.

Trailing Limit, opposite side = Places a trailing limit order that tracks the opposite side of the incomplete order.

Payups = Replaces the original limit order to complete the spread with a limit order that has the price adjusted based on number of slip ticks.
- Monitor leaning DOM volume to determine when to replace order:** Determines whether the system should monitor leaning DOM volume. The condition chosen from the list below must be met before the unfilled order is modified (either payup or trail it).
- Volume or volume ratio threshold:** Determines whether the system should monitor leaning DOM volume. This condition must be met before the unfilled order is modified (either payup or trail it).

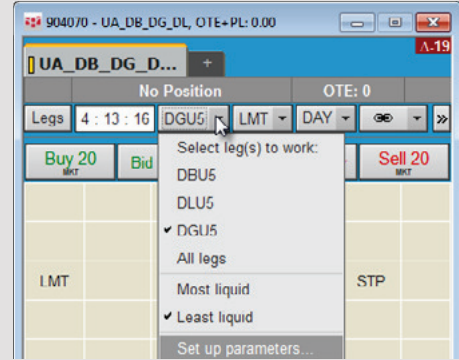
DOM Volume = Uses threshold parameter as an absolute volume. When the leaning leg volume available at the exchange (best bid/ask, as appropriate for a leaning sell/buy order) drops below this specified volume, then the system performs a payup (replaces the original limit order to complete the spread with a limit order that has the price adjusted based on specified number of slipped ticks) or a trailing limit.

DOM Volume relative to order size = Uses threshold parameter as volume ratio.

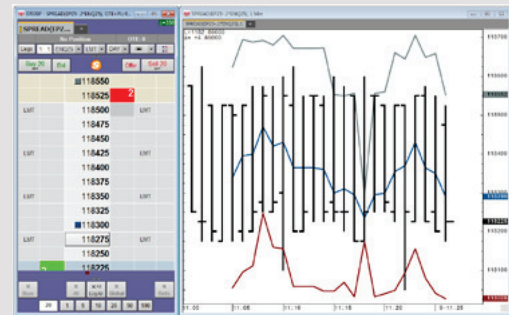
DOM ratio between best bid/ask = Uses threshold parameter as volume ratio. When ratio between volumes available at the exchange (best bid/ask for a leaning sell order, best ask/bid for a leaning buy order) falls below specified ratio, the system performs a payup (replaces original limit order to complete spread with a limit order that has the price adjusted based on specified number of slipped ticks) or a trailing limit.

Working Leg Options ›

On the working leg menu, choose the legs to work first: most liquid, least liquid, or all legs (works legs simultaneously). Clearing all legs initiates Sniper mode.



Charting Spreads ›



DOMTrader and the chart display the spread between the E-mini S&P and E-mini NASDAQ 100 contracts. Bollinger band study values are displayed on the DOM ladder.