

Pegged-to-Stock Orders

A Pegged to Stock order continually adjusts the option order price by the product of a signed user-define delta and the change of the option's underlying stock price. The delta is entered as an absolute and assumed to be positive for calls and negative for puts. A buy or sell call order price is determined by adding the delta times a change in an underlying stock price to a specified starting price for the call. To determine the change in price, the stock reference price is subtracted from the current NBBO midpoint. The Stock Reference Price can be defined by the user, or defaults to the NBBO midpoint at the time of the order if no reference price is entered. You may also enter a high/low stock price range which cancels the order when reached. The delta times the change in stock price will be rounded to the nearest penny in favor of the order.

Products	Availability	Routing	TWS
Options <input checked="" type="checkbox"/>	US Products <input checked="" type="checkbox"/>	Smart <input checked="" type="checkbox"/>	Attribute <input type="checkbox"/>
	Non-US Products <input type="checkbox"/>	Directed <input checked="" type="checkbox"/>	Order Type <input checked="" type="checkbox"/>
			Time in Force <input type="checkbox"/>
View Supported Exchanges		Open Users' Guide	

Example



Order Type In Depth - Pegged-to-Stock Buy Order

Step 1 Enter a Pegged-to-Stock Buy Order

In this example, we show how to use a pegged-to-stock buy order to continually adjust an option order price by the product of a user-define delta and the change of the option's underlying stock price. First, use TWS's Customize Layout feature to display the Stock Reference Price and Delta columns, then click the Ask price of a call option to create a buy order. Select PEG STK from the Type field, then enter the option starting price, stock reference price and delta as shown above. Enter the delta as an absolute value; this will be used by the order as a percent in this example, we enter 50 for 50%). Transmit the order.

Ensure your option is routed to SMART (or an exchange that supports this order type). Note that this order type is only valid for US Equity options.

Assumptions	
Action	BUY
Qty	100
Order Type	PEG STK
Stock Market Price (NBBO) Range	\$130.78
Stock Midpoint	130.80
Option Market Price (NBBO) Range	7.30 7.50
Option Midpoint	7.40
Option Starting Price	
(By default, this is set to the Option Midpoint at the time the order is submitted.)	7.40
Stock Reference Price	
(By default, this is set to the stock NBBO midpoint at the time the order is submitted.)	139.79
Delta	50%
Limit Price	7.40



Order Type In Depth - Pegged-to-Stock Buy Order

Step 2 Order Transmitted

Your pegged-to-stock order has been submitted. The bid is entered at the midpoint of the option NBBO, or \$7.40. As the price of the underlying moves, the price of the option moves by the delta (in this example, 50%) times the change in the stock price.

Assumptions	
Action	BUY
Qty	100
Order Type	PEG STK
Stock Market Price (NBBO) Range	\$130.78 130.80
Stock Midpoint	130.79
Option Market Price (NBBO) Range	7.30 7.50
Option Midpoint	7.40
Option Starting Price	7.40
Stock Reference Price	139.79
Delta	50%
Limit Price	7.40



Order Type In Depth - Pegged-to-Stock Buy Order

Step 3 Price Rises

In this scenario, the underlying stock midpoint moves up by \$0.10. The option midpoint rises to \$7.45, which is the delta multiplied by the change in underlying price, or 50% x 0.10, or 0.05.

Assumptions	
Action	BUY
Qty	100
Order Type	PEG STK
Stock Market Price (NBBO) Range	\$130.88 130.90
Stock Midpoint	130.89
Option Market Price (NBBO) Range	7.35 7.55
Option Midpoint	7.45
Option Starting Price	7.40
Stock Reference Price	139.79
Delta	50%



Order Type In Depth - Pegged-to-Stock Buy Order

Step 4 Price Falls

In this scenario, the underlying midpoint falls by \$0.10 to \$130.69. The option midpoint falls to \$7.35, which is the delta multiplied by the change in underlying price, or $50\% \times (-0.10)$ or -0.05 .

Assumptions	
Action	BUY
Qty	100
Order Type	PEG STK
Stock Market Price (NBBO) Range	\$130.68 130.70
Stock Midpoint	130.69
Option Market Price (NBBO) Range	7.25 7.45
Option Midpoint	7.35
Option Starting Price	7.40
Stock Reference Price	139.79
Delta	50%

Any stock or option symbols displayed are for illustrative purposes only and are not intended to portray a recommendation.

The Reference Table at the top of the page provides a general summary of the order type characteristics. The checked features are applicable in some combination, but do not necessarily work in conjunction with all other checked features. For example, if Options and Stocks, US and Non-US, and Smart and Directed are all checked, it does not follow that all US and Non-US Smart and direct-routed stocks support the order type. It may be the case that only Smart-routed US Stocks, direct-routed Non-US stocks and Smart-routed US Options are supported.