

Price Improvement Auction Orders

For option orders routed to the Boston Options Exchange (BOX) you may elect to participate in the BOX's price improvement auction in pennies. All BOX-directed price improvement orders are immediately sent from Interactive Brokers to the BOX order book, and when the terms allow, IB will evaluate it for inclusion in a price improvement auction based on price and volume priority. In the auction, your order will have priority over broker-dealer price improvement orders at the same price.

Enter your order price in penny increments, and it will be rounded to the nearest listed increment in favor of the order (bids and offers will continue to be listed in increments of \$0.05 or \$.10) until the start of the auction. Should an auction start, your improvement amount will be the absolute difference of your order price in pennies and your rounded listed price.

Interactive Brokers' customers submitting Smart marketable options orders will have their orders routed to BOX when BOX is at the NBBO, and Interactive Brokers has information that there is an NBBO improvement order on the opposite side of the trade, in which case your order will be exposed to a price improvement auction.

Products	Availability	Routing	TWS
Options <input checked="" type="checkbox"/>	US Products <input checked="" type="checkbox"/>	Smart <input 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"/>

[Open Users' Guide](#)

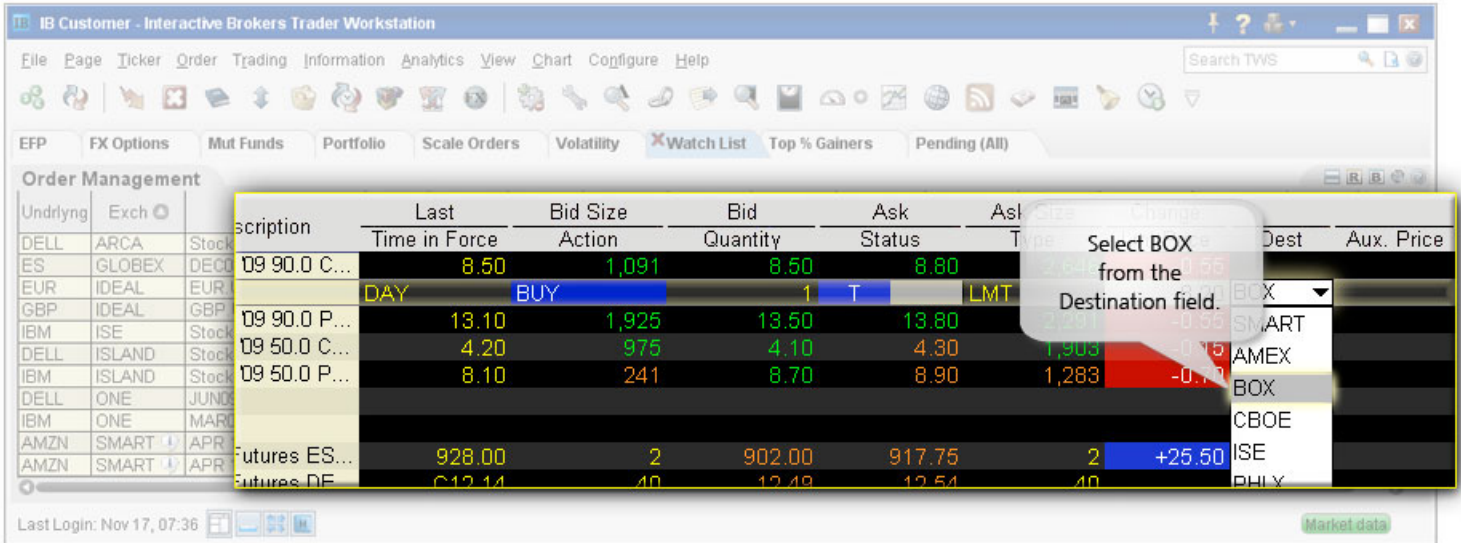
Order Types

Limit: A buy or a sell order at a specified price. Use of a limit order ensures that you will not receive an execution at a price less favorable than the limit price. Enter limit orders in penny increments with your auction improvement amount computed as the difference between your limit order price and the nearest listed increment.

Relative: A buy or a sell order that is set at a fixed offset to the current NBBO (National Best Bid Offer). A buy order price is specified at an offset higher than the current NBB (National Best Bid), and a sell order price is specified at an offset lower than the current NBO (National Best Offer). If you do not enter an offset it will be assumed to be zero. Enter offsets in penny increments which will be used as your auction improvement amount.

Pegged to Stock: A buy or a sell order that adjusts the order price by the product of a signed delta (which is entered as an absolute and assumed to be positive for calls, negative for puts) and the change of the option's underlying stock price. A buy or sell call order price is determined by adding the delta times a change in an underlying stock price change to a specified starting price for the call. To determine the change in price, a stock reference price (NBBO midpoint at the time of the order is assumed if no reference price is entered) is subtracted from the current NBBO midpoint. A stock range may also be entered that cancels an order when reached. The delta times the change in stock price will be rounded to the nearest penny in favor of the order and will be used as your auction improvement amount.

Example



To enter a limit order, select limit order in the **Type** field and enter a limit price. As an example, if the market was \$2-2.10 and you wanted to enter a buy limit order at \$1.97 you would enter:

Order Type:	Limit
Limit Price:	1.97
Aux Price:	N/A

If the bid on BOX moves to \$1.95, and if an auction were to start, you would immediately bid \$1.97 in the auction.

To enter a relative order, select *Relative* in the **Type** field and enter an offset. For example, if the market was \$2-2.10 and you wanted to enter a sell relative order with a \$.04 offset, you would enter:

Order Type:	Relative
Limit Price:	N/A (Optional)
Aux Price:	.04 (Offset)

If the listed offer moved to \$2.05, and if an auction were to start and the first auction offer was \$2.04, your auction offer would then be \$2.03. Your auction price would continue to improve the auction by \$.01 until you reached \$2.01.

To enter a Pegged-to-Stock order, select *Pegged* in the **Type** field and enter a starting price, then enter a stock reference price (optional), and a stock range (optional). For example if the market was \$2-2.10 and you wanted to enter a buy pegged-to-Stock call with a starting price of \$2.05, a delta of .5, a stock reference price of \$100, and a stock range of \$98-\$102, you would enter:

Order Type:	Pegged-to-Stock
Limit Price:	N/A
Aux Price:	2.05 (Starting Price)
Delta:	.5
Stock Reference:	100
Stock Range (Low):	98
Stock Range (High):	102

Your bid would be entered at \$2.05. If the NBBO midpoint price of the stock went to \$100.05 your bid would be \$2.06, and would continue to move up until you reached \$2.07 (the .5 delta times \$.05 stock move rounded down to the nearest increment). If the NBBO midpoint price of the stock were to go above \$102 or below \$98, the order would be cancelled.

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.