

NASDAQ REFERENCE GUIDE

Order Types and Routing Strategies

NASDAQ[®] offers a single, streamlined platform with superior technology and increased trading efficiency. To better serve our customers, NASDAQ provides users with various sophisticated order types and routing strategies for trading all U.S. equity securities.

NASDAQ ONLY (NON-ROUTABLE):

INTERMARKET SWEEP ORDER (ISO)

Indicates that the entering firm has already checked all other protected quotes before coming to NASDAQ. This order will not route. It will trade at NASDAQ's best prices regardless of prices in other market centers.

PRICE-TO-COMPLY ORDERS

Complies with the Reg NMS Order Protection Rule and Locked and Crossed market rule by re-pricing and converting into a non-displayed order. Buy orders will be priced at the inside offer and sell orders will be priced at the inside bid. If the market moves, the order will be re-priced to the new inside. In addition, if the market moves such that the display of the original entered price would not result in a locked market, the order will be displayed at its original entered price.¹

NASDAQ CROSS ORDERS:

ON-OPEN ORDERS

Specifically request an execution at the opening price.

- Can be limit-on-open or market-on-open.
- Accepted beginning at 7:00 a.m., Eastern Time (ET), each day.

IMBALANCE-ONLY OPEN ORDERS

Provides liquidity intended to offset on-open orders during the Opening Cross.

- Must be priced (limit), no market imbalance-only orders.
- Imbalance-only buy/sell orders only execute at or above/below the 9:30 a.m., ET, offer/bid.
- Accepted beginning at 7:00 a.m., ET, each day.

ON-CLOSE ORDERS

Specifically request an execution at the closing price.

- Can be limit-on-close or market-on-close.
- Accepted beginning at 7:00 a.m., ET, each day.

IMBALANCE-ONLY CLOSE ORDERS

Provides liquidity intended to offset on-close orders during the Closing Cross.

- Must be priced (limit), no market imbalance-only orders.
- Imbalance-only buy/sell orders only execute at or above/below the 4:00 p.m., ET, bid/ask.
- Accepted beginning at 7:00 a.m., ET, each day.

INTRADAY CROSS ORDERS

- Can include the next cross only, the next cross and all subsequent crosses excluding the Post-Close Cross at 4:30 p.m., or the next cross and all subsequent crosses including the Post-Close Cross. Please note: Intraday cross orders do not participate in the Opening or Closing Crosses.

¹ Orders entered via OUCH will be re-priced upon entry if necessary, but will not continue to re-price as the market moves. However, firms may configure their OUCH ports such that if an order would be re-priced more aggressively, it will be canceled back to the firm.

ROUTING STRATEGIES:

SCAN

First attempts to execute against orders available in NASDAQ book at a price equal to or better than the NBBO; it will then route to other markets. If shares remain unexecuted after routing they are posted on the NASDAQ book. Once the order is posted to the NASDAQ book, if it is subsequently locked or crossed, the system will not route out again.

STGY

Behaves similar to SCAN, except that the order will route out again after posting to the NASDAQ book if the order is subsequently locked or crossed.

DIRECTED ORDERS

This unique order is directed to a market center other than NASDAQ as specified by the entering party. Directed orders do not check the NASDAQ book and are routed at the entered price and entered quantity. If unexecuted, the order (or unexecuted portion thereof) shall be returned to the entering party. This order type can be entered as an InterMarket Sweep Order (ISO), and may only be used for orders with time-in-force of IOC.

MOPP

Route to all protected quotes for display size only. Depending on the time in force (TIF) on the order, the remaining shares will be posted to the NASDAQ book or be cancelled back to the entering party. Post on the NASDAQ book and sweep all protected quotes prior to trade reporting to the FINRA/NASDAQ Trade Reporting Facility. Once an order posts to NASDAQ it is no longer eligible for routing.

DOTM

Attempts to execute against orders in the NASDAQ book at a price equal to or better than the NBBO. If marketable against other markets upon entry, or if locked/crossed subsequent to posting on the NASDAQ book, the order will IOC other market centers and any unfilled shares will re-post on the NASDAQ book.

DOTA

Attempts to execute against orders in the NASDAQ book at a price equal to or better than the NBBO. If marketable against other markets upon entry, the order will IOC other market centers and any unfilled shares will re-post on the NASDAQ book.

DOTI

Attempts to execute against orders in the NASDAQ book at a price equal to or better than the NBBO and then route to the NYSE or AMEX where the order will remain until being executed or cancelled.

DOTD

Routes directly to the NYSE or Amex without checking the NASDAQ book.

Instructions for Entering a DOT/MOPP Order:

Protocol	CTCI	INET FIX	NASDAQ FIX	QIX	RASHport
Field	Preferred MMID	Tag 76	Tag 100	Preferred MPID	ExecBroker

ATTRIBUTES OF NASDAQ ORDER TYPES:

ANONYMOUS

Orders leverage NASDAQ's anonymous MPID (NSDQ) allowing you to be displayed in the marketplace without revealing your MPID.

RESERVE

Orders allow you to display only a fraction of your entire order.

- Have a round lot display size and corresponding non-display size.
- Incoming order flow has access to both the display and non-display portion of a booked reserve order.

Minimum share quantity for a displayed order is 100 shares; this amount is replenished when the amount falls below 100 shares.

PEGGED

Orders allow clients to price orders relative to the current market price for a security.

- Only supported between 9:30 a.m. and 4:00 p.m., ET.
- Offsets allow a client to peg an order with an incremental difference, in \$0.01 increments, from the NBBO and can be either positive (higher price) or negative (lower price).
- There are three types of pegged orders:
 - **Primary Peg:** Peg an order to the same side of the NBBO.
 - **Market Peg:** Peg an order to the opposite side of the NBBO.
 - **Mid-Point Peg:** Peg an order to the mid-point of the NBBO.

MINIMUM QUANTITY

Orders are entered for execution with a minimum share quantity. NASDAQ only accepts Minimum Quantity orders with a time in force of zero seconds (IOC).

DISCRETIONARY

Orders are displayed on the book at one price while passively trading at a more aggressive discretionary price. The discretionary portion of the order is not entered on the book, and only becomes active as an IOC order when shares are available within the discretionary range. Discretion can also be combined with Pegging, Reserve and non-DOT routing strategies.

NON-DISPLAY

Orders are hidden from the marketplace. All incoming order flow can interact with hidden orders until hidden size is exhausted at the specified price.

TIME IN FORCE (TIF) OPTIONS AVAILABLE FOR ORDER TYPES

- **Market Hours Immediate or Cancel:** Immediately executable upon entry between 9:30 a.m. to 4:00 p.m., ET, or canceled.
- **System Hours Immediate or Cancel:** Immediately executable upon entry between 7:00 a.m. to 8:00 p.m., ET, or canceled.
- **Market Hours Day:** Executable between 9:30 a.m. to 4:00 p.m., ET, on the day the order is entered.
- **System Hours Day:** Executable between 7:00 a.m. to 8:00 p.m., ET, on the day the order is entered.
- **Good-til-market close:** Executable between 7:00 a.m. to 8:00 p.m., if entered after the closing cross will be treated as SIOC, if entered prior to the closing cross any unexecuted orders will be returned to entering party after the cross.
- **Market Hours Good 'til Canceled:** Executable between 9:30 a.m. to 4:00 p.m., ET, on the day the order was submitted until canceled.
- **System Hours Good 'til Canceled:** Executable between 7:00 a.m. to 8:00 p.m., ET, on the day the order was submitted until canceled.
- **System Hours Expire Time:** If not executable upon entry any unexecuted shares shall remain available for execution for the amount of time specified by the entering party.
- **All Crosses:** Eligible to participate in all intraday crosses and the post close cross. Any remaining shares after a cross are eligible for subsequent Intraday Crosses, including Post-Close at 4:30 p.m., ET. Not eligible for opening and closing crosses.
- **Regular Hours Cross:** Eligible to participate in all intraday crosses. Any remaining shares after a cross are eligible for subsequent Intraday Crosses, Not eligible for opening, closing, and post close crosses.
- **Next Cross:** Eligible for the next Intraday Cross only. Unexecuted shares are cancelled back to the entering party.

Attributes for Good-til-Cancel TIFs

- **Do Not Reduce Orders:** If a dividend is processed for a stock, the order price will not be adjusted.
- **Do Not Increase Orders:** If a dividend is processed for a stock, the order quantity will not be adjusted.