FOR MORE INFORMATION, VISIT NASDAQTRADER.COM/OPEN.

THE NASDAQ OPENING AND CLOSING CROSSES

The NASDAQ® Opening Cross and Closing Cross leverage NASDAQ's speed, access and market structure to provide participants and investors with a transparent price in NASDAQ-, NYSE- and NYSE Amex-listed securities. The Crosses enable market participants to execute market-on-close and limit-on-close interest and provide unparalleled transparency. Market makers and other industry professionals continue to demonstrate their willingness and ability to offset imbalances in the cross. The cross generates opening and closing prices widely used as benchmarks throughout the industry, including Russell Indexes, Standard & Poor's and Dow Jones for NASDAQ-listed securities. The Opening and Closing Crosses are open to all securities listed on the NASDAQ, NYSE, NYSE Amex and NYSE Arca Exchanges.

TRANSPARENT, CONSISTENT PRICES

The NASDAQ Crosses provide accurate and consistent opening and closing prices for all Nationally-listed issues. For traders, indexers, institutional investors, individual investors and issuers, the Opening and Closing Cross:

- OFFER ENHANCED TRANSPARENCY AND EXECUTION CHOICES PRIOR TO AND AT THE OPEN AND CLOSE
- PROVIDE A TRUE PRICE DISCOVERY FACILITY THAT REPRESENTS SUPPLY AND DEMAND IN THE MARKETPLACE
- CREATE ROBUST BENCHMARK PRICES FOR NAVS AND INDEX VALUATIONS FOR NASDAQ-LISTED SECURITIES
- PROVIDE A FACILITY TO RESOLVE NATURAL ORDER IMBALANCES IN CRITICAL EVENTS, SUCH AS INDEX REBALANCES
- OFFER BROKERS AN EFFICIENT MECHANISM FOR EXECUTING RETAIL ORDERS AT THE OPENING AND CLOSING PRICE

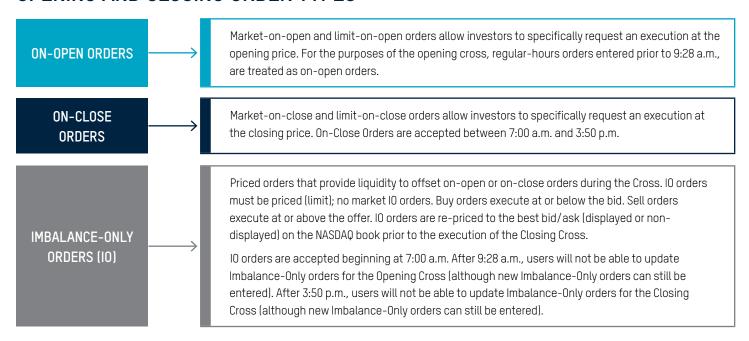
HOW THE OPENING AND CLOSING CROSS WORK

The NASDAQ Opening and Closing Cross enable market participants to execute on-open / on-close interest in a robust price discovery facility.

- + NASDAQ accepts on-open and on-close order types executable only during their respective cross.
- + Leading up to the crosses, NASDAQ disseminates information about order imbalances in the opening book and closing books, respectively, along with an indicative opening/closing price.
- + At 9:30 a.m., Eastern Time*, the opening book and the NASDAQ continuous book are brought together to create a single NASDAQ opening price.
- + NASDAQ opening prices are distributed to the consolidated tape immediately after the Opening Cross.
- + Leading up to the crosses, NASDAQ disseminates information about order imbalances in the opening and closing book, along with indicative prices.
- + At 4:00 p.m., the closing book and the NASDAQ continuous book are brought together to create a single NASDAQ closing price.

The Opening Cross sets the NASDAQ Official Opening Price (NOOP). If an issue does not have an Opening Cross, the NOOP is determined by the first last-sale eligible trade reported at or after 9:30 a.m., when regular trading hours begin. The Closing Cross set the NASDAQ Official Closing Price (NOCP).

OPENING AND CLOSING ORDER TYPES



EXTENDED HOURS ORDERS

Extended Hours orders are executable from 7:00 a.m. to 8:00 p.m.

 Includes quotes, system hours day, system hours GTC (GTX) and System hours Immediate-or-Cancel orders.

REGULAR MARKET HOURS ORDERS

NASDAQ continues to offer Regular Day, GTC, Imbalance-or- Cancel orders and market orders available for execution from 9:30 a.m. to 4:00 p.m.

- + Regular market hours orders may participate in the Opening Cross. Accepted beginning at 7:00 a.m.
- + Regular market hours orders will never result in a .T execution

DISSEMINATION OF IMBALANCE INFORMATION

One of the hallmarks of the NASDAQ Opening and Closing Crosses is the transparency of the order imbalances. Unlike other closing auctions among the U.S. equity markets, NASDAQ provides detailed and continuous information regarding the imbalances, indicative and likely clearing prices.

This data, called the Net Order Imbalance Indicator (NOII), is disseminated via the NASDAQ TotalView® data feed, the NASDAQ DataStore, the NASDAQ Cross Net Order Imbalance Indicator (NOII) website, the NASDAQ Workstation® and numerous market data distributors and service bureaus between 9:28 and 9:30 a.m. and 3:50 and 4:00 p.m.



NASDAQ CROSS TIMES*

NET ORDER IMBALANCE INDICATOR (NOII)

OPENING CROSS	
7:00 a.m.	Trading and Order Entry Begins
9:25 a.m.	NASDAQ opens/ enters quotes for participants with no open interest
9:28 a.m.	Dissemination of imbalance information begins
9:30 a.m.	The Opening Cross occurs
CLOSING CROSS	
3:50 p.m.	Dissemination of imbalance information begins
4:00 p.m.	The Closing Cross occurs



VIEW CROSSING DATA ON NASDAQTRADER.COM

SHARE VOLUME

Share volume for both the NASDAQ Opening Cross and Closing Cross is available for free on NASDAQTRADER.COM open on a T+1 basis. Click on a specific day to view volume for individual securities.

To subscribe to the NASDAQ Cross Net Order Imbalance Indicator, visit the NASDAQ OMX DataStore at **DATA.NASDAQ.COM** or call your Market Data Representative.

To view a guide on how to access NASDAQ Opening and Closing Net Order Imbalance data through market data vendors and service bureaus and how to enter closing orders, visit NASDAQTRADER.COM/OPEN.

MORE INFORMATION

NASDAQTRADER.COM/OPEN | EMAIL: SALES@NASDAQOMX.COM | PHONE: + 1 800 846 0477



^{*}All times are Eastern.