

# Nasdaq BookViewer 3.0 User Guide

Nasdaq BookViewer® 3.0 offers a real-time view of the order depth using the most recent Nasdaq TotalView product for Nasdaq and other exchange-listed securities including:

- The top buy and sell orders for all issues
- Security-level order statistics, price charts and trade data displays

BookViewer provides a real-time, automatically updating view of order data. *BookViewer is currently available on the [Nasdaq Workstation](#)® and through the [DataStore website](#).* In order to view BookViewer, your computer settings must have pop-up blockers and re-directs allowed. BookViewer window displays data for orders entered for a given security.

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## I. BookViewer Components

**Nasdaq Bookviewer** PAUSED! [Export](#) [Help](#)

**NDAQ** Last Match: **40.44** Current stock: **NDAQ**  
 Today's Activity: Orders: 37,903 Volume: 86,283

GO ▶ 11:49:48.644

Filters Mpid:  Aggregate By: Price  Mpid  Limit: 30

BUY ORDERS						SELL ORDERS					
Time	MPID	Total	Shares	MV	BID	ASK	MV	Shares	Total	MPID	Time
11:49:48.644	NSDQ	100	100	4,047.00	\$40.47	\$40.45	202.45	5	5	NSDQ	11:49:50.419
11:49:48.644	NSDQ	239	139	5,625.33	\$40.47	\$40.49	404.90	10	15	NSDQ	11:47:08.230
11:49:48.644	NSDQ	439	200	8,094.00	\$40.47	\$40.49	4,049.00	100	115	NSDQ	11:47:08.205
11:49:48.650	NSDQ	444	5	202.30	\$40.46	\$40.49	4,049.00	100	215	NSDQ	11:49:50.407
11:49:49.978	NSDQ	449	5	202.30	\$40.46	\$40.50	202.50	5	220	NSDQ	11:49:48.645
11:49:48.644	NSDQ	549	100	4,046.00	\$40.46	\$40.50	202.50	5	225	NSDQ	11:49:48.645
11:49:48.644	NSDQ	649	100	4,046.00	\$40.46	\$40.50	405.00	10	335	NSDQ	11:46:10.929
11:49:48.644	NSDQ	749	100	4,046.00	\$40.46	\$40.50	4,050.00	100	335	NSDQ	11:35:28.637
11:49:48.644	NSDQ	949	200	8,092.00	\$40.46	\$40.50	4,050.00	100	435	NSDQ	11:40:08.632
11:49:48.645	NSDQ	954	5	202.25	\$40.45	\$40.50	4,050.00	100	535	NSDQ	11:49:38.300
11:49:48.614	NSDQ	1,054	100	4,045.00	\$40.45	\$40.50	4,050.00	100	635	NSDQ	11:49:43.027
11:49:48.614	NSDQ	1,154	100	4,045.00	\$40.45	\$40.50	4,050.00	100	735	NSDQ	11:49:48.853
11:49:48.614	NSDQ	1,254	100	4,045.00	\$40.45	\$40.50	8,100.00	200	935	NSDQ	11:47:10.127
11:49:48.664	NSDQ	1,354	100	4,045.00	\$40.45	\$40.50	8,100.00	200	1,135	NSDQ	11:49:32.816
11:49:50.479	NSDQ	1,454	100	4,045.00	\$40.45	\$40.51	202.55	5	1,140	NSDQ	11:49:48.645
11:49:43.762	NSDQ	1,459	5	202.20	\$40.44	\$40.51	4,051.00	100	1,240	NSDQ	11:35:36.689
11:49:46.324	NSDQ	1,464	5	202.20	\$40.44	\$40.51	4,051.00	100	1,340	NSDQ	11:41:07.663
11:49:40.265	NSDQ	1,564	100	4,044.00	\$40.44	\$40.51	4,051.00	100	1,440	NSDQ	11:41:08.241
11:49:48.618	NSDQ	1,664	100	4,044.00	\$40.44	\$40.51	4,051.00	100	1,540	NSDQ	11:49:48.646
11:49:49.145	NSDQ	1,764	100	4,044.00	\$40.44	\$40.51	8,102.00	200	1,740	NSDQ	11:46:56.080
11:49:40.266	NSDQ	1,769	5	202.15	\$40.43	\$40.52	202.60	5	1,745	NSDQ	11:49:48.651
11:49:46.331	NSDQ	1,788	19	768.17	\$40.43	\$40.52	4,052.00	100	1,845	NSDQ	11:35:44.665
11:49:40.144	NSDQ	1,888	100	4,043.00	\$40.43	\$40.52	4,052.00	100	1,945	NSDQ	11:40:09.753
11:49:43.755	NSDQ	1,988	100	4,043.00	\$40.43	\$40.52	4,052.00	100	2,045	NSDQ	11:47:42.765
11:49:43.018	NSDQ	2,007	19	767.98	\$40.42	\$40.52	8,104.00	200	2,245	NSDQ	11:48:28.980
11:45:57.809	NSDQ	2,107	100	4,042.00	\$40.42	\$40.53	4,053.00	100	2,345	NSDQ	11:35:44.737
11:47:44.358	NSDQ	2,207	100	4,042.00	\$40.42	\$40.53	4,053.00	100	2,445	NSDQ	11:43:27.724
11:49:38.912	NSDQ	2,307	100	4,042.00	\$40.42	\$40.53	4,053.00	100	2,545	NSDQ	11:49:31.703
11:49:40.265	NSDQ	2,407	100	4,042.00	\$40.42	\$40.53	4,053.00	100	2,645	NSDQ	11:49:39.769
11:49:43.756	NSDQ	2,507	100	4,042.00	\$40.42	\$40.53	8,106.00	200	2,845	NSDQ	11:44:14.739
Total Shares: 33,153						Total Shares: 139,590					

- 1. Symbol field, GO** — Users enter symbol in the Symbol field. Click the GO button to refresh the screen with the information for the stock symbol above.

2. **Pause/Play** - Click the Pause/Play button to either pause or play the information activity for the stock symbol above. When the data is paused, the text "PAUSED!" will appear at the top of the window.
3. **Last Match**
  - Last Match (Price) — Reflects the execution price from the most recently matched orders on for the particular security on the Nasdaq stock market. Please note that trades matched on other venues are not included in the calculation. The display will show "N/A" if there are no matches for the current trading day.
  - Last Match (Time) — Reflects the time stamp in the Last Match Price.
4. **Current Stock** — Identifies the stock being displayed. Please note that BookViewer is designed to display data for one security at a time.
5. **Today's Activity**
  - **Today's Activity (Orders)** — Reflects the cumulative number of displayable orders for the security during the current trading day. Any order that was displayable at any point in time will be added to this number and it will rarely reflect the total number of orders outstanding at the current time. This number does not include non-display orders (such as immediate-or-cancel or on-open/on-close orders).
  - **Today's Activity (Volume)** — Reflects the total number of shares matched during the current day. This volume counts each change of beneficial ownership once. For example, if participant "A" sells 100 shares to participant "B", the BookViewer volume will increase by 100 shares.
6. **Filter** — Filter the book by MPID, Volume and the Price for either the Buy Side or Sell Side. Select 'Go' to apply the filter; Select 'Clear' to clear the filter.

The screenshot shows the 'Filters' section of the BookViewer interface. At the top, there is a blue header with the word 'Filters' in an orange box. Below the header, there is a 'Mpid' input field and an 'Aggregate By' dropdown menu with options 'Price', 'Mpid', and 'Limit'. The 'Limit' dropdown is currently set to '30'. The interface is split into two columns: 'BUY ORDERS' and 'SELL ORDERS'. Each column has input fields for 'Price range' and 'Volume range', with a 'Go' button (green) and a 'Clear' button (red) below each set of fields.

7. **Aggregate By**
  - Price: Select this box to view all shares aggregated at each price level.
  - MPID: Select this box to view all shares on the book aggregated at an MPID and price level.
8. **Limit** – By default, the first 30 rows on the Buy and Sell Side show. Selected 'Limit' dropdown displays options: '30', '60', '90', and '120'.

9. **Buy Orders and Sell Orders** — BookViewer automatically displays up to the first 30 individual open visible buy and sell orders, that are available for instant matching. Buy orders are on the left, and sell orders are on the right. Orders are presorted according to execution priority (price and time) so orders higher on the list will be executed before orders lower on the list. Hidden orders are not displayed. The background colors help to visually group equally priced orders at the first four prices. To see additional orders, users should increase the Limit (see #8).
  
10. **Shares** — Reflects the number of shares per order, available for matching. The displayed amount may be less than the original number of shares entered if the order was partially executed or partially canceled.
  
11. **Market Value (MV)** – Market Value represents the total value of the bid or offer.
  - $\text{Market Value} = \# \text{ of Shares Traded} \times \text{Current Price}$
  
12. **Price (Buy/Ask)** — Reflects the limit price for each order.
  
13. **Export** — Export the order book to Excel.
  
14. **Help** — Links to the BookViewer 3.0 User Guide.
  
15. **Status Bar** – If there is an issue with BookViewer 3.0, a red message will appear at the top of the application window. As pictured below:



## II. BookViewer Frequently Asked Questions (FAQs)

### What is BookViewer?

Powered by Nasdaq TotalView-ITCH 5.0, BookViewer is the standard-setting data product for the serious trader, allowing users to view all of the buy and sell orders in Nasdaq for securities listed on the Nasdaq, BATS, NYSE, NYSE Arca and NYSE MKT exchanges.

### Does BookViewer provide real-time data?

Yes, BookViewer provides a real-time representation of Nasdaq's limit order book.

### What do the colors in BookViewer mean?

The colors help to visually group orders at the same price on each side of the market.

### To what granularity is size reflected on BookViewer?

BookViewer shows display size for each order in actual shares (not round lots).

### What does 'Total Shares' at the bottom of the buy and sell columns mean?

By default BookViewer only shows the top 30 buy orders and the top 30 sell orders for each stock. 'Total Shares' at the bottom of the buy and sell columns mean the current total number of (buy/sell) shares on the book. Users can display more orders by selecting from the 'Limit' dropdown selection. 'Limit' displays options include: '30', '60', '90', and '120'.

### Why am I experiencing problems with the BookViewer?

There are some common reasons why individuals might have problems running BookViewer. Please refer to the BookViewer Troubleshooting section below.

## III. BookViewer Troubleshooting

Below are common reasons why you might be experiencing problems running BookViewer:

### You are trying to send more than four requests in a 15-second period.

Microsoft Internet Explorer limits an applet to a maximum of four simultaneous connections. If you try to query more than four stocks in a 15-second period, your browser may not let the newest connection go through until the oldest connection has expired.

### Other system requirements for BookViewer.

Ensure you have the following:

1. A Broadband connection (BookViewer does not work with dial-up).
2. Disabled Firewalls; allow pop-up blockers and re-directs
3. Enabled 'Accept Cookies from Third-party':
  - a. Open Internet Explorer
  - b. Click Tools menu and select Options

- c. Select Privacy tab
- d. Click Advanced button

**To Launch BookViewer:**

1. Log in with username and password at <https://datastore.nasdaq.com/>
2. Click on 'My Account'
3. Select the 'Launch' button under BookViewer
4. Always launch BookViewer from 'My Account'. The application will open in a new window. It is best to close the DataStore browser and run each application individually after launching.

Note: Some users experience a lost connection when logging on to BookViewer. This could be due to problems with the computer's virus protection software or firewall where it does not allow the streaming of data from Nasdaq.

**You went through all the checks, and BookViewer still doesn't work.**

Please send your questions with a complete description of the problem to [datastore@Nasdaq.com](mailto:datastore@Nasdaq.com). Please be sure to include the operating system, browser name and version.

Having a question related to billing? Please send your questions with a complete description of the problem to [dataops@Nasdaq.com](mailto:dataops@Nasdaq.com)