



US SuperX ATS

October 2018

Order Type & Matching Logic Summary

Book Priority

SuperX continuously matches orders in price, time priority.

For the purposes of determining book priority, price is rounded to the nearest permissible increment, within the NBBO in accordance with Regulation NMS. In other words, queue position cannot be improved through sub-tick-increment limit prices or setting the limit price of an order through the far touch.

There are no SuperX participants that gain matching preference over other participants. There is only one pool of liquidity; it is not possible to match in order of counterparty type.

Order Types

SuperX supports the following order types and order parameters. All trades print at or inside the NBBO.

| Order Type | Description |
|--------------|--|
| Market Order | Order will match at any price |
| Limit Order | Order will match at the limit or better |
| Pegged Order | Market: far touch or better Mid-point: (Bid+Offer)/2 or better Primary: near touch |

| Parameter | Behavior |
|---------------|--|
| MinQTY | The minimum contra-side order quantity that can be matched with. SuperX does not aggregate orders to meet MinQTY. By default, when leaves quantity becomes less than MinQTY, MinQTY is reduced to be equal to leaves quantity. Please see the FAQ for more information on Minimum Quantity. |
| Time-In-Force | IOC: Immediate or Cancel. The order will match with eligible resting contra-side orders and cancel back the balance Day: The order will remain in the book until it is canceled, fully filled or the market closes at 4pm |

Market Data

Source of NBBO Feed

SuperX uses direct exchange feeds as the primary source of NBBO for all protected quotes. The Securities Information Processor (SIP) feeds are used as a secondary source of NBBO and for regulatory status.

Feeds from SuperX

SuperX is a completely dark trading venue. There is no market data feed made available externally or internally. DB's SOR and trading algorithms do not receive any information about orders rested in SuperX.

Matching Permissions

Any client can choose to opt-out of interacting with any other client or group of clients. DB will not disclose the name of other clients.

Clients can choose to apply a different minimum quantity to interactions with the major counterparty groups.

If two matching orders are not permitted to cross with each other because either or both clients have opted out, then the orders will rest in the book until executed or canceled.

Matching Price

All trades are printed at or inside the NBBO in accordance with Regulation NMS.

Price Improvement

As the system default, the ATS provides equal price improvement on orders to both parties whenever possible.

Price improvement is solely based on possible price improvement with the NBBO. Pricing an order through NBBO does not affect price improvement calculations.

Example:

Where RegNMS, order instructions and NBBO allow, SuperX will equally split price improvement. For example if the NBBO is \$10.10 x \$10.11, a buy order pegged to mid-point will cross with a sell order pegged to bid at \$10.1025.

Technical Summary

Matching Engine Location

The primary location for SuperX is the Equinix NY4 datacenter in Secaucus, NJ. The SuperX disaster recovery site is in Carteret, NJ.

Order Entry Protocol

SuperX supports order entry via FIX. There is no proprietary protocol available.

Trade Reporting Facility (TRF)

SuperX reports trades to the NASDAQ TRF (DQ)



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Autobahn

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