



OVERVIEW

MIAX PEARL is Miami International Holdings (MIH) second fully electronic options trading exchange and has leveraged the industry leading technology and infrastructure developed by MIAX to serve as a counterpart to MIAX Options by providing a price-time allocation and maker-taker pricing model. Trading on MIAX PEARL commenced on February 6, 2017 following its approval from the SEC as a National Securities Exchange. MIAX PEARL along with MIAX Options and the MIAX Options Complex Order System now provides members of the MIAX exchange group with access to approximately 75% of the total U.S. options market volume. The MIAX PEARL Trading System has been developed specifically for the unique demands of derivatives trading, providing best in class customer interface features, protections and extreme performance for users of the Exchange.

Market Model

- Price/Time allocation
- Maker/Taker pricing

Market Access

- Market Makers and Electronic Exchange Members can interface with MIAX PEARL through:
 - **MIAX PEARL Express Order Interface (MEO)** – allows the submission of Cancel-Replacement orders quote like behavior or Standard Orders in a binary format. Each full service MEO Interface is capable of processing more than 200,000 orders per second
 - **MIAX PEARL FIX Order Interface (FOI) gateway** – allows standard orders in FIX format. Each FOI is capable of processing more than 7,700 order messages per second

Membership

- Types of Membership
 - Market Makers
 - Electronic Exchange Members
- Holders of MIAX Options Exchange Trading Permits in good standing are eligible to receive a MIAX PEARL Trading Permit through a short form waive-in membership process
- Prospective member firms must be registered as a broker-dealer and must meet certain additional criteria described by the Exchange in the Exchange's Rules
- Further information on membership at MIAX PEARL, is available on the MIAX Exchange [website](#)

MIAX PEARL Functionality

- Cancel-Replacement Order
- Do Not Route (DNR)
- Good 'Til Cancelled Order (GTC)
- Immediate-or-Cancel Order (IOC)
- Intermarket Sweep Order (ISO)
- Limit Order
- Market Order
- Post Only Order

* Each of these types of orders is described in detail in MIAX PEARL Rule Book; Rule 516

Routing to Other Exchanges

- Routing services are provided for routing to all U.S. Options Exchanges and are fully compliant with the Options Locked and Crossed Markets Plan. The MIAX PEARL System routes Public Customer orders received via the FIX Order Interface (FOI) to away markets displaying liquidity at the NBBO when required to satisfy a protected quotation under the Plan. Orders received through FIX orders for origins other than public customer or any order through MEO are not eligible for routing by the MIAX PEARL System and will be managed if locking or crossing the NBBO

MIAX PEARL Market Protections

- MIAX PEARL Variable Price Protection (MVP)
- MIAX PEARL Order Monitor (MOM)
- MIAX PEARL Aggregate Risk Manager (ARM)
- MIAX PEARL Aggregate Risk Manager Across Classes (ARM²)
- MIAX PEARL Risk Protection Monitor (RPM)
- FIX Auto Cancel on Disconnect Protection (FIX ACOD)
- MEO Binary Orders Auto Cancel on Disconnect Protection (MEO ACOD)
- Mass Cancellation of Trading Interest
- Self-Trade Protection
- Order Purges
- ABBO Crossing Protections

[* MIAX Options Risk Management Market Protections Overview](#)

Market Data and Data Center Services

- MIAX PEARL Top of Market (**ToM**) provides low latency access to MIAX PEARL top of book market data over a multicast feed
- MIAX PEARL Clearing Trade Drop (**CTD**) is a low-latency, real-time feed providing clearing trade information to the parties of a trade. Also available to the firms clearing for the parties of a trade
- MIAX PEARL Liquidity Feed (**PLF**) provides information about actionable orders on the MIAX PEARL order book over a multicast feed

- MIAX PEARL FIX Drop (**FXD**) is available only to submitting Electronic Exchange Members for clearing trade drops normally sent over FIX
- MIAX PEARL has partnered with Equinix, a world-class provider of data center services, to host the MIAX PEARL Trading System's data center infrastructure in its NY4 location
- Customers can cross-connect to the MIAX PEARL Systems from elsewhere within the Equinix NY4 facility
- MIAX PEARL cross-connects are latency equalized to ensure each participant's cross-connect is the same physical distance from the MIAX PEARL System regardless of their location in the Equinix NY4 facility

Fees

Transaction Fees

- The full MIAX PEARL fee schedule can be found [here](#)

Initial Non-Transaction Fees

- MIAX PEARL Membership – Free
- Application Fees – Free
- Trading Permits Fee – Free
- MPID Fee – Free
- MEO Port Fees – Free
- FIX Port Fees – Free
- Market Data – ToM and PLF – Free
- Non-Display – Free

- Clearing Trade Drop Copy Ports – Free
- FIX Drop Copy Port Fees – Free
- Network Testing and Monthly Physical Connectivity Fees for Member and Non-Member firms will apply and will be assessed at the same rate as MIAX Options. See the [MIAX Options Fee Schedule](#) for reference
- Regulatory fees for Member firms will apply and will be announced at a later date

Connectivity

- MIAX PEARL utilizes the same or similar APIs and protocols as MIAX Options, minimizing complexity of connectivity for prospective members
- MIAX PEARL offers truly diverse, redundant 1 Gigabit, 10 Gigabit and 10 Gigabit ULL, latency equalized connectivity options in data center facilities
- MIAX PEARL supports the following connectivity options: Cross Connect, Point-to-point and Metro Ethernet/Dark Fiber
- Users are strongly encouraged to establish dual connections to the primary facility in NY4 and connection to the disaster recovery system located in Chicago (CH4) to minimize the possibility of service disruption
- Exchange Codes
 - OPRA Participant ID “P”
 - Market Identifier Code (MIC) “MPRL”
 - OCC Code “R”

Trading Hours

- Live Order Window 7:30 am to 4:25 pm Eastern Time
- Regular Trading Session (Equity options) 9:30 am to 4:00 pm Eastern Time
- Regular Trading Session (Defined list of ETF options) 9:30 am to 4:15 pm Eastern Time

For further information, please contact Sales at Sales@MIAXOptions.com, (609) 897-8177, or MIAX Trading Operations at TradingOperations@MIAXOptions.com, (609) 897-7302.