

# INVESTORS EXCHANGE FIX SPECIFICATION

Version 3.00

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# **OVERVIEW**

This specifications document outlines the format in which IEX Members should correctly format their FIX messages for order entry as well the expected format for execution and drop copy messages received back from IEX.

IEX supports FIX 4.2 as a base protocol, with IEX-specific modifications detailed in this specification.

It is assumed that the reader is familiar with the FIX 4.2 protocol as described at <a href="http://www.fixprotocol.org">http://www.fixprotocol.org</a>. This document describes the differences between the IEX implementation and the FIX 4.2 standard.

See the Investors Exchange Rule Book for functional details.

## **Hours of Operation**

Refer to the Exchange website for the IEX holiday schedule.

Orders entered prior to the start of the Pre-Market Session will be rejected. Orders entered prior to the start of the Regular Market Session which are accepted and designated to begin trading in the Regular Market Session will be queued. For more information on each order type's available Time in Force (sessions in which it will queue or trade), please see the TIF Matrix [Appendix E]. Once the Regular Market Session begins, queued orders will be released to the book in time priority and will be eligible for matching. Refer to the IEX Regular Market Hours Opening Process in Exchange Rule 11.231 for more information.

Orders are rejected if they are received outside the hours IEX is available for trading. All orders remaining after the Post-Market Session will be cancelled automatically.

Session	Start and End Time (all times are Eastern Time)
Begin Order Entry Acceptance	8:00 a.m.
Pre-Market Session	8:00 a.m 9:30 a.m.
Regular Market Session	9:30 a.m 4:00 p.m.
Post-Market Session	4:00 p.m 5:00 p.m.
System Hours (trade matching and routing)	8:00 a.m 5:00 p.m.

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# **FIX TAGS**

This section lists the FIX tags and values supported while transacting with IEX. Required tags for various message types are shown in further detail in the section titled **Message Types** below. The subsection titled **Trading Messages** indicates tag/value requirements and dependencies per order type supported at IEX.

# **Session FIX Tags**

#### Header

Tag	Field Name	Details	Guidelines
8	BeginString	Identifies beginning of new message and protocol version 4.2. ALWAYS FIRST FIELD IN MESSAGE	
9	BodyLength	Message length, in bytes, forward to the CheckSum field. ALWAYS SECOND FIELD IN MESSAGE.	
35	MsgType	Defines message type. ALWAYS THIRD FIELD IN MESSAGE. Supported values: O=Heartbeat 1=Test Request 2=Resend Request 3=Reject 4=Sequence Reset 5=Logout 8=Execution Report 9=Order Cancel Reject A=Logon D=Order Single F=Order Cancel Request G=Order Cancel/Replace Request UCC=IEX Trade Bust	
34	MsgSeqNum	Integer message sequence number.	
49	SenderCompID	IEX-assigned value used to identify firm sending message.	
52	SendingTime	Time of message transmission (always expressed in UTC (Universal Time Coordinated, also known as "GMT"). Higher resolution timestamps (i.e., microsecond or nanosecond level granularity) are available on IEX outbound messages and will reflect the User's port-level setting.	Applied on the port session level. Default format:  Millisecond  YYYYMMDD- HH:MM:SS.sss sss=000-999

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56	TargetCompID	Members will target "IEXG"	
			HH:MM:SS. SSSSSSSS
			YYYYMMDD-
			Nanosecond
			1111.1111.00.333333
			HH:MM:SS.ssssss
			YYYYMMDD-
			Microsecond
			port session level:
			below settings per
			choosing one of the
			Request Form by
			IEX Equities Port
			timestamps via the
			for more granular
			Members must opt in

## Trailer

Tag	Field Name	Details	Guidelines
10	CheckSum	Three byte, simple checksum.  ALWAYS LAST FIELD IN MESSAGE; i.e., serves, with the trailing <soh>, as the end-of-message delimiter. Always defined as three characters.</soh>	

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## **Duplicate Messages**

Tag	Field Name	Details	Guidelines
43	PossDupFlag	Indicates possible retransmission of message with this sequence number	Default: Not sent. Only required for
97	PossResend	Indicates that message may contain information that has been sent under another sequence number.	resend messages (PossDup or PossResend)
122	OrigSendingTime	Original time of message transmission (always expressed in UTC (Universal Time Coordinated, also known as "GMT") when transmitting orders as the result of a resend request. Timestamp granularity (i.e. milliscond, microsecond or nanosecond) based upon User's port-level setting(s)	Applied on the port session level. Default format: Millisecond YYYYMMDD- HH:MM:SS.sss sss=000-999  Members must opt in for more granular timestamps via the IEX Equities Port Request Form by choosing one of the below settings per port session level:  Microsecond YYYYMMDD- HH:MM:SS.sssssss

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# **Order Transaction FIX Tags**

## **FIX Standard Tags**

The highlighted portions below are not yet operative. IEX will issue a trading alert announcing implementation timing. Please see IEX Trading Alert #2024-007 for details.

Tag	Field Name	Details	Guidelines
1	Account	If sent by Member, this value will be echoed back in execution reports	Max length: 16 chars
11	ClOrdID	Unique identifier, per session, per trading day for Order as assigned by the Member	Max length: 20 chars ASCII characters not permitted: @ - at sign , - comma " - double quotation   - pipe
18	ExecInst	d=Discretionary Peg (executes on IEX)  f=ISO (executes on IEX)  i=IEX Only (also known as Standard)  j=Discretionary Limit (executes on IEX)  M=Midpoint Peg (executes on IEX)  o=Offset Peg (executes on IEX)  P=Market Peg (executes on IEX)  Q=Market Maker Peg (executes on IEX)  R=Primary Peg (executes on IEX)  u=Router ([r,s,t] are accepted and converted to [u])  y=Trade At ISO (executes on IEX)  z=Corporate D-Peg (executes on IEX)	Only single values allowed  See the IEX Rule Book for functional details.
21	Handlinst	1=Automated execution order, private, no Broker intervention	Optional. Value ignored, if present.
38	OrderQty	Number of shares ordered	1-10,000,000
40	OrdType	1=Market 2=Limit P=Pegged	Price (44) must be populated for [2]=Limit  OrdType (40) must be populated with [P]=Pegged when  ExecInst (18) has any of the following values: [M]=Midpoint peg, [R] = Primary peg, [d] = Discretionary peg, [o] = Offset Peg, [z] = Corporate D-Peg,

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Tag	Field Name	Details	Guidelines
			[Q]=Market Maker peg, or [P]=Market Peg
			OrdType must be populated with [2]=Limit for Discretionary Limit orders (18=j)
			[P]=Pegged orders are not eligible to route (Tag 18 = u) unless members instruct IEX on the IEX Equities  Port Request Form to ignore their routing instruction and instead treat as a Midpoint Peg (FIX Tag 18=M).  At the open and At the close orders (59=2,7) with 40=P will be
41	OrigClOrdID	ClOrdID referencing the order to be cancelled or replaced	rejected upon receipt.  Max length: 20 chars  ASCII characters not permitted: @ - at sign , - comma " - double quotation   - pipe

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Tag	Field Name	Details	Guidelines
44	Price	Required for Limit Orders	The Minimum Price Variation ("MPV") for orders entered into the System shall be \$0.01 for orders priced \$1.00 or greater, and \$0.0001 for orders priced below \$1.00.
			Only valid for OrdType (40) of [2]=Limit or [P]=Peg
47	OrderCapacity	A=Agency P=Principal R=Riskless Principal	Option to default on a session level without needing to send per message
54	Side	Side of Order  1=Buy  2=Sell Long  5=Sell Short  6=Sell Short Exempt	LocateReqd (114) must be populated with [N] for [5]=Sell Short and [6]=Sell Short Exempt
55	Symbol	Ticker symbol	The entire symbol (root and suffix, if applicable) needs to be sent if using Nasdaq symbology.  CMS symbology can be sent either via 55/65 combo or concatenated using 55 alone.
			Please consult Appendix A
58	Text	Free form text. Will not be processed and will not be echoed back on execution reports.	
59	TimeInForce	O=Day 2=At the open 3=IOC 4=FOK 5=Good 'til Extended Day 6=Good 'til Time 7=At the close M=System Hours	TIFs function differently for certain order types. Please see the TIF Details and Guidelines in the Trading Messages section for specific order type details. Please reference the TIF Matrix [Appendix E] for accepted order entry

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Tag	Field Name	Details	Guidelines
			parameters in the Pre, Post and Regular Market Sessions.
			[0]=Day orders can be sent, and will be acknowledged before the start of Regular Market Hours starting at 9:30 am, but will only be eligible to trade between 9:30 am - 4 pm
			[5]=Good 'til Extended Day can be sent, and will be acknowledged before the start of Regular Market Hours starting at 9:30 am, but will only be eligible to trade between 9:30 am - 5 pm
			Pegged orders ([40]=P) and Discretionary Limit Orders ([40]=2) ,([18]=j) entered in the pre-market must have a TimeInForce of [0]=DAY; orders with all other TimeInForce values will be rejected
			Market Day orders received before the start of the Regular Market Session will be rejected unless the order is for an IEX listed security [3]=IOC not compatible
			with Discretionary Limit

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Tag	Field Name	Details	Guidelines
			Orders (18=j) or Offset Peg orders (18=o)
			[4]=FOK not compatible with routable orders (18=r, s, t, u), Discretionary Limit Orders (18=j), or Offset Peg orders (18=o)
			[6]=Good 'til Time requires ExpireTime (126)
			[2,7]=At the open, At the close orders submitted for non-IEX-listed securities will be rejected upon receipt.
			All unexecuted orders at end of corresponding trading sessions will receive Unsolicited Cancels.
			Applied on the port session level. Default format:
			Millisecond  YYYYMMDD- HH:MM:SS.sss sss=000-999
60	TransactTime	Time of order creation (expressed in UTC)).	Members must opt in for more granular timestamps via the <u>IEX</u> <u>Equities Port Request</u> <u>Form</u> by choosing one of the below settings per port session level:
			Microsecond YYYYMMDD- HH:MM:SS.ssssss

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Tag	Field Name	Details	Guidelines
65	SymbolSfx	Additional information about the security (e.g., preferred, warrants, etc.).	Nanosecond YYYYMMDD-HH:MM:SS. Ssssssss Not available for Nasdaq format, available for CMS only. Please consult Appendix A.
110	MinQty	Minimum quantity size of an order to be executed.	Only available for non-displayed IEX-only orders (18=i, j, M, R, d, P, o, z), but not valid for orders with 18=M and 9416=T or F (RLP or Fixed Midpoint Peg orders). Not valid for routable orders (18=r, s, t, u), ISO orders (18=f, y) or displayed Discretionary Limit Orders (18=j).  At the open or At the close orders (59=2,7) with MinQty greater than 0 will be rejected upon receipt.  For Reserve orders:
111	MaxFloor	Quantity to display (for a reserve order).  If not populated, order is fully displayed.  If MaxFloor(111) = 0, limit order is non-displayed.	A value of [O] indicates a non-displayed order.  Omitting the MaxFloor(111) tag or submitting MaxFloor (111) = OrderQty (38) indicates a fully displayed order.  MaxFloor may be a fixed amount of shares; or an odd, mixed, or round lot quantity. A Random Replinshment feature is also

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Tag	Field Name	Details	Guidelines
			supported, please see FIX tag section 8020 for more details.
			For odd lot reserve orders, set to a value < 1 round lot and < OrderQty (38)
			Discretionary Limit Orders (18=j) can be fully displayed (omit MaxFloor) or non- displayed (111=0). Reserve functionality is also supported for Discretionary Limit Orders.  Accepted for At the open and At the close orders (59=2,7), but not enforced during auction match.  Not compatible with
			IOC or FOK.  [N] is the only accepted valid value. Lack of
114	LocateReqd	Required for Sell Short and Sell Short Exempt orders.  N=Locate not required	(114) or values other than 114=[N] for Sell Short or Sell Short Exempt orders will be rejected.
115	OnBehalfOfCompID  ExpireTime	IEX-assigned value used to identify firm sending message. Applicable for Service Bureau connections. Required for GTT orders. Must be today's date with a valid value within the remaining trading time.	
7928	Anti-Internalization Qualifiers (AIQ) ID	Anti-Internalization "AIQ group" must be enabled at the port level first in order for the AIQ identifiers and modifiers to be properly enforced if sent per order. Users have the choice of setting AIQ on a Member Affiliate, User or MPID basis. If an order is submitted	1st and 2nd character AIQ identifier Level: Each character can be "0-9", "A-Z", "a-z".

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Tag	Field Name	Details	Guidelines
		on a port that is not AIQ enabled, this FIX tag will be disregarded.	Case sensitive (i.e., 5B != 5b).
		<ul> <li>First 2 characters are the AIQ identifier to prevent orders that share the same value and originate from the same Member Affiliate (two or more Members that are affiliates), User (Member) or MPID (as set at the port level) from executing against each other.</li> <li>3<sup>rd</sup> character is the 1 character AIQ modifier, which specifies the type of AIQ behavior</li> </ul>	If 7928 is omitted, and AIQ is enabled for the order entry port, the order will still be subject to AIQ. To disable AIQ for an order submitted on an AIQ-enabled port, User should input either "-" or "" - which signifies "free-to-trade" (Anti-Internalization disabled for this order). Users can also completely disable their AIQ on a port level for all orders via the IEX Equities Port Request Form.
			3 <sup>rd</sup> character AIQ Modifier: N - Cancel newest O - Cancel oldest B - Cancel both S - Cancel smaller D - Decrement larger original order quantity and cancel smaller
			Missing 3 <sup>rd</sup> character modifier indicates default behavior of cancel oldest (O).
			Routable orders (18=u) with a 3 <sup>rd</sup> character of "D" (Decrement Larger) will be rejected upon receipt.
			Accepted for At the open and At the close orders (59=2,7), but not enforced.

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Field Name   Details   Must be accompanied with a MaxFloor (110) if DisplayRange (8020) is populated   Cannot have DisplayRange that is >= MaxFloor = cound lot multiple or < than one round lot multiple. DisplayRange must be a round lot multiple. DisplayRange = 100  If MaxFloor = 200, DisplayRange can = 100, 200, or 300  Big MaxFloor = 400, DisplayRange can = 100, 200, or 300  Big MaxFloor = 400, DisplayRange can = 100, 200, or 300  If MaxFloor = 400, DisplayRange can = 100, 200, or 300  If MaxFloor = 99, DisplayRange can = 100, 200, or 300  If MaxFloor = 99, DisplayRange can = 100, 200, or 300  If MaxFloor = 99, DisplayRange can = 100, 200, or 300  If MaxFloor = 99, DisplayRange can = 100, 200, or 300  If MaxFloor = 99, DisplayRange can = 100, 200, or 300  If MaxFloor = 99, DisplayRange can = 100, 200, or 300  If MaxFloor = 99, DisplayRange can = 100, 200, or 300  If MaxFloor = 90, DisplayRange can = 100, 200, or 300  If MaxFloor = 90, DisplayRange can = 100, 200, or 300  If MaxFloor = 90, DisplayRange can = 100, 200, or 300  If MaxFloor = 90, DisplayRange can = 100, 200, or 300  If MaxFloor = 90, DisplayRange can = 100, 200, or 300  If MaxFloor = 90, DisplayRange can = 100, 200, or 300  If MaxFloor = 90, DisplayRange can = 100, 200, or 300  If MaxFloor = 90, DisplayRange can = 100, 200, or 300  If MaxFloor = 90, DisplayRange can = 100, 200, or 300  If MaxFloor = 90, DisplayRange can = 100, 200, or 300  If MaxFloor = 90, DisplayRange can = 100, 200, or 300  If MaxFloor =				
with a MaxFloor (III) if DisplayRange (8020) is populated  Cannot have DisplayRange that is >= MaxFloor  May either be a round lot multiple or < than one round lot (odd lot)  If MaxFloor = 200, DisplayRange = 100 DisplayRange = 100 DisplayRange = 100 DisplayRange = 100 DisplayRange can = 100, 200, or 300  8020  DisplayRange  Guantity range to display (for a reserve order)  If MaxFloor = 400, DisplayRange can = 100, 200, or 300 ExplayRange can = 100, 200, or 300 DisplayRange can = 100, 200, or 300 DisplayRange one or more shares <a href="MaxFloor">MaxFloor</a> Value Select DisplayRange one or more shares <a href="MaxFloor">MaxFloor</a> Value Select DisplayRange one or more shares <a href="MaxFloor">MaxFloor</a> DisplayRange one or more shares <a href="MaxFloor">MaxFloor</a> Value Select DisplayRange one or more shares <a href="MaxFloor">MaxFloor</a> Value Shares  If DisplayRange an = 1-98 shares  If DisplayRange an = 1-98 shares  If DisplayRange an = 1-98 shares  If DisplayRange one or and lot the replenishment range is capped at 99 shares, but not a single round lot (100 shares) If MaxFloor are >= to a round lot the replenishment range is capped at 99 shares are loud applies for symbols with other round lot sizes = 100 shares DisplayRange one or more shares  **Camples assume a round lot size = 100 shares DisplayRange one or more shares  **MaxFloor or symbols with other round lot sizes  **Unique string per "investor" on whose behalf the  **Wember is acting. Will not be echeed back on  **Max length: 20 chars	Tag	Field Name	Details	Guidelines
	8020	DisplayRange		with a MaxFloor (111) if DisplayRange (8020) is populated  Cannot have DisplayRange that is >= MaxFloor  May either be a round lot multiple or < than one round lot (odd lot)  If MaxFloor = round lot multiple, DisplayRange must be a round lot multiple < MaxFloor  *e.g.,  If MaxFloor = 200,  DisplayRange = 100  If MaxFloor = 400,  DisplayRange can =100,  200, or 300  If MaxFloor < a round lot select DisplayRange one or more shares  < Maxfloor  *e.g.,  Can be <=99 shares, but not a single round lot (100 shares)  If MaxFloor = 99,  DisplayRange can = 1-98 shares  *If DisplayRange + MaxFloor are >= to a round lot, the replenishment range is capped at 99 shares  *Examples assume a round lot size = 100 shares. Same logic applies for symbols with
	8484	Investor ID		Max length: 20 chars

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Tag	Field Name	Details	Guidelines
9140	DisplayInst	P=Post Only -=None	Only applicable when ExecInst(18) = 'i' or 'j'.  9140=[P] only if OrdType(40) = '2', MaxFloor(111) is omitted or equal to OrderQty(38), and Price(44) is equal to \$1.00 or more.  None is the default DisplayInst.  DisplayInst value will override any values set at the port level; if DisplayInst is omitted
9303	RoutingInst	N=Trade Now On -=Trade Now opt-out	the default port session setting will be enforced.  9303 can only be populated if:  OrdType(40)=[P] when ExecInst(18) has any of the following values:  [o]=Offset peg, [P]=Market peg [M]=Midpoint peg (including Fixed Midpoint Peg: ExtendedExecInst (9416)=[F])  Trade Now On is the default RoutingInst.  RoutingInst will override any values set at the port level; if RoutingInst is omitted the default port session setting will be enforced.
9416	ExtendedExecInst	R = Retail T = Retail Liquidity Provider (RLP) F = Fixed Midpoint Peg  This value will be echoed back in execution reports	9416= "T" or "F" will only be accepted when ExecInst(18) = "M". 9416= "R" will only be accepted when ExecInst(18)= "M" or "d"; OrdType (40) = "P"; OrderCapacity (47) = "A" or "R"; and

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Tag	Field Name	Details	Guidelines
			TimeInForce (59) = 3 (IOC), 4 (FOK)
		C=Composite	"R" may be assigned by IEX based on a port configuration setting instruction from an approved Retail Member Organization.  Only valid if 110 (MinQty) is sent.
9500	MinQtyInstruction	M=Minimum Execution Size with Cancel Remaining; once LeavesQty < MinQty, order will cancel	Will not be echoed back in execution reports.
		A=Minimum Execution Size with AON Remaining; once LeavesQty < MinQty, Open shares become All or None	Not changeable via Cancel/Replace
9692	DisplayPrice	Displayed Order book price if different than Limit Price(44)	Only applicable when order is displayed
20003	CancelInsteadOfSlide	O=Slide 3=Cancel order instead of slide	Only applicable for when DisplayInst (9140) = 'P'.  Sliding is the default behavior.  CancelInsteadOfSlide will override any values set at the port level; if CancelInsteadOfSlide is omitted the default port session setting will be enforced.
20050	CxIPxBack	N=No Action C=Cancel order U=Re-price to the less aggressive of the order's limit price or the NBB (for buys)/NBO (for sells) Above is the behavior to enforce upon expiration of a set timer.	Only applies to Discretionary Limit orders (18= j) that have been price adjusted due to a CQI event, if 10 ms after the CQI event, the order is priced less aggressively than the NBB (for buy orders)/NBO (for sell orders).

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Tag	Field Name	Details	Guidolines
Tag	Field Name	Details	Guidelines
			CxIPxBack value will
			override any values set
			at the port level; if
			CxIPxBack is omitted the default port session
			setting will be enforced.
			setting will be emorced.
			For D-Peg, P-Peg and
			C-Peg orders only.
		Simply version	If omitted the value will
		Signal version	be the requested
20067	SigVersion	1 = Signal v5	default on the <u>IEX</u>
		2 = Signal v6	<b>Equities Port Request</b>
			Form. If no default is
			specified then Signal
			v5[1] will be used.
		FIX Tags / Values from IEX Executions	
Tag	Field Name	Details	Guidelines
Tag 6	Field Name AvgPrice	Details  Calculated average price of all fills on this order	Guidelines
			Guidelines
6	AvgPrice	Calculated average price of all fills on this order	Case sensitive alpha-
6	AvgPrice	Calculated average price of all fills on this order	Case sensitive alpha- numeric free format
6	AvgPrice	Calculated average price of all fills on this order  Total number of shares filled	Case sensitive alpha- numeric free format string. (i.e., ABC !=
6	AvgPrice	Calculated average price of all fills on this order	Case sensitive alpha- numeric free format
6	AvgPrice CumQty	Calculated average price of all fills on this order  Total number of shares filled	Case sensitive alpha- numeric free format string. (i.e., ABC !=
6	AvgPrice CumQty	Calculated average price of all fills on this order  Total number of shares filled	Case sensitive alphanumeric free format string. (i.e., ABC != abc).  Can include any character or
6	AvgPrice CumQty	Calculated average price of all fills on this order  Total number of shares filled  Unique identifier of execution message	Case sensitive alphanumeric free format string. (i.e., ABC != abc).  Can include any
6	AvgPrice CumQty	Calculated average price of all fills on this order  Total number of shares filled	Case sensitive alphanumeric free format string. (i.e., ABC != abc).  Can include any character or
6 14 17	AvgPrice CumQty  ExecID	Calculated average price of all fills on this order  Total number of shares filled  Unique identifier of execution message  Referenced ExecID of execution to apply trade	Case sensitive alphanumeric free format string. (i.e., ABC != abc).  Can include any character or
6 14 17	AvgPrice CumQty  ExecID	Calculated average price of all fills on this order  Total number of shares filled  Unique identifier of execution message  Referenced ExecID of execution to apply trade correction to	Case sensitive alphanumeric free format string. (i.e., ABC != abc).  Can include any character or
6 14 17	AvgPrice CumQty  ExecID	Calculated average price of all fills on this order  Total number of shares filled  Unique identifier of execution message  Referenced ExecID of execution to apply trade correction to  Identifies transaction type  O=New	Case sensitive alphanumeric free format string. (i.e., ABC != abc).  Can include any character or
6 14 17	AvgPrice CumQty  ExecID	Calculated average price of all fills on this order  Total number of shares filled  Unique identifier of execution message  Referenced ExecID of execution to apply trade correction to Identifies transaction type	Case sensitive alphanumeric free format string. (i.e., ABC != abc).  Can include any character or punctuation
6 14 17	AvgPrice CumQty  ExecID	Calculated average price of all fills on this order  Total number of shares filled  Unique identifier of execution message  Referenced ExecID of execution to apply trade correction to  Identifies transaction type  O=New	Case sensitive alphanumeric free format string. (i.e., ABC != abc).  Can include any character or
6 14 17 19 20	AvgPrice CumQty  ExecID  ExecRefID  ExecTransType	Calculated average price of all fills on this order  Total number of shares filled  Unique identifier of execution message  Referenced ExecID of execution to apply trade correction to  Identifies transaction type  O=New 1=Cancel	Case sensitive alphanumeric free format string. (i.e., ABC != abc).  Can include any character or punctuation  4 character code. See
6 14 17 19 20 30	AvgPrice CumQty  ExecID  ExecRefID  ExecTransType  LastMkt	Calculated average price of all fills on this order  Total number of shares filled  Unique identifier of execution message  Referenced ExecID of execution to apply trade correction to Identifies transaction type  O=New 1=Cancel  Market of execution for last fill.	Case sensitive alphanumeric free format string. (i.e., ABC != abc).  Can include any character or punctuation  4 character code. See

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Tag	Field Name	Details	Guidelines
37	OrderID	Unique IEX Order ID	
39	OrderStatus	O=New 1=Partial fill 2=Fill 4=Canceled 5=Replace 6=Pending Cancel (e.g., result of Order Cancel Request) 8=Rejected E=Pending Replace (e.g., result of Order Cancel Cancel/Replace Request)	Identifies current status of order.
42	OrigTime	Indicates TransactTime (60) of original execution.  Applicable for Trade Busts. Timestamp granularity (i.e. millisecond, microsecond, or nanosecond) based upon User's port-level setting(s).	Applied on the port session level. Default format:  Millisecond  YYYYMMDD- HH:MM:SS.sss sss=000-999  Members must opt in for more granular timestamps via the IEX Equities Port Request Form by choosing one of the below settings per port session level:  Microsecond YYYYMMDD- HH:MM:SS.ssssss
102	CxlRejReason	O=Too late to cancel 1=Unknown order 2=Exchange Option 3=Already Pending Cancel or Pending Replace	Code to identify reason for cancel rejection.
103	OrdRejReason	O=Broker option 1=Unknown symbol 2=Exchange closed	Code to identify reason for order rejection.

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Tag	Field Name	Details	Guidelines
128	DeliverToCompID	3=Order exceeds limit 4=Too late to enter 5=Unknown order IEX-assigned value used to identify firm the message is intended for. Applicable for Service Bureau connections.	
150	ExecType	O=New 1=Partial fill 2=Fill 4=Canceled 5=Replace 6=Pending Cancel (e.g., result of Order Cancel Request) 8=Rejected D=Restated E=Pending Replace (e.g., result of Order Cancel Cancel/Replace Request)	Describes the specific Execution Report (e.g., Pending Cancel) while OrdStatus will always identify the current order status (i.e., Partially Filled)
151	LeavesQty	Number of shares open for further execution.	
375	ContraBroker	Identifies contra broker (denoted with value "IEXG").	
382	NoContraBrokers	The number of ContraBroker (375) entries (denoted with value "1").	
434	CxlRejResponseTo	1=Order Cancel Request 2=Order Cancel/Replace Request	Identifies the type of request that a Cancel Reject is in response to.
851	LastLiquidityInd	1=Added Liquidity 2=Removed Liquidity 3=Routed 4=Auction 9=Removed Liquidity on Recheck	Identifies source of execution and whether an execution on IEX resulted from liquidity provision or removal, or from a single-price cross (e.g., auction).
9416	ExtendedExecInst	R=Retail T=Retail Liquidity Provider (RLP) F=Fixed Midpoint Peg  This value will be echoed back in execution reports	9416="T" or "F" will only be accepted when ExecInst(18) = "M".  9416="R" will only be accepted when ExecInst(18)="M" or "d"; OrdType (40) = "P"; OrderCapacity (47) = "A" or "R"; and TimeInForce (59) = 3 (IOC), 4 (FOK)

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Tag	Field Name	Details	Guidelines
			'R' may be assigned by IEX based on a port configuration setting instruction from an approved Retail Member Organization.
		Base Character(s)  MI=Add Non-Displayed Continuous Execution  ML=Add Displayed Continuous Execution  TI=Remove Non-Displayed Continuous Execution  TL=Remove Displayed Continuous Execution  X=Opening Process  O=Opening Auction  C=Closing Auction  H=Halt / Volatility Auction  P=IPO Auction	To be used in conjunction with LastMkt(30) to determine trading costs. If LastMkt is a non-IEX market, this field will pass through the Indicator value sent by that market center.
9730	TradeLiquidityIndicator	Appended Characters  D=Execution of displayed Continuous Book interest in a cross or auction (applied with X, O, or C, only)  R=Retail order removes liquidity  A=Member adds liquidity against a Retail order with a Retail Liquidity Provider order  W=Resting order removes against Post Only order  Y=Post Only order executes on entry	Opening, Closing, IPO, Halt, and Volatility Auctions are conducted for IEX-listed securities. See the IEX Auction Process Specification for details about each auction type.
		[Passed through value from Market Centers if LastMkt is not IEX; See Appendix F for details about tag mapping.]	Opening Process is conducted for non-IEX-listed securities.
9882	FeeCode	Specific fee code associated with execution on a non-IEX market.  [Passed through value from Market Centers if LastMkt is not IEX; See Appendix F for details about tag mapping.]	To be used in conjunction with LastMkt(30) to determine trading costs. If LastMkt is a non-IEX market, this field will pass through the Indicator value sent by that market center.

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# **MESSAGE TYPES**

All messages below will be preceded by the standard FIX header and followed by the standard FIX trailer. **Bolded** text indicates required tags for the message type in question, unbolded text indicates optional tags.

## **Session Messages**

#### Logon

The logon message authenticates a user establishing a connection to a remote system. Must always be initiated by Member to IEX.

Tag	Field Name	Details	Guidelines
35	MsgType	A	
108	HeartBtInt	Heartbeat interval in seconds	Low values (e.g., 30) are recommended

#### Heartbeat

The Heartbeat monitors the status of the communication link and identifies when the last of a string of messages was not received.

Tag	Field Name	Details	Guidelines
35	MsgType	0	

#### **Test Request**

The test request message forces a heartbeat from the opposing application.

Tag	Field Name	Details	Guidelines
35	MsgType	1	
112	TestReqID	Required when the heartbeat is the result of a Test Request message.	

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#### **Resend Request**

The resend request is sent by the receiving application to initiate the retransmission of messages. This function is utilized if a sequence number gap is detected, if the receiving application lost a message, or as a function of the initialization process.

Tag	Field Name	Details	Guidelines
35	MsgType	2	
7	BeginSeqNo	Message sequence number of first message in range to be resent	
16	EndSeqNo	Message sequence number of last message in range to be resent. If request is for a single message BeginSeqNo = EndSeqNo. If request is for all messages subsequent to a particular message, EndSeqNo = "O" (representing infinity).	

## **Session Reject**

The reject message should be issued when a message is received but cannot be properly processed due to a session-level rule violation.

Tag	Field Name	Details	Guidelines
35	MsgType	3	
45	RefSeqNum	MsgSeqNum of rejected message	
373	SessionRejectReason	Code to identify reason for a session-level Reject message.  O=Invalid tag number  1=Required tag missing  2=Tag not defined for this message type  3=Undefined Tag  4=Tag specified without a value  5=Value is incorrect (out of range) for this tag  6=Incorrect data format for value  7=Decryption problem  8=Signature problem  9=CompID problem  10=SendingTime accuracy problem  11=Invalid MsgType	
58	Text		

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### **Sequence Reset**

The sequence reset message is used by the sending application to reset the incoming sequence number on the opposing side.

Tag	Field Name	Details	Guidelines
35	MsgType	4	
36	NewSeqNo	Next sequence number to expect	
123	GapFillFlag	Indicates that the Sequence Reset message is replacing administrative or application messages which will not be resent.  Y=Gap Fill Message, MsgSeqNum field valid	

## Logout

The logout message initiates or confirms the termination of a FIX session.

Tag	Field Name	Details	Guidelines
35	MsgType	5	
58	Text		

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# **Trading Messages**

**Bolded** text indicates required tags for the message type in question, unbolded text indicates optional tags.

The highlighted portions below are not yet operative. IEX will issue a trading alert announcing implementation timing. Please see <u>IEX Trading Alert #2024-007</u> for details.

## Sent to IEX - Single Order

#### Market

Must be IOC or FOK, or DAY. Can be enriched with MinQty. Compatible with Routing. Not compatible with MaxFloor or ISO.

Tag	Field Name	Details	Guidelines
35	MsgType	D	
11	ClOrdID	Unique identifier, per session, per trading day for Order as assigned by the Member	Max length: 20 chars ASCII characters not permitted: @ - at sign , - comma " - double quotation   - pipe
18	Execinst	i=IEX Only (a.k.a. Standard) u=Router ([r,s,t] are accepted and converted to [u])	
21	HandInst	Instructions for order handling.	Value ignored, if present.
38	OrderQty	Number of shares ordered	1-10,000,000
40	OrdType	1=Market	
47	OrderCapacity	A=Agency P=Principal R=Riskless Principal	Option to default on a session level without needing to send per message
54	Side	Side of Order 1=Buy 2=Sell Long 5=Sell Short 6=Sell Short Exempt	LocateReqd (114)=[N] must be populated for [5]=Sell Short and [6]=Sell Short Exempt
55	Symbol	Ticker Symbol	The entire symbol (root and suffix, if applicable) needs to be sent if using Nasdaq symbology. CMS symbology can be sent either via 55/65 combo or concatenated using 55 alone.  Please consult Appendix A

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Tag	Field Name	Details	Guidelines
59	TimeInForce	O=Day 3=IOC 4=FOK	Please reference the TIF Matrix  [Appendix E] for accepted order entry parameters in the Pre, Post and Regular Market Sessions.  [O]=Day Market orders sent before the start of the Regular Market Session will be rejected unless for an IEX listed security, and such orders will only be active in the Opening Auction.  [4]=FOK not compatible with routable orders (18=r, s, t, u)
60	TransactTime	Time of order creation expressed in UTC	
1	Account		
58	Text		
65	SymbolSfx	Additional information about the security (e.g., preferred, warrants, etc.).	Not available for Nasdaq format, available for CMS only. Please consult Appendix A.
110	MinQty		Not compatible with FOK  Not compatible with 59=0 when submitted during the Pre-Market Session
114	LocateReqd	Required for Sell Short and Sell Short Exempt orders. N=Locate not required	[N] is the only accepted valid value. Lack of (114) or values other than 114=[N] for Sell Short or Sell Short Exempt orders will be rejected.
7928	Anti-Internalization Qualifiers (AIQ) ID	Anti-Internalization "AIQ" grouping must be enabled at the port level first in order for the AIQ identifiers and modifiers to be properly enforced if sent per order.  Users have the choice of setting AIQ on a Member Affiliate, User or MPID basis. If an order is submitted on a port that is not AIQ enabled, this FIX tag will be disregarded.  3 Characters for self trade prevention:  • First 2 characters are the AIQ identifier to prevent orders that share the same value and originate from the same Member Affiliate, User or MPID (as set at	1st and 2nd character AIQ identifier Level: Each character can be "0-9", "A-Z", "a-z". Case sensitive (i.e., 5B!= 5b).  If 7928 is omitted, and AIQ is enabled for the order entry port, the order will still be subject to AIQ. To disable AIQ for an order submitted on an AIQ-enabled port, User should input either "" or "" - which signifies "free-to-trade" (Anti-Internalization disabled for this order). Users can also completely disable their AIQ on a port level for all orders via the IEX Equities Port Request Form.

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Tag	Field Name	Details	Guidelines
		the port level) from executing against each other.  • 3 <sup>rd</sup> character is the 1 character AIQ modifier, which specifies the type of AIQ behavior	3 <sup>rd</sup> character AIQ Modifier: N - Cancel newest O - Cancel oldest B - Cancel both S - Cancel smaller D - Decrement larger original order quantity and cancel smaller  Missing 3 <sup>rd</sup> character modifier indicates default behavior of cancel oldest (O).  Routable orders (18=u) with a 3 <sup>rd</sup> character of "D" (Decrement Larger) will be rejected upon receipt.  Accepted for At the open and At the close orders (59=2,7), but not enforced.
8484	Investor ID	Unique string per "investor" on whose behalf the Member is acting. Will not be echoed back on execution reports.	Max length: 20 chars
9500	MinQtyInstruction	C=Composite  M=Minimum Execution Size with Cancel Remaining; once LeavesQty < MinQty, order will cancel  A=Minimum Execution Size with AON Remaining; once LeavesQty < MinQty, Open shares become All or None	Only valid if 110 (MinQty) is sent.  Will not be echoed back in execution reports. Not changeable via Cancel/Replace

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#### Limit

Can be enriched with MaxFloor, MinQty, or can be coded as an ISO (subject to guidelines below).

Tag	Field Name	Details	Guidelines
35	MsgType	D	
11	ClOrdID	Unique identifier, per session, per trading day for Order as assigned by the Member	Max length: 20 chars ASCII characters not permitted: @ - at sign , - comma " - double quotation   - pipe
18	Execinst	f=ISO (executes on IEX) i=IEX Only (a.k.a. Standard) u=Router ([r,s,t] are accepted and converted to [u]) y=Trade At ISO (executes on IEX)	[f]=ISO Not compatible with MinQty  [f, y]=ISO only compatible with TIF of IOC
21	HandInst	Instructions for order handling.	Value ignored, if present.
38	OrderQty	Number of shares ordered	1-10,000,000
40	OrdType	2=Limit	
44	Price	The MPV for orders entered into the System shall be \$0.01 for orders priced \$1.00 or greater, and \$0.0001 for orders priced below \$1.00.	
47	OrderCapacity	A=Agency P=Principal R=Riskless Principal	Option to default on a session level without needing to send per message
54	Side	Side of Order 1=Buy 2=Sell Long 5=Sell Short 6=Sell Short Exempt	LocateReqd (114)=[N] must be populated for [5]=Sell Short and [6]=Sell Short Exempt
55	Symbol	Ticker Symbol	The entire symbol (root and suffix, if applicable) needs to be sent if using Nasdaq symbology. CMS symbology can be sent either via 55/65 combo or concatenated using 55 alone.  Please consult Appendix A.
59	TimeInForce	0=Day 3=IOC 4=FOK 5=Good 'til Extended Day	Please reference the TIF Matrix  [Appendix E] for accepted order entry parameters in the Pre, Post and Regular Market Sessions.

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Tag	Field Name	Details	Guidelines
		6=Good 'til Time M=System Hours	D-Limit orders will only trade during the Regular Market Session.
			[0]=Day orders can be sent, and will be acknowledged before the start of Regular Market Hours starting at 9:30 am, but will only be eligible to trade between 9:30 am - 4 pm
			Orders with a TIF of [5]=Good 'til Extended Day, [6]=Good 'til Time, and [M]=System Hours can be sent will be rejected if submitted before the start of Regular Market Hours.
			[4]=FOK not compatible with routable orders (18=r, s, t, u)
			[6]=Good 'til Time requires ExpireTime (126)All unexecuted orders at end of Regular Trading Session will receive Unsolicited Cancels, and all orders received after the close of the Regular Market Session will be rejected.
60	TransactTime	Time of order creation expressed in UTC	
1	Account		
58	Text		
65	SymbolSfx	Additional information about the security (e.g., preferred, warrants, etc.).	Not available for Nasdaq format, available for CMS only. Please consult Appendix A.
110	MinQty		Only non-displayed orders (111=0) may have a MinQty  Not compatible with ISO.
111	MaxFloor	Quantity to display (for a reserve order).  If not populated, order is fully displayed.  If MaxFloor(111) = 0, limit order is non-displayed.	Not compatible with FOK  For Reserve orders: A value of [0] indicates a non-displayed order.

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Tag	Field Name	Details	Guidelines
			Omitting the MaxFloor(111) tag or submitting MaxFloor (111) = OrderQty (38) indicates a fully displayed order.  MaxFloor may be a fixed amount of shares; or an odd, mixed, or round lot quantity. A Random Replenishment feature is also supported, please see FIX tag section 8020 for more details.  For odd lot reserve orders, set to a value < 1 round lot and < OrderQty (38)
			Not compatible with IOC or FOK.
114	LocateReqd	Required for Sell Short and Sell Short Exempt orders. N=Locate not required	[N] is the only accepted valid value.  Lack of (114) or values other than  114=[N] for Sell Short or Sell Short  Exempt orders will be rejected.
			1st and 2nd character Unique ID Level:
7928	Anti-Internalization	Anti-Internalization "AIQ group" must be enabled at the port level first in order for the AIQ identifiers and modifiers to be properly enforced if sent per order.  Users have the choice of setting AIQ on a Member Affiliate, User or MPID basis. If an order is submitted on a port that is not AIQ enabled, this FIX tag will be disregarded.  3 Characters for self trade prevention:  • First 2 characters are the AIQ	Each character can be "0-9", "A-Z", "a-z".  Case sensitive (i.e., 5B != 5b).  User should input either "" or "" - which signifies "free-to-trade" (Anti-Internalization disabled for this order). Users can also completely disable their AIQ on a port level for all orders via the IEX Equities Port Request Form.
7320	Qualifiers (AIQ) ID	identifier to prevent orders that share the same value and originate from the same Member Affiliate (two or more Members that are affiliates), User (Member) or MPID (as set at the port level) from executing against each other.  • 3 <sup>rd</sup> character is the 1 character AIQ modifier, which specifies the type of AIQ behavior	3 <sup>rd</sup> character AIQ Modifier: N - Cancel newest O - Cancel oldest B - Cancel both S - Cancel smaller D - Decrement larger original order quantity and cancel smaller Missing 3 <sup>rd</sup> character modifier indicates default behavior of cancel oldest (O).  Routable orders (18=u) with a 3 <sup>rd</sup> character of "D" (Decrement Larger) will be rejected upon receipt.

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Tag	Field Name	Details	Guidelines
			Accepted for At the open and At the close orders (59=2,7), but not enforced.
			Must be accompanied with a MaxFloor (111) if DisplayRange (8020) is populated
			Cannot have DisplayRange that is >= MaxFloor
			May either be a round lot multiple or < than one round lot (odd lot)
	DisplayRange		If MaxFloor = round lot multiple, DisplayRange must be a round lot multiple < MaxFloor
			*e.g., If MaxFloor = 200, DisplayRange = 100
8020		Quantity range to display (for a reserve order)	If MaxFloor = 400, DisplayRange can =100, 200, or 300
			If MaxFloor < a round lot select DisplayRange one or more shares < Maxfloor
			*e.g., Can be <=99 shares, but not a single round lot (100 shares) If MaxFloor = 99, DisplayRange can = 1- 98 shares
			*If DisplayRange + MaxFloor are >= to a round lot, the replenishment range is capped at 99 shares
			*Examples assume a round lot size = 100 shares. Same logic applies for symbols with other round lot sizes.
8484	Investor ID	Unique string per "investor" on whose behalf the Member is acting. Will not be echoed back on execution reports.	Max length: 20 chars

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Tag	Field Name	Details	Guidelines
9140	DisplayInst	P=Post Only -=None	9140=[P] only if OrdType(40) = '2', MaxFloor(111) is omitted or equal to OrderQty(38), and Price(44) is equal to \$1.00 or more.  None is the default DisplayInst.  DisplayInst value will override any values set at the port level; if DisplayInst is omitted the default port session setting will be enforced.
9500	MinQtyInstruction	C=Composite  M=Minimum Execution Size with Cancel Remaining; once LeavesQty < MinQty, order will cancel  A=Minimum Execution Size with AON Remaining; once LeavesQty < MinQty, Open shares become All or None	Only valid if 110 (MinQty) is sent.  Will not be echoed back in execution reports. Not changeable via Cancel/Replace
20003	CancelInsteadOfSlide	O=Slide 3=Cancel order instead of slide	Only applicable for when DisplayInst (9140) = 'P'.  Sliding is the default behavior.  CancelInsteadOfSlide will override any values set at the port level; if  CancelInsteadOfSlide is omitted the default port session setting will be enforced.

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#### **Midpoint Peg**

Non-displayed order, ExecInst must be [M]=Midpoint Peg. Not compatible with ISO. Can be enriched with MinQty (subject to guidelines below).

Tag	Field Name	Details	Guidelines
35	MsgType	D	
11	ClOrdID	Unique identifier, per session, per trading day for Order as assigned by the Member	Max length: 20 chars  ASCII characters not permitted:  @ - at sign , - comma  " - double quotation   - pipe
18	ExecInst	M=Midpoint Peg (executes on IEX)	
21	HandInst	Instructions for order handling.	Value ignored, if present.
38	OrderQty	Number of shares ordered	1-10,000,000
40	OrdType	P=Pegged	
47	OrderCapacity	A=Agency P=Principal R=Riskless Principal	Option to default on a session level without needing to send per message
54	Side	Side of Order 1=Buy 2=Sell Long 5=Sell Short 6=Sell Short Exempt	LocateReqd (114)=[N] must be populated for [5]=Sell Short and [6]=Sell Short Exempt
55	Symbol	Ticker Symbol	The entire symbol (root and suffix, if applicable) needs to be sent if using Nasdaq symbology. CMS symbology can be sent either via 55/65 combo or concatenated using 55 alone.  Please consult Appendix A.
59	TimeInForce	O=Day 3=IOC 4=FOK 5=Good 'til Extended Day 6=Good 'til Time M=System Hours	Please reference the TIF Matrix  [Appendix E] for accepted order entry parameters in the Pre, Post and Regular Market Sessions.  No matter the TIF, this order type will only trade during the Regular Market Session.  [O]=Day orders can be sent, and will be acknowledged before the start of Regular Market Hours starting at 9:30

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Ton	Field Name	Dataila	Cuidalinas
Tag	Field Name	Details	Guidelines
			am, but will only be eligible to trade between 9:30 am - 4 pm
			[6]=Good 'til Time requires ExpireTime (126)
			All unexecuted orders at end of the Regular Market Session will receive Unsolicited Cancels.
60	TransactTime	Time of order creation expressed in UTC	
1	Account		
		The MPV for orders entered into the	
44	Price	System shall be \$0.01 for orders priced \$1.00 or greater, and \$0.0001 for orders priced below \$1.00.	If price is not specified, will be constrained by internal IEX Order Collar
58	Text		
65	SymbolSfx	Additional information about the security (e.g., preferred, warrants, etc.).	Not available for Nasdaq format, available for CMS only. Please consult Appendix A.
111	MaxFloor	0=Non-Displayed	Will only accept value of [0] - Non-displayed
110	MinQty		All other values will be rejected. Only non-displayed orders (111=0) may have a MinQty  Not compatible with ISO
			Not compatible with FOK.
114	LocateReqd	Required for Sell Short and Sell Short Exempt orders. N=Locate not required	[N] is the only accepted valid value. Lack of (114) or values other than 114=[N] for Sell Short or Sell Short Exempt orders will be rejected.
7928	Anti-Internalization Qualifiers (AIQ) ID	Anti-Internalization "AIQ group" must be enabled at the port level first in order for the AIQ identifiers and modifiers to be properly enforced if sent per order.  Users have the choice of setting AIQ on a Member Affiliate, User or MPID basis. If an order is submitted on a port that is not AIQ enabled, this FIX tag will be disregarded.	1st and 2nd character Unique ID Level: Each character can be "O-9", "A-Z", "a-z". Case sensitive (i.e., 5B!= 5b).  User should input either "" or "" - which signifies "free-to-trade" (Anti-Internalization disabled for this order). Users can also completely disable their AIQ on a port level for all orders via the IEX Equities Port Request Form.

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Tag	Field Name	Details	Guidelines
		<ul> <li>First 2 characters are the AIQ identifier to prevent orders that share the same value and originate from the same Member Affiliate (two or more Members that are affiliates), User (Member) or MPID (as set at the port level) from executing against each other.</li> <li>3<sup>rd</sup> character is the 1 character AIQ modifier, which specifies the type of AIQ behavior</li> </ul>	3 <sup>rd</sup> character AIQ Modifier: N - Cancel newest O - Cancel oldest B - Cancel both S - Cancel smaller D - Decrement larger original order quantity and cancel smaller  Missing 3 <sup>rd</sup> character modifier indicates default behavior of cancel oldest (O).  Routable orders (18=u) with a 3 <sup>rd</sup> character of "D" (Decrement Larger) will be rejected upon receipt.  Accepted for At the open and At the close orders (59=2,7), but not enforced.
8484	Investor ID	Unique string per "investor" on whose behalf the Member is acting. Will not be echoed back on execution reports.	Max length: 20 chars
9303	RoutingInst	N=Trade Now On -=Trade Now opt-out	Trade Now On is the default RoutingInst.  RoutingInst will override any values set at the port level; if RoutingInst is omitted the default port session setting will be enforced.
9500	MinQtyInstruction	C=Composite  M=Minimum Execution Size with Cancel Remaining; once LeavesQty < MinQty, order will cancel  A=Minimum Execution Size with AON Remaining; once LeavesQty < MinQty, Open shares become All or None	Only valid if 110 (MinQty) is sent.  Will not be echoed back in execution reports. Not changeable via Cancel/Replace

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#### **Fixed Midpoint Peg**

Non-displayed order, ExecInst must be [M]=Midpoint Peg with ExtendedExecInst=[F]. Not compatible with ISO. Fixed Midpoint Peg orders cannot be enriched with MinQty (110).

Tag	Field Name	Details	Guidelines
35	MsgType	D	
11	ClOrdID	Unique identifier, per session, per trading day for Order as assigned by the Member	Max length: 20 chars  ASCII characters not permitted:  @ - at sign , - comma  " - double quotation   - pipe
18	Execinst	M=Midpoint Peg (executes on IEX)	
21	HandInst	Instructions for order handling.	Value ignored, if present.
38	OrderQty	Number of shares ordered	1-10,000,000
40	OrdType	P=Pegged	
47	OrderCapacity	A=Agency P=Principal R=Riskless Principal	Option to default on a session level without needing to send per message
54	Side	Side of Order 1=Buy 2=Sell Long 5=Sell Short 6=Sell Short Exempt	LocateReqd (114)=[N] must be populated for [5]=Sell Short and [6]=Sell Short Exempt
55	Symbol	Ticker Symbol	The entire symbol (root and suffix, if applicable) needs to be sent if using Nasdaq symbology. CMS symbology can be sent either via 55/65 combo or concatenated using 55 alone.  Please consult Appendix A.
59	TimeInForce	0=Day 3=IOC 4=FOK 5=Good 'til Extended Day 6=Good 'til Time M=System Hours	Please reference the TIF Matrix  [Appendix E] for accepted order entry parameters in the Pre, Post and Regular Market Sessions.  No matter the TIF, this order type will only trade during the Regular Market Session.  [O]=Day orders can be sent, and will be acknowledged before the start of

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Tag	Field Name	Details	Guidelines
			Regular Market Hours starting at 9:30 am, but will only be eligible to trade between 9:30 am - 4 pm
			[6]=Good 'til Time requires ExpireTime (126)
			All unexecuted orders at end of the Regular Market Session will receive Unsolicited Cancels.
60	TransactTime	Time of order creation expressed in UTC	
9416	ExtendedExecInst	F = Fixed Midpoint Peg	'F' will only be accepted when ExecInst(18) = 'M'.
1	Account		
44	Price	The MPV for orders entered into the System shall be \$0.01 for orders priced \$1.00 or greater, and \$0.0001 for orders priced below \$1.00.	If price is not specified, will be constrained by internal IEX Order Collar
58	Text		
65	SymbolSfx	Additional information about the security (e.g., preferred, warrants, etc.).	Not available for Nasdaq format, available for CMS only. Please consult Appendix A.
111	MaxFloor	O=Non-Displayed	Will only accept value of [0] - Non-displayed
			All other values will be rejected.
114	LocateReqd	Required for Sell Short and Sell Short Exempt orders. N=Locate not required	[N] is the only accepted valid value. Lack of (114) or values other than 114=[N] for Sell Short or Sell Short Exempt orders will be rejected.
7928	Anti-Internalization Qualifiers (AIQ) ID	Anti-Internalization "AIQ group" must be enabled at the port level first in order for the AIQ identifiers and modifiers to be properly enforced if sent per order.  Users have the choice of setting AIQ on a Member Affiliate, User or MPID basis. If an order is submitted on a port that is not AIQ enabled, this FIX tag will be disregarded.  3 Characters for self trade prevention:	1st and 2nd character Unique ID Level: Each character can be "0-9", "A-Z", "a-z". Case sensitive (i.e., 5B!= 5b).  User should input either "" or "" - which signifies "free-to-trade" (Anti-Internalization disabled for this order). Users can also completely disable their AIQ on a port level for all orders via the IEX Equities Port Request Form.

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Tag	Field Name	Details	Guidelines
		<ul> <li>First 2 characters are the AIQ identifier to prevent orders that share the same value and originate from the same Member Affiliate (two or more Members that are affiliates), User (Member) or MPID (as set at the port level) from executing against each other.</li> <li>3<sup>rd</sup> character is the 1 character AIQ modifier, which specifies the type of AIQ behavior</li> </ul>	3 <sup>rd</sup> character AIQ Modifier: N - Cancel newest O - Cancel oldest B - Cancel both S - Cancel smaller D - Decrement larger original order quantity and cancel smaller  Missing 3 <sup>rd</sup> character modifier indicates default behavior of cancel oldest (O).  Routable orders (18=u) with a 3 <sup>rd</sup> character of "D" (Decrement Larger) will be rejected upon receipt.  Accepted for At the open and At the close orders (59=2,7), but not enforced.
8484	Investor ID	Unique string per "investor" on whose behalf the Member is acting. Will not be echoed back on execution reports.	Max length: 20 chars
9303	RoutingInst	N=Trade Now On -=Trade Now opt-out	Trade Now On is the default RoutingInst.  RoutingInst will override any values set at the port level; if RoutingInst is omitted the default port session setting will be enforced.

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## Offset Peg

Non-displayed order, Execlnst must be [o]=Offset Peg. Not compatible with ISO. Can be enriched with MinQty (subject to guidelines below).

Tag	Field Name	Details	Guidelines
35	MsgType	D	
11	ClOrdID	Unique identifier, per session, per trading day for Order as assigned by the Member	Max length: 20 chars  ASCII characters not permitted:  @ - at sign , - comma  " - double quotation   - pipe
18	Execinst	o=Offset Peg (executes on IEX)	
21	HandInst	Instructions for order handling.	Value ignored, if present.
38	OrderQty	Number of shares ordered	1-10,000,000
40	OrdType	P=Pegged	ExecInst (18) must be populated with [o] = Offset Peg
47	OrderCapacity	A=Agency P=Principal R=Riskless Principal	Option to default on a session level without needing to send per message
54	Side	Side of Order 1=Buy 2=Sell Long 5=Sell Short 6=Sell Short Exempt	LocateReqd (114)=[N] must be populated for [5]=Sell Short and [6]=Sell Short Exempt
55	Symbol	Ticker Symbol	The entire symbol (root and suffix, if applicable) needs to be sent if using Nasdaq symbology. CMS symbology can be sent either via 55/65 combo or concatenated using 55 alone.  Please consult Appendix A.
59	TimeInForce	O=Day 5=Good 'til Extended Day 6=Good 'til Time M=System Hours	Please reference the TIF Matrix  [Appendix E] for accepted order entry parameters in the Pre, Post and Regular Market Sessions.  No matter the TIF, this order type will only trade during the Regular Market Session.  [O]=Day orders can be sent, and will be acknowledged before the start of Regular Market Hours starting at 9:30

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Tag	Field Name	Details	Guidelines
			am, but will only be eligible to trade between 9:30 am - 4 pm
			[6]=Good 'til Time requires ExpireTime (126) All unexecuted orders at end of the Regular Market Session will receive Unsolicited Cancels.
60	TransactTime	Time of order creation expressed in UTC	
1	Account		
44	Price	The MPV for orders entered into the System shall be \$0.01 for orders priced \$1.00 or greater, and \$0.0001 for orders priced below \$1.00.	If price is not specified, will be constrained by internal IEX Order Collar
58	Text		
211	PegDifference	Signed dollar value added to the price of the peg for a pegged order.	The domain of values for PegDifference are: [-100.00 100.00].  Values outside the bounds of the domain will be rejected.  Signed dollar value of up to two (four) decimal places will be accepted for limit prices above (below) a dollar.  The PegDifference will be added to the NBB (NBO) for buys (sells). If the resultant peg calculation would result in the Offset Peg order being booked at a price that is more aggressive than the contra-side protected quote (the NBO for buys/NBB for sells), the order will be booked at the contra-side protected quote.  If the resultant peg calculation creates an impermissible Minimum Price Variant (MPV), the peg calculation will be rounded down for buys and up for sells.  Omission of the PegDifference for an Offset Peg order will be given a default value of 0.

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Tag	Field Name	Details	Guidelines
65	SymbolSfx	Additional information about the security (e.g., preferred, warrants, etc.).	Not available for Nasdaq format, available for CMS only. Please consult Appendix A.
110	MinQty		Only non-displayed orders (111=0) may have a MinQty  Not compatible with ISO  Not compatible with FOK.
111	MaxFloor	O=Non-Displayed	Will only accept value of [0] - Non-displayed  All other values will be rejected.
114	LocateReqd	Required for Sell Short and Sell Short Exempt orders. N=Locate not required	[N] is the only accepted valid value. Lack of (114) or values other than 114=[N] for Sell Short or Sell Short Exempt orders will be rejected.
7928	Anti- Internalization Qualifiers (AIQ) ID	Anti-Internalization "AIQ group" must be enabled at the port level first in order for the AIQ identifiers and modifiers to be properly enforced if sent per order. Users have the choice of setting AIQ on a Member Affiliate, User or MPID basis. If an order is submitted on a port that is not AIQ enabled, this FIX tag will be disregarded.  3 Characters for self trade prevention:  • First 2 characters are the AIQ identifier to prevent orders that share the same value and originate from the same Member Affiliate (two or more Members that are affiliates), User (Member) or MPID (as set at the port level) from executing against each other.  • 3rd character is the 1 character AIQ modifier, which specifies the type of AIQ behavior	1st and 2nd character Unique ID Level:  Each character can be "0-9", "A-Z", "a-z".  Case sensitive (i.e., 5B!= 5b).  User should input either "" or "" - which signifies "free-to-trade" (Anti-Internalization disabled for this order). Users can also completely disable their AIQ on a port level for all orders via the IEX Equities Port Request Form.  3rd character AIQ Modifier:  N - Cancel newest  O - Cancel oldest  B - Cancel smaller  D - Decrement larger original order quantity and cancel smaller  Missing 3rd character modifier indicates default behavior of cancel oldest (O).  Routable orders (18=u) with a 3rd character of "D" (Decrement Larger) will be rejected upon receipt.  Accepted for At the open and At the close orders (59=2,7), but not enforced.

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Tag	Field Name	Details	Guidelines
8484	Investor ID	Unique string per "investor" on whose behalf the Member is acting. Will not be echoed back on execution reports.	Max length: 20 chars
9303	RoutingInst	N=Trade Now On -=Trade Now opt-out	Trade Now On is the default RoutingInst.  RoutingInst will override any values set at the port level; if RoutingInst is omitted the default port session setting will be enforced.
9500	MinQtyInstruction	C=Composite  M=Minimum Execution Size with Cancel Remaining; once LeavesQty < MinQty, order will cancel  A=Minimum Execution Size with AON Remaining; once LeavesQty < MinQty, Open shares become All or None	Only valid if 110 (MinQty) is sent.  Will not be echoed back in execution reports. Not changeable via Cancel/Replace

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## **Market Peg**

Non-displayed order, ExecInst must be [P]=Market Peg. Not compatible with ISO. Can be enriched with MinQty (subject to guidelines below).

Tag	Field Name	Details	Guidelines
35	MsgType	D	
11	ClOrdID	Unique identifier, per session, per trading day for Order as assigned by the Member	Max length: 20 chars ASCII characters not permitted: @ - at sign , - comma " - double quotation   - pipe
18	Execinst	P=Market Peg (executes on IEX)	
21	HandInst	Instructions for order handling.	Value ignored, if present.
38	OrderQty	Number of shares ordered	1-10,000,000
40	OrdType	P=Pegged	Execinst (18) must be populated with [P] = Market Peg
47	OrderCapacity	A=Agency P=Principal R=Riskless Principal	Option to default on a session level without needing to send per message
54	Side	Side of Order 1=Buy 2=Sell Long 5=Sell Short 6=Sell Short Exempt	LocateReqd (114)=[N] must be populated for [5]=Sell Short and [6]=Sell Short Exempt
55	Symbol	Ticker Symbol	The entire symbol (root and suffix, if applicable) needs to be sent if using Nasdaq symbology. CMS symbology can be sent either via 55/65 combo or concatenated using 55 alone.  Please consult Appendix A.
59	TimeInForce	O=Day 3=IOC 4=FOK 5=Good 'til Extended Day 6=Good 'til Time M=System Hours	Please reference the TIF Matrix  [Appendix E] for accepted order entry parameters in the Pre, Post and Regular Market Sessions.  No matter the TIF, this order type will only trade during the Regular Market Session.  [O]=Day orders can be sent, and will be acknowledged before the start of Regular Market Hours starting at 9:30

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Tag	Field Name	Details	Guidelines
Т			am, but will only be eligible to trade between 9:30 am - 4 pm
			[6]=Good 'til Time requires ExpireTime (126)
			All unexecuted orders at end of the Regular Market Session will receive Unsolicited Cancels.
60	TransactTime	Time of order creation expressed in UTC	
1	Account		
44	Price	The MPV for orders entered into the System shall be \$0.01 for orders priced \$1.00 or greater, and \$0.0001 for orders priced below \$1.00.	If price is not specified, will be constrained by internal IEX Order Collar
58	Text		
211	PegDifference	Signed dollar value added to the price of the peg for a pegged order.	The domain of values for PegDifference are: [-100.00 100.00].  Values outside the bounds of the domain will be rejected.  Signed dollar value of up to two (four) decimal places will be accepted for limit prices above (below) a dollar.  The PegDifference will be added to the NBO (NBB) for buys (sells). If the offset amount would result in the Market Peg order being booked at a price that is more aggressive than the NBO (NBB) for buys (sells), the offset amount will be disregarded (meaning the Market Peg will rest at the contra-side primary quote).
			impermissible Minimum Price Variant (MPV), the peg calculation will be rounded down for buys and up for sells.  Omission of the PegDifference for an Market Peg order will be given a default value of O.

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Tag	Field Name	Details	Guidelines
65	SymbolSfx	Additional information about the security (e.g., preferred, warrants, etc.).	Not available for Nasdaq format, available for CMS only. Please consult Appendix A.
110	MinQty		Only non-displayed orders (111=0) may have a MinQty  Not compatible with ISO  Not compatible with FOK.
111	MaxFloor	O=Non-Displayed	Will only accept value of [0] - Non-displayed  All other values will be rejected.
114	LocateReqd	Required for Sell Short and Sell Short Exempt orders. N=Locate not required	[N] is the only accepted valid value. Lack of (114) or values other than 114=[N] for Sell Short or Sell Short Exempt orders will be rejected.
7928	Anti- Internalization Qualifiers (AIQ) ID	Anti-Internalization "AIQ group" must be enabled at the port level first in order for the AIQ identifiers and modifiers to be properly enforced if sent per order. Users have the choice of setting AIQ on a Member Affiliate, User or MPID basis. If an order is submitted on a port that is not AIQ enabled, this FIX tag will be disregarded.  3 Characters for self trade prevention:  • First 2 characters are the AIQ identifier to prevent orders that share the same value and originate from the same Member Affiliate (two or more Members that are affiliates), User (Member) or MPID (as set at the port level) from executing against each other.  • 3rd character is the 1 character AIQ modifier, which specifies the type of AIQ behavior	Each character can be "O-9", "A-Z", "a-z". Case sensitive (i.e., 5B!= 5b).  User should input either "" or "" - which signifies "free-to-trade" (Anti-Internalization disabled for this order). Users can also completely disable their AIQ on a port level for all orders via the IEX Equities Port Request Form.  3rd character AIQ Modifier: N - Cancel newest O - Cancel oldest B - Cancel smaller D - Decrement larger original order quantity and cancel smaller  Missing 3rd character modifier indicates default behavior of cancel oldest (O).  Accepted for At the open and At the close orders (59=2,7), but not enforced.  Routable orders (18=u) with 3rd character of D (Decrement Larger) will be rejected upon receipt.

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Tag	Field Name	Details	Guidelines
8484	Investor ID	Unique string per "investor" on whose behalf the Member is acting. Will not be echoed back on execution reports.	Max length: 20 chars
9303	RoutingInst	N=Trade Now On -=Trade Now opt-out	Trade Now On is the default RoutingInst.  RoutingInst will override any values set at the port level; if RoutingInst is omitted the default port session setting will be enforced.
9500	MinQtyInstruction	C=Composite  M=Minimum Execution Size with Cancel Remaining; once LeavesQty < MinQty, order will cancel  A=Minimum Execution Size with AON Remaining; once LeavesQty < MinQty, Open shares become All or None	Only valid if 110 (MinQty) is sent.  Will not be echoed back in execution reports. Not changeable via Cancel/Replace

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## **Primary Peg**

Non-displayed order, ExecInst must be [R]=Primary Peg. Not compatible with ISO. Can be enriched with MinQty (subject to guidelines below).

Tag	Field Name	Details	Guidelines
35	MsgType	D	
11	ClOrdID	Unique identifier, per session, per trading day for Order as assigned by the Member	Max length: 20 chars  ASCII characters not permitted:  @ - at sign , - comma  " - double quotation   - pipe
18	ExecInst	R=Primary Peg (executes on IEX)	
21	HandInst	Instructions for order handling.	Value ignored, if present.
38	OrderQty	Number of shares ordered	1-10,000,000
40	OrdType	P=Pegged	
47 54	OrderCapacity Side	A=Agency P=Principal R=Riskless Principal Side of Order 1=Buy 2=Sell Long 5=Sell Short 6=Sell Short Exempt	Option to default on a session level without needing to send per message  LocateReqd (114)=[N] must be populated for [5]=Sell Short and [6]=Sell Short Exempt
55	Symbol	Ticker Symbol	The entire symbol (root and suffix, if applicable) needs to be sent if using Nasdaq symbology. CMS symbology can be sent either via 55/65 combo or concatenated using 55 alone.  Please consult Appendix A.
59	TimeInForce	O=Day 3=IOC 4=FOK 5=Good 'til Extended Day 6=System Hours M=System Hours	Please reference the TIF Matrix  [Appendix E] for accepted order entry parameters in the Pre, Post and Regular Market Sessions.  No matter the TIF, this order type will only trade during the Regular Market Session.  [O]=Day orders can be sent, and will be acknowledged before the start of Regular Market Hours starting at 9:30

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Tag	Field Name	Details	Guidelines
			am, but will only be eligible to trade between 9:30 am - 4 pm
			[6]=Good 'til Time requires ExpireTime (126)
			All unexecuted orders at end of the Regular Market Session will receive Unsolicited Cancels.
60	TransactTime	Time of order creation expressed in UTC	
1	Account		
		The MPV for orders entered into the	
44	Price	System shall be \$0.01 for orders priced \$1.00 or greater, and \$0.0001 for orders priced below \$1.00.	If price is not specified, will be constrained by internal IEX Order Collar
58	Text		
65	SymbolSfx	Additional information about the security (e.g. preferred, warrants, etc.).	Not available for Nasdaq format, available for CMS only. Please consult Appendix A.
110	MinQty		Only non-displayed orders (111=0) may have a MinQty  Not compatible with ISO  Not compatible with FOK.
111	MaxFloor	0=Non-Displayed	Will only accept value of [0] - Non-displayed
114	LocateReqd	Required for Sell Short and Sell Short Exempt orders. N=Locate not required	All other values will be rejected.  [N] is the only accepted valid value. Lack of (114) or values other than 114=[N] for Sell Short or Sell Short Exempt orders will be rejected.
7928	Anti-Internalization Qualifiers (AIQ) ID	Anti-Internalization "AIQ group" must be enabled at the port level first in order for the AIQ identifiers and modifiers to be properly enforced if sent per order. Users have the choice of setting AIQ on a Member Affiliate, User or MPID basis. If an order is submitted on a port that is not AIQ enabled, this FIX tag will be disregarded.	1st and 2nd character Unique ID Level:  Each character can be "0-9", "A-Z", "a-z".  Case sensitive (i.e., 5B!= 5b).  User should input either "" or "" - which signifies "free-to-trade" (Anti-Internalization disabled for this order). Users can also completely disable their AIQ on a port level for all orders via the IEX Equities Port Request Form.

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Tag	Field Name	Details	Guidelines
		<ul> <li>First 2 characters are the AIQ identifier to prevent orders that share the same value and originate from the same Member Affiliate (two or more Members that are affiliates), User (Member) or MPID (as set at the port level) from executing against each other.</li> <li>3<sup>rd</sup> character is the 1 character AIQ modifier, which specifies the type of AIQ behavior</li> </ul>	3rd character AIQ Modifier: N - Cancel newest O - Cancel oldest B - Cancel both S - Cancel smaller D - Decrement larger original order quantity and cancel smaller  Missing 3rd character modifier indicates default behavior of cancel oldest (O).  Routable orders (18=u) with a 3rd character of "D" (Decrement Larger) will be rejected upon receipt.  Accepted for At the open and At the close orders (59=2,7), but not enforced.
8484	Investor ID	Unique string per "investor" on whose behalf the Member is acting. Will not be echoed back on execution reports.	Max length: 20 chars
9500	MinQtyInstruction	C=Composite  M=Minimum Execution Size with Cancel Remaining; once LeavesQty < MinQty, order will cancel  A=Minimum Execution Size with AON Remaining; once LeavesQty < MinQty, Open shares become All or None	Only valid if 110 (MinQty) is sent.  Will not be echoed back in execution reports. Not changeable via Cancel/Replace
20067	SigVersion	Signal version  1 = Signal v5  2 = Signal v6	For D-Peg, P-Peg and C-Peg orders only.  If omitted the value will be the requested default on the <u>IEX Equities Port Request Form</u> . If no default is specified then Signal v5[1] will be used.

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## **Discretionary Peg**

Non-displayed order, ExecInst must be [d]=Discretionary Peg. Not compatible with ISO. Can be enriched with MinQty (subject to guidelines below).

Tag	Field Name	Details	Guidelines
35	MsgType	D	
11	ClOrdID	Unique identifier, per session, per trading day for Order as assigned by the Member	Max length: 20 chars  ASCII characters not permitted:  @ - at sign , - comma  " - double quotation   - pipe
18	Execinst	d=Discretionary Peg (executes on IEX)	
21	HandInst	Instructions for order handling.	Value ignored, if present.
38	OrderQty	Number of shares ordered	1-10,000,000
40	OrdType	P=Pegged	
47	OrderCapacity	A=Agency P=Principal R=Riskless Principal	Option to default on a session level without needing to send per message
54	Side	Side of Order 1=Buy 2=Sell Long 5=Sell Short 6=Sell Short Exempt	LocateReqd (114)=[N] must be populated for [5]=Sell Short and [6]=Sell Short Exempt
55	Symbol	Ticker Symbol	The entire symbol (root and suffix, if applicable) needs to be sent if using Nasdaq symbology. CMS symbology can be sent either via 55/65 combo or concatenated using 55 alone.  Please consult Appendix A.
59	TimeInForce	0=Day 3=IOC 4=FOK 5=Good 'til Extended Day 6=Good 'til Time M=System Hours	Please reference the TIF Matrix  [Appendix E] for accepted order entry parameters in the Pre, Post and Regular Market Sessions.  No matter the TIF, this order type will only trade during the Regular Market Session.  [O]=Day orders can be sent, and will be acknowledged before the start of Regular Market Hours starting at 9:30

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Tag	Field Name	Details	Guidelines
			am, but will only be eligible to trade between 9:30 am - 4 pm
			[6]=Good 'til Time requires ExpireTime (126)
			All unexecurted orders at the end of the Regular Market Session will receive Unsolicited Cancels.
60	TransactTime	Time of order creation expressed in UTC	
1	Account		
		The MPV for orders entered into the	
44	Price	System shall be \$0.01 for orders priced \$1.00 or greater, and \$0.0001 for orders priced below \$1.00.	If price is not specified, will be constrained by internal IEX Order Collar
58	Text		
65	SymbolSfx	Additional information about the security (e.g., preferred, warrants, etc.).	Not available for Nasdaq format, available for CMS only. Please consult Appendix A.
110	MinQty		Only non-displayed orders (111=0) may have a MinQty  Not compatible with ISO  Not compatible with FOK.
111	MaxFloor	O=Non-Displayed	Will only accept value of [0] - Non-displayed
114	LocateReqd	Required for Sell Short and Sell Short Exempt orders. N=Locate not required	All other values will be rejected.  [N] is the only accepted valid value. Lack of (114) or values other than 114=[N] for Sell Short or Sell Short Exempt orders will be rejected.
7928	Anti-Internalization Qualifiers (AIQ) ID	Anti-Internalization "AIQ group" must be enabled at the port level first in order for the AIQ identifiers and modifiers to be properly enforced if sent per order. Users have the choice of setting AIQ on a Member Affiliate, User or MPID basis. If an order is submitted on a port that is not AIQ enabled, this FIX tag will be disregarded.	1st and 2nd character Unique ID Level:  Each character can be "0-9", "A-Z", "a-z".  Case sensitive (i.e., 5B!= 5b).  User should input either "" or "" - which signifies "free-to-trade" (Anti-Internalization disabled for this order). Users can also completely disable their AIQ on a port level for all orders via the IEX Equities Port Request Form.

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Tag	Field Name	Details	Guidelines
		<ul> <li>First 2 characters are the AIQ identifier to prevent orders that share the same value and originate from the same Member Affiliate (two or more Members that are affiliates), User (Member) or MPID (as set at the port level) from executing against each other.</li> <li>3<sup>rd</sup> character is the 1 character AIQ modifier, which specifies the type of AIQ behavior</li> </ul>	3rd character AIQ Modifier:  N - Cancel newest O - Cancel oldest B - Cancel both S - Cancel smaller D - Decrement larger original order quantity and cancel smaller  Missing 3rd character modifier indicates default behavior of cancel oldest (O).  Routable orders (18=u) with a 3rd character of "D" (Decrement Larger) will be rejected upon receipt.  Accepted for At the open and At the close orders (59=2,7), but not enforced.
8484	Investor ID	Unique string per "investor" on whose behalf the Member is acting. Will not be echoed back on execution reports.	Max length: 20 chars
9500	MinQtyInstruction	C=Composite  M=Minimum Execution Size with Cancel Remaining; once LeavesQty < MinQty, order will cancel  A=Minimum Execution Size with AON Remaining; once LeavesQty < MinQty, Open shares become All or None	Only valid if 110 (MinQty) is sent.  Will not be echoed back in execution reports. Not changeable via Cancel/Replace
20067	SigVersion	Signal version  1 = Signal v5  2 = Signal v6	For D-Peg, P-Peg and C-Peg orders only.  If omitted the value will be the requested default on the <u>IEX Equities Port Request Form</u> . If no default is specified then Signal v5[1] will be used.

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#### **Discretionary Limit**

Displayed or Non-displayed order, ExecInst must be [j]=Discretionary Limit. Not compatible with ISO. Not compatible with SigVersion instruction. Can be enriched with MinQty (subject to guidelines below).

Tag	Field Name	Details	Guidelines
35	MsgType	D	
11	ClOrdID	Unique identifier, per session, per trading day for Order as assigned by the Member	Max length: 20 chars ASCII characters not permitted: @ - at sign , - comma " - double quotation   - pipe
18	ExecInst	j=Discretionary Limit (executes on IEX)	
21	Handinst	Instructions for order handling.	Value ignored, if present.
38	OrderQty	Number of shares ordered	1-10,000,000
40	OrdType	2=Limit	Price (44) must be populated for [2]=Limit  Execlnst (18) must be populated with [j] = Discretionary Limit
44	Price	The MPV for orders entered into the System shall be \$0.01 for orders priced \$1.00 or greater, and \$0.0001 for orders priced below \$1.00.	
47	OrderCapacity	A=Agency P=Principal R=Riskless Principal	Option to default on a session level without needing to send per message
54	Side	Side of Order 1=Buy 2=Sell Long 5=Sell Short 6=Sell Short Exempt	LocateReqd (114)=[N] must be populated for [5]=Sell Short and [6]=Sell Short Exempt
55	Symbol	Ticker Symbol	The entire symbol (root and suffix, if applicable) needs to be sent if using Nasdaq symbology. CMS symbology can be sent either via 55/65 combo or concatenated using 55 alone.  Please consult Appendix A.
59	TimeInForce	0=Day 5=Good 'til Extended Day 6=Good 'til Time	Please reference the <u>TIF Matrix</u> [Appendix E] for accepted order entry

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Tag	Field Name	Details	Guidelines
		M=System Hours	parameters in the Pre, Post and Regular Market Sessions.
			No matter the TIF, this order type will only trade during the Regular Market Session.
			[0]=Day orders can be sent, and will be acknowledged before the start of Regular Market Hours starting at 9:30 am, but will only be eligible to trade between 9:30 am - 4 pm
			[6]=Good 'til Time requires ExpireTime (126)
			All unexecuted orders at end of the Regular Market Session will receive Unsolicited Cancels.
60	TransactTime	Time of order creation expressed in UTC	
1	Account		
58	Text		
65	SymbolSfx	Additional information about the security (e.g., preferred, warrants, etc.).	Not available for Nasdaq format, available for CMS only. Please consult Appendix A.
			Only non-displayed orders (111=0) may have a MinQty
110	MinQty		Not compatible with ISO
			Not compatible with FOK
		Quantity to display (for a reserve order).	For Reserve orders: A value of [0] indicates a non-displayed order.
111	MaxFloor	If not populated, order is fully displayed.  If MaxFloor(111) = 0, D-Limit order is non-	Omitting the MaxFloor(111) tag or submitting MaxFloor (111) = OrderQty (38) indicates a fully displayed order.
		displayed.	MaxFloor may be a fixed amount of shares; or an odd, mixed, or round lot quantity. A Random Replinshment feature is also supported, please see FIX tag section 8020 for more details.

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Tag	Field Name	Details	Guidelines
			For odd lot reserve orders, set to a value < 1 round lot and < OrderQty (38)  Discretionary Limit Orders (18=j) can be fully displayed (omit MaxFloor) or non-displayed (111=0). Reserve functionality is also supported for Discretionary Limit Orders.  Accepted for At the open and At the close orders (59=2,7), but not enforced during auction match.
114	LocateReqd	Required for Sell Short and Sell Short Exempt orders. N=Locate not required	[N] is the only accepted valid value. Lack of (114) or values other than 114=[N] for Sell Short or Sell Short Exempt orders will be rejected. 1st and 2nd character Unique ID Level:
		Anti-Internalization "AIQ group" must be enabled at the port level first in order for the AIQ identifiers and modifiers to be properly enforced if sent per order. Users have the choice of setting AIQ on a Member Affiliate, User or MPID basis. If an order is submitted on a port that is not AIQ enabled, this FIX tag will be disregarded.	Each character can be "0-9", "A-Z", "a-z".  Case sensitive (i.e., 5B!= 5b).  User should input either "" or "" - which signifies "free-to-trade" (Anti-Internalization disabled for this order). Users can also completely disable their AIQ on a port level for all orders via the IEX Equities Port Request Form.
7928	Anti-Internalization Qualifiers (AIQ) ID	<ul> <li>First 2 characters are the AIQ identifier to prevent orders that share the same value and originate from the same Member Affiliate (two or more Members that are affiliates), User (Member) or MPID (as set at the port level) from executing against each other.</li> <li>3<sup>rd</sup> character is the 1 character AIQ modifier, which specifies the type of AIQ behavior</li> </ul>	3 <sup>rd</sup> character AIQ Modifier: N - Cancel newest O - Cancel oldest B - Cancel both S - Cancel smaller D - Decrement larger original order quantity and cancel smaller Missing 3 <sup>rd</sup> character modifier indicates default behavior of cancel oldest (O).  Routable orders (18=u) with a 3 <sup>rd</sup> character of "D" (Decrement Larger) will be rejected upon receipt.

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Tag	Field Name	Details	Guidelines
8020	DisplayRange	Quantity range to display (for a reserve order)	Accepted for At the open and At the close orders (59=2,7), but not enforced.  Must be accompanied with a MaxFloor (111) if DisplayRange (8020) is populated  Cannot have DisplayRange that is >= MaxFloor  May either be a round lot multiple or < than one round lot (odd lot)  If MaxFloor = round lot multiple, DisplayRange must be a round lot multiple < MaxFloor  *e.g.  If MaxFloor = 200, DisplayRange = 100  If MaxFloor = 400, DisplayRange can =100, 200, or 300  If MaxFloor < a round lot select DisplayRange one or more shares < Maxfloor  *e.g.  Can be <=99 shares, but not a single round lot (100 shares)  If MaxFloor = 99, DisplayRange can = 1-98 shares  *If DisplayRange + MaxFloor are >= to a round lot, the replenishment range is capped at 99 shares  *Examples assume a round lot size = 100 shares. Same logic applies for symbols with other round lot sizes.
8484	Investor ID	Unique string per "investor" on whose behalf the Member is acting. Will not be echoed back on execution reports.	Max length: 20 chars

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Tag	Field Name	Details	Guidelines
9140	DisplayInst	P=Post Only -=None	9140=[P] only if OrdType(40) = '2', MaxFloor(111) is omitted or equal to OrderQty(38), and Price(44) is equal to \$1.00 or more.  None is the default DisplayInst.  DisplayInst value will override any values set at the port level; if DisplayInst is omitted the default port session setting will be enforced.
		C=Composite	
9500	MinQtyInstruction	M=Minimum Execution Size with Cancel Remaining; once LeavesQty < MinQty, order will cancel  A=Minimum Execution Size with AON Remaining; once LeavesQty < MinQty, Open shares become All or None	Only valid if 110 (MinQty) is sent.  Will not be echoed back in execution reports. Not changeable via Cancel/Replace.
20003	CancelInsteadOfSlide	O=Slide 3=Cancel order instead of slide	Only applicable for when DisplayInst (9140) = 'P'.  Sliding is the default behavior.  CancelInsteadOfSlide will override any values set at the port level; if  CancelInsteadOfSlide is omitted the default port session setting will be enforced.
20050	CxIPxBack	N=No Action C=Cancel order U=Re-price to the less aggressive of the order's limit price or the NBB (for buys)/NBO (for sells) Above is the behavior to enforce upon expiration of a set timer.	Only applies to Discretionary Limit orders (18= j) that have been price adjusted due to a CQI event, if 10 ms after the CQI event, the order is priced less aggressively than the NBB (for buy orders)/NBO (for sell orders).  CxIPxBack value will override any values set at the port level; if CxIPxBack is omitted the default port session setting will be enforced.

## **Corporate D-Peg**

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Non-displayed order, ExecInst must be [z]=Corporate D-Peg. Not compatible with ISO. Can be enriched with MinQty (subject to guidelines below).

Tag	Field Name	Details	Guidelines
35	MsgType	D	
11	ClOrdID	Unique identifier, per session, per trading day for Order as assigned by the Member	Max length: 20 chars ASCII characters not permitted: @ - at sign , - comma " - double quotation   - pipe
18	ExecInst	z=Corporate D-Peg (executes on IEX)	
21	HandInst	Instructions for order handling.	Value ignored, if present.
38	OrderQty	Number of shares ordered	1-10,000,000
40	OrdType	P=Pegged	
47	OrderCapacity	A=Agency P=Principal R=Riskless Principal	Option to default on a session level without needing to send per message
54	Side	Side of Order 1=Buy	Values other than 1=Buy will be rejected
55	Symbol	Ticker Symbol	The entire symbol (root and suffix, if applicable) needs to be sent if using Nasdaq symbology. CMS symbology can be sent either via 55/65 combo or concatenated using 55 alone.  Please consult Appendix A.
59	TimeInForce	0=Day 3=IOC 4=FOK 5=Good 'til Extended Day 6=Good 'til Time M=System Hours	Please reference the TIF Matrix  [Appendix E] for accepted order entry parameters in the Pre, Post and Regular Market Sessions.  No matter the TIF, this order type will only trade during the Regular Market Session.  [O]=Day orders can be sent, and will be acknowledged before the start of Regular Market Hours starting at 9:30 am, but will only be eligible to trade between 9:30 am - 4 pm  [6]=Good 'til Time requires ExpireTime (126)

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Tag	Field Name	Details	Guidelines
			All unexecuted orders at end of the Regular Market Session will receive Unsolicited Cancels.
60	TransactTime	Time of order creation expressed in UTC	
1	Account		
44	Price	The MPV for orders entered into the System shall be \$0.01 for orders priced \$1.00 or greater, and \$0.0001 for orders priced below \$1.00.	If price is not specified, will be constrained by internal IEX Order Collar
58	Text		
65	SymbolSfx	Additional information about the security (e.g., preferred, warrants, etc.).	Not available for Nasdaq format, available for CMS only. Please consult Appendix A. Only non-displayed orders (111=0) may
110	MinQty		Not compatible with ISO  Not compatible with FOK
111	MaxFloor	O=Non-Displayed	Will only accept value of [0] - Non-displayed  All other values will be rejected.
114	LocateReqd	Required for Sell Short and Sell Short Exempt orders. N=Locate not required	[N] is the only accepted valid value. Lack of (114) or values other than 114=[N] for Sell Short or Sell Short Exempt orders will be rejected.
7928	Anti-Internalization Qualifiers (AIQ) ID	Anti-Internalization "AIQ group" must be enabled at the port level first in order for the AIQ identifiers and modifiers to be properly enforced if sent per order. Users have the choice of setting AIQ on a Member Affiliate, User or MPID basis. If an order is submitted on a port that is not AIQ enabled, this FIX tag will be disregarded.  3 Characters for self trade prevention:  • First 2 characters are the AIQ identifier to prevent orders that share the same value and originate from the same Member	1st and 2nd character Unique ID Level:  Each character can be "O-9", "A-Z", "a-z".  Case sensitive (i.e., 5B!= 5b).  User should input either "" or "" - which signifies "free-to-trade" (Anti-Internalization disabled for this order). Users can also completely disable their AIQ on a port level for all orders via the IEX Equities Port Request Form.  3rd character AIQ Modifier:  N - Cancel newest O - Cancel oldest B - Cancel both

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Tag	Field Name	Details	Guidelines
		Affiliate (two or more Members that are affiliates), User (Member) or MPID (as set at the port level) from executing against each other.  • 3 <sup>rd</sup> character is the 1 character AIQ modifier, which specifies the type of AIQ behavior	S - Cancel smaller D - Decrement larger original order quantity and cancel smaller  Missing 3 <sup>rd</sup> character modifier indicates default behavior of cancel oldest (O).  Routable orders (18=u) with a 3 <sup>rd</sup> character of "D" (Decrement Larger) will be rejected upon receipt.  Accepted for At the open and At the close orders (59=2,7), but not enforced.
8484	Investor ID	Unique string per "investor" on whose behalf the Member is acting. Will not be echoed back on execution reports.	Max length: 20 chars
9500	MinQtyInstruction	C=Composite  M=Minimum Execution Size with Cancel Remaining; once LeavesQty < MinQty, order will cancel  A=Minimum Execution Size with AON Remaining; once LeavesQty < MinQty, Open shares become All or None	Only valid if 110 (MinQty) is sent.  Will not be echoed back in execution reports. Not changeable via Cancel/Replace
20067	SigVersion	Signal version  1 = Signal v5  2 = Signal v6	For D-Peg, P-Peg and C-Peg orders only.  If omitted the value will be the requested default on the <u>IEX Equities Port Request Form</u> . If no default is specified then Signal v5[1] will be used.

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#### **Market Maker Peg**

This order type essentially functions as a one-sided displayed limit order that allows for quoting at a defined "Market Maker Peg Designated Percentage" away from the NBB or NBO, as applicable. This order type can only be sent by IEX Registered Market Makers. Please refer to the <u>IEX Market Maker Specification</u> for complete details. ExecInst must be [Q]=Market Maker Peg. Not compatible with ISO. Incompatible with MinQty or MaxFloor and will be rejected if either is populated.

Tag	Field Name	Details	Guidelines
35	MsgType	D	
		Unious identifies nessesies nes	Max length: 20 chars ASCII characters not permitted:
11	CIOrdID	Unique identifier, per session, per trading day for Order as assigned by the Member	<ul><li>@ - at sign</li><li>, - comma</li><li>" - double quotation</li><li>  - pipe</li></ul>
18	ExecInst	Q=Market Maker Peg (executes on IEX)	
21	HandInst	Instructions for order handling.	Value ignored, if present.
38	OrderQty	Number of shares ordered	1-10,000,000 Must be at least one round lot.
40	OrdType	P=Pegged	
47	OrderCapacity	A=Agency P=Principal R=Riskless Principal	Option to default on a session level without needing to send per message
54	Side	Side of Order 1=Buy 2=Sell Long 5=Sell Short 6=Sell Short Exempt	LocateReqd (114)=[N] must be populated for [5]=Sell Short and [6]=Sell Short Exempt
55	Symbol	Ticker Symbol	The entire symbol (root and suffix, if applicable) needs to be sent if using Nasdaq symbology. CMS symbology can be sent either via 55/65 combo or concatenated using 55 alone.  Please consult Appendix A.
59	TimeInForce	O=Day	[O]=Day orders can be sent, and will be acknowledged before the start of Regular Market Hours starting at 9:30 am, but will only be eligible to trade between 9:30 am - 4 pm  All unexecuted orders at end of the Regular Market Session will receive Unsolicited Cancels.
60	TransactTime	Time of order creation expressed in UTC	

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1	Account		
44	Price	The MPV for orders entered into the System shall be \$0.01 for orders priced \$1.00 or greater, and \$0.0001 for orders priced below \$1.00.	If price is not specified, will be constrained by internal IEX Order Collar.
58	Text		
65	SymbolSfx	Additional information about the security (e.g., preferred, warrants, etc.).	Not available for Nasdaq format, available for CMS only. Please consult Appendix A.
114	LocateReqd	Required for Sell Short and Sell Short Exempt orders. N=Locate not required	[N] is the only accepted valid value. Lack of (114) or values other than 114=[N] for Sell Short or Sell Short Exempt orders will be rejected.
		Anti-Internalization "AIQ group" must be enabled at the port level first in order for the AIQ identifiers and modifiers to be properly enforced if sent per order. Users have the choice of setting AIQ on a Member Affiliate, User or MPID basis. If an order is submitted on a port that is not AIQ enabled, this FIX tag will be disregarded.	1st and 2nd character Unique ID Level:  Each character can be "0-9", "A-Z", "a-z".  Case sensitive (i.e., 5B!= 5b).  User should input either "" or "" - which signifies "free-to-trade" (Anti-Internalization disabled for this order). Users can also completely disable their AIQ on a port level for all orders via the IEX Equities Port Request Form.
7928	Anti- Internalization Qualifiers (AIQ) ID	<ul> <li>Tirst 2 characters are the AIQ identifier to prevent orders that share the same value and originate from the same Member Affiliate (two or more Members that are affiliates), User (Member) or MPID (as set at the port level) from executing against each other.</li> <li>3rd character is the 1 character AIQ modifier, which specifies the type of AIQ behavior</li> </ul>	3rd character AIQ Modifier: N - Cancel newest O - Cancel oldest B - Cancel both S - Cancel smaller D - Decrement larger original order quantity and cancel smaller  Missing 3rd character modifier indicates default behavior of cancel oldest (O).  Routable orders (18=u) with a 3rd character of "D" (Decrement Larger) will be rejected upon receipt.  Accepted for At the open and At the close orders (59=2,7), but not enforced.

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#### **Retail Order**

Retail orders are accepted during the Regular Market Session and designated based on ExtendedExecInst (9416) = 'R' (Retail Order) which can be assigned by IEX based on session configuration instruction from an IEX-approved Retail Member Organization. Retail orders are eligible for interaction with Retail Liquidity Provider orders and Retail Price Improvement Program fees when the following conditions are satisfied: ExecInst (18) is either [d]=Discretionary Peg or [M]=Midpoint Peg; OrdType (40) = 'P' (Pegged); OrderCapacity (47) = A (Agency) or R (Riskless Principal); and TimeInForce (59) = 3 (IOC), 4 (FOK). Can be enriched with MinQty (subject to guidelines below - not applicable to FOK).

Retail orders (ExtendedExecInst (9416) = 'R') that do not conform to the above or below Retail order specifications are disregarded as being from Retail investors and are handled in accordance with corresponding IEX FIX Specifications for the order type (non-Retail) and handled in accordance with the <u>General Trading Rules of the IEX Rulebook</u>.

Retail orders are not compatible with ISO and do not gueue pre-market.

Retail orders will be rejected if received during a Halt, Volatility or IPO auction.

Tag	Field Name	Details	Guidelines
35	MsgType	D	
11	ClOrdID	Unique identifier, per session, per trading day for Order as assigned by the Member	Max length: 20 chars  ASCII characters not permitted:  @ - at sign , - comma  " - double quotation   - pipe
18	Execinst	d=Discretionary Peg, M=Midpoint Peg; (executes on IEX)	
21	HandInst	Instructions for order handling.	Value ignored, if present.
38	OrderQty	Number of shares ordered	1-10,000,000
40	OrdType	P=Pegged	
47	OrderCapacity	A=Agency R=Riskless Principal	Option to default on a session level without needing to send per message
54	Side	Side of Order 1=Buy 2=Sell Long 5=Sell Short 6=Sell Short Exempt	LocateReqd (114)=[N] must be populated for [5]=Sell Short and [6]=Sell Short Exempt
55	Symbol	Ticker Symbol	The entire symbol (root and suffix, if applicable) needs to be sent if using Nasdaq symbology. CMS symbology can be sent either via 55/65 combo or concatenated using 55 alone.  Please consult Appendix A.

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Tag	Field Name	Details	Guidelines
59	TimeInForce	3=IOC 4=FOK	Retail orders will be rejected if received outside of the Regular Market Session, (before 9:30am or after 4:00pm)
60	TransactTime	Time of order creation expressed in UTC	
1	Account		
44	Price	The MPV for orders entered into the System shall be \$0.01 for orders priced \$1.00 or greater, and \$0.0001 for orders priced below \$1.00.	If price is not specified, will be constrained by internal IEX Order Collar
58	Text		
65	SymbolSfx	Additional information about the security (e.g., preferred, warrants, etc.).	Not available for Nasdaq format, available for CMS only. Please consult Appendix A.
110	MinQty		Only non-displayed orders (111=0) may have a MinQty  Not compatible with ISO.  Not compatible with FOK
111	MaxFloor	O=Non-Displayed	Will only accept value of [0] - Non-displayed  All other values will be rejected.
114	LocateReqd	Required for Sell Short and Sell Short Exempt orders. N=Locate not required	[N] is the only accepted valid value. Lack of (114) or values other than 114=[N] for Sell Short or Sell Short Exempt orders will be rejected.
7928	Anti-Internalization Qualifiers (AIQ) ID	Anti-Internalization "AIQ group" must be enabled at the port level first in order for the AIQ identifiers and modifiers to be properly enforced if sent per order.  Users have the choice of setting AIQ on a Member Affiliate, User or MPID basis. If an order is submitted on a port that is not AIQ enabled, this FIX tag will be disregarded.	1st and 2nd character Unique ID Level:  Each character can be "0-9", "A-Z", "a-z".  Case sensitive (i.e., 5B!= 5b).  User should input either "" or "" - which signifies "free-to-trade" (Anti-Internalization disabled for this order). Users can also completely disable their AIQ on a port level for all orders via the IEX Equities Port Request Form.
		<ul> <li>3 Characters for self trade prevention:</li> <li>First 2 characters are the AIQ identifier to prevent orders that share the same value and originate from the same Member</li> </ul>	3 <sup>rd</sup> character AIQ Modifier: N - Cancel newest O - Cancel oldest B - Cancel both S - Cancel smaller

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Tag	Field Name	Details	Guidelines
		Affiliate (two or more Members that are affiliates), User (Member) or MPID (as set at the port level) from executing against each other.  • 3 <sup>rd</sup> character is the 1 character AIQ modifier, which specifies the type of AIQ behavior	D - Decrement larger original order quantity and cancel smaller  Missing 3 <sup>rd</sup> character modifier indicates default behavior of cancel oldest (O).  Routable orders (18=u) with a 3 <sup>rd</sup> character of "D" (Decrement Larger) will be rejected upon receipt.  Accepted for At the open and At the close orders (59=2,7), but not enforced.
8484	Investor ID	Unique string per "investor" on whose behalf the Member is acting. Will not be echoed back on execution reports.	Max length: 20 chars
9416	ExtendedExecInst	R=Retail	Option to default on a session level without needing to send per message
9500	MinQtyInstruction	C=Composite  M=Minimum Execution Size with Cancel Remaining; once LeavesQty < MinQty, order will cancel  A=Minimum Execution Size with AON Remaining; once LeavesQty < MinQty, Open shares become All or None	Only valid if 110 (MinQty) is sent.  Will not be echoed back in execution reports. Not changeable via Cancel/Replace

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#### **Retail Liquidity Provider Order**

Retail Liquidity Provider (RLP) orders are based on ExtendedExecInst (9416) = 'T' (Retail Liquidity Provider) and will only interact with eligible Retail orders as described in this FIX Specification. Retail Liquidity Provider orders must satisfy the following conditions: ExecInst (18) = M (Midpoint Peg), OrdType (40) = P (Pegged); OrderCapacity (47) = P (Principal), A (Agency), or R (Riskless Principal); TimeInForce (59) = 0 (Day), M (SYS), 6 (GTT), and 5 (GTX). Day orders submitted Pre-Market will queue up for trading during the Regular Market Session. SYS, GTT, and GTX orders will not be accepted in the Pre-Market.

Open RLP orders may not be modified to remove or update Tag 9416. Non-RLP orders may not be modified to update Tag 9416 = 'T'.

RLP orders cannot be enriched with MinQty (110).

Tag	Field Name	Details	Guidelines
35	MsgType	D	
11	ClOrdID	Unique identifier, per session, per trading day for Order as assigned by the Member	Max length: 20 chars  ASCII characters not permitted:  @ - at sign , - comma  " - double quotation   - pipe
18	ExecInst	M=Midpoint Peg (executes on IEX)	RLP orders that are not MPEG will be rejected
21	HandInst	Instructions for order handling.	Value ignored, if present.
38	OrderQty	Number of shares ordered	1-10,000,000
40	OrdType	P=Pegged	
47	OrderCapacity	A=Agency R=Riskless Principal P=Principal	Option to default on a session level without needing to send per message
54	Side	Side of Order 1=Buy 2=Sell Long 5=Sell Short 6=Sell Short Exempt	LocateReqd (114)=[N] must be populated for [5]=Sell Short and [6]=Sell Short Exempt
55	Symbol	Ticker Symbol	The entire symbol (root and suffix, if applicable) needs to be sent if using Nasdaq symbology. CMS symbology can be sent either via 55/65 combo or concatenated using 55 alone.  Please consult Appendix A.
59	TimeInForce	0=Day 5=Good 'til Extended Day 6=Good 'til Time	Please reference the <u>TIF Matrix</u> [Appendix E] for accepted order entry

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Tag	Field Name	Details	Guidelines
		M=System Hours	parameters in the Pre, Post and Regular Market Sessions.
			[0]=Day orders can be sent, and will be acknowledged before the start of Regular Market Hours starting at 9:30 am, but will only be eligible to trade between 9:30 am - 4 pm
			[6]=Good 'til Time requires ExpireTime (126)
			All unexecuted orders will receive Unsolicited Cancels at the end of the Regular Market Session
60	TransactTime	Time of order creation expressed in UTC	
1	Account		
44	Price	The MPV for orders entered into the System shall be \$0.01 for orders priced \$1.00 or greater, and \$0.0001 for orders priced below \$1.00.	If price is not specified, will be constrained by internal IEX Order Collar
58	Text		
65	SymbolSfx	Additional information about the security (e.g., preferred, warrants, etc.).	Not available for Nasdaq format, available for CMS only. Please consult Appendix A.
111	MaxFloor	O=Non-Displayed	Will only accept value of [0] - Non-displayed
			All other values will be rejected.
114	LocateReqd	Required for Sell Short and Sell Short Exempt orders. N=Locate not required	[N] is the only accepted valid value. Lack of (114) or values other than 114=[N] for Sell Short or Sell Short Exempt orders will be rejected.
7020	Anti Intornali-ati-r	Anti-Internalization "AIQ group" must be enabled at the port level first in order for the AIQ identifiers and modifiers to be properly enforced if sent per order.	1st and 2nd character Unique ID Level: Each character can be "0-9", "A-Z", "a-z". Case sensitive (i.e., 5B != 5b).
7928	Anti-Internalization Qualifiers (AIQ) ID	Users have the choice of setting AIQ on a Member Affiliate, User or MPID basis. If an order is submitted on a port that is not AIQ enabled, this FIX tag will be disregarded.	User should input either "" or "" - which signifies "free-to- trade" (Anti-Internalization disabled for this order). Users can also completely disable their AIQ on a port level for all

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Tag	Field Name	Details	Guidelines
		<ul> <li>Tirst 2 characters are the AIQ identifier to prevent orders that share the same value and originate from the same Member Affiliate (two or more Members that are affiliates), User (Member) or MPID (as set at the port level) from executing against each other.</li> <li>3<sup>rd</sup> character is the 1 character AIQ modifier, which specifies the type of AIQ behavior</li> </ul>	orders via the IEX Equities Port Request Form.  3rd character AIQ Modifier: N - Cancel newest O - Cancel oldest B - Cancel both S - Cancel smaller D - Decrement Larger original order quantity and cancel smaller  Missing 3rd character modifier indicates default behavior of cancel oldest (O).  Routable orders (18=u) with a 3rd character of "D" (Decrement Larger) will be rejected upon receipt.  Accepted for At the open and At the close orders (59=2,7), but not enforced.
8484	Investor ID	Unique string per "investor" on whose behalf the Member is acting. Will not be echoed back on execution reports.	Max length: 20 chars
9416	ExtendedExecInst	T=Retail Liquidity Provider	'T' will only be accepted when ExecInst(18) = 'M'.

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# **Auction Only Orders**

For more information on the following Auction Only Orders, please refer to the <u>IEX Auction Process Specification</u> and the implementation below.

Order Type	IEX FIX Specification Field (FIX 1	「ag)
Market-On-Open (MOO)	OrdType(40) = 1 (Market)	TimeInForce(59) = 2 (At the open)
Market-On-Close (MOC)	ExecInst(18) = i (IEX Only)	TimeInForce(59) = 7 (At the close)
Limit-On-Open (LOO)	OrdType(40) = 2 (Limit)	TimeInForce(59) = 2 (At the open)
Limit-On-Close (LOC)	ExecInst(18) = i (IEX Only)  Price(44) = [price]	TimeInForce(59) = 7 (At the close)
Day	TimeInForce(	59) = 0 (DAY)
Good 'til Extended Day	TimeInForce(	(59) = 5 (GTX)

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# Market-On-Open (MOO)

Must be IEX Only. Incompatible with MinQty or MaxFloor.

Tag	Field Name	Details	Guidelines
35	MsgType	D	
11	ClOrdID	Unique identifier, per session, per trading day for Order as assigned by the Member	Max length: 20 chars ASCII characters not permitted: @ - at sign , - comma " - double quotation   - pipe
18	ExecInst	i=IEX Only (a.k.a. Standard)	
21	HandInst	Instructions for order handling.	Value ignored, if present.
38	OrderQty	Number of shares ordered	1-10,000,000
40	OrdType	1=Market	
47	OrderCapacity	A=Agency P=Principal R=Riskless Principal	Option to default on a session level without needing to send per message
54	Side	Side of Order 1=Buy 2=Sell Long 5=Sell Short 6=Sell Short Exempt	LocateReqd (114)=[N] must be populated for [5]=Sell Short and [6]=Sell Short Exempt
55	Symbol	Ticker Symbol	The entire symbol (root and suffix, if applicable) needs to be sent if using Nasdaq symbology. CMS symbology can be sent either via 55/65 combo or concatenated using 55 alone.  Please consult Appendix A
59	TimeInForce	2=At the open	Please Collsuit Appelluix A
60	TransactTime	Time of order creation expressed in UTC	
1	Account		
58	Text		
65	SymbolSfx	Additional information about the security (e.g., preferred, warrants, etc.).	Not available for Nasdaq format, available for CMS only. Please consult Appendix A.
114	LocateReqd	Required for Sell Short and Sell Short Exempt orders. N=Locate not required	[N] is the only accepted valid value. Lack of (114) or values other than 114=[N] for

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Tag	Field Name	Details	Guidelines
			Sell Short or Sell Short Exempt orders will be rejected.
8484	Investor ID	Unique string per "investor" on whose behalf the Member is acting. Will not be echoed back on execution reports.	Max length: 20 chars

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#### Market-On-Close (MOC)

Must be IEX Only. Incompatible with MinQty or MaxFloor.

Tag	Field Name	Details	Guidelines
35	MsgType	D	
11	CIOrdID	Unique identifier, per session, per trading day for Order as assigned by the Member	Max length: 20 chars  ASCII characters not permitted:  @ - at sign , - comma  " - double quotation   - pipe
18	ExecInst	i=IEX Only (a.k.a. Standard)	
21	HandInst	Instructions for order handling.	Value ignored, if present.
38	OrderQty	Number of shares ordered	1-10,000,000
40	OrdType	1=Market	
47	OrderCapacity	A=Agency P=Principal R=Riskless Principal	Option to default on a session level without needing to send per message
54	Side	Side of Order 1=Buy 2=Sell Long 5=Sell Short 6=Sell Short Exempt	LocateReqd (114)=[N] must be populated for [5]=Sell Short and [6]=Sell Short Exempt
55	Symbol	Ticker Symbol	The entire symbol (root and suffix, if applicable) needs to be sent if using Nasdaq symbology. CMS symbology can be sent either via 55/65 combo or concatenated using 55 alone.
59	TimeInForce	7=At the close	Please consult Appendix A
60	TransactTime	Time of order creation expressed in UTC	
1	Account		
58	Text		
65	SymbolSfx	Additional information about the security (e.g., preferred, warrants, etc.).	Not available for Nasdaq format, available for CMS only. Please consult Appendix A.
114	LocateReqd	Required for Sell Short and Sell Short Exempt orders. N=Locate not required	[N] is the only accepted valid value. Lack of (114) or values other than 114=[N] for

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Tag	Field Name	Details	Guidelines
			Sell Short or Sell Short Exempt orders will be rejected.
8484	Investor ID	Unique string per "investor" on whose behalf the Member is acting. Will not be echoed back on execution reports.	Max length: 20 chars

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#### Limit-On-Open (LOO)

Must be IEX Only. Incompatible with MinQty.

Tag	Field Name	Details	Guidelines
35	MsgType	D	
11	ClOrdID	Unique identifier, per session, per trading day for Order as assigned by the Member	Max length: 20 chars ASCII characters not permitted: @ - at sign , - comma " - double quotation   - pipe
18	Execinst	i=IEX Only (a.k.a. Standard)	
21	HandInst	Instructions for order handling.	Value ignored, if present.
38	OrderQty	Number of shares ordered	1-10,000,000
40	OrdType	2=Limit	
44	Price	The MPV for orders entered into the System shall be \$0.01 for orders priced \$1.00 or greater, and \$0.0001 for orders priced below \$1.00.	
47	OrderCapacity	A=Agency P=Principal R=Riskless Principal	Option to default on a session level without needing to send per message
54	Side	Side of Order 1=Buy 2=Sell Long 5=Sell Short 6=Sell Short Exempt	LocateReqd (114)=[N] must be populated for [5]=Sell Short and [6]=Sell Short Exempt
55	Symbol	Ticker Symbol	The entire symbol (root and suffix, if applicable) needs to be sent if using Nasdaq symbology. CMS symbology can be sent either via 55/65 combo or concatenated using 55 alone.  Please consult Appendix A.
59	TimeInForce	2=At the open	
60	TransactTime	Time of order creation expressed in UTC	
1	Account		

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Tag	Field Name	Details	Guidelines	
58	Text			
65	SymbolSfx	Additional information about the security (e.g., preferred, warrants, etc.).	Not available for Nasdaq format, available for CMS only. Please consult Appendix A.	
111	MaxFloor	O=Non-Displayed  If MaxFloor is populated order will still be treated as non-displayed.	Not enforced during auction match.	
114	LocateReqd	Required for Sell Short and Sell Short Exempt orders. N=Locate not required	[N] is the only accepted valid value. Lack of (114) or values other than 114=[N] for Sell Short or Sell Short Exempt orders will be rejected.	
8484	Investor ID	Unique string per "investor" on whose behalf the Member is acting. Will not be echoed back on execution reports.	Max length: 20 chars	

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#### Limit-On-Close (LOC)

Must be IEX Only. Incompatible with MinQty.

Tag	Field Name	Details	Guidelines
35	MsgType	D	
11	ClOrdID	Unique identifier, per session, per trading day for Order as assigned by the Member	Max length: 20 chars  ASCII characters not permitted:  @ - at sign , - comma  " - double quotation   - pipe
18	Execinst	i=IEX Only (a.k.a. Standard)	
21	HandInst	Instructions for order handling.	Value ignored, if present.
38	OrderQty	Number of shares ordered	1-10,000,000
40	OrdType	2=Limit	
44	Price	The MPV for orders entered into the System shall be \$0.01 for orders priced \$1.00 or greater, and \$0.0001 for orders priced below \$1.00.	
47	OrderCapacity	A=Agency P=Principal R=Riskless Principal	Option to default on a session level without needing to send per message
54	Side	Side of Order 1=Buy 2=Sell Long 5=Sell Short 6=Sell Short Exempt	LocateReqd (114)=[N] must be populated for [5]=Sell Short and [6]=Sell Short Exempt
55	Symbol	Ticker Symbol	The entire symbol (root and suffix, if applicable) needs to be sent if using Nasdaq symbology. CMS symbology can be sent either via 55/65 combo or concatenated using 55 alone.  Please consult Appendix A.
59	TimeInForce	7=At the close	
60	TransactTime	Time of order creation expressed in UTC	
1	Account		
58	Text		

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Tag	Field Name	Details	Guidelines
65	SymbolSfx	Additional information about the security (e.g., preferred, warrants, etc.).	Not available for Nasdaq format, available for CMS only. Please consult Appendix A.
111	MaxFloor	O=Non-Displayed  If MaxFloor is populated order will still be treated as non-displayed.	Not enforced during auction match.
114	LocateReqd	Required for Sell Short and Sell Short Exempt orders. N=Locate not required	[N] is the only accepted valid value. Lack of (114) or values other than 114=[N] for Sell Short or Sell Short Exempt orders will be rejected.
8484	Investor ID	Unique string per "investor" on whose behalf the Member is acting. Will not be echoed back on execution reports.	Max length: 20 chars

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#### Order Cancel / Replace Request

The only amendable properties of IEX orders are:

- Order Quantity (38)
- Price (44) (for Peg and Limit orders)
- MinQty (110)
- Account (1)
- PegDifference (211)

Priced Peg orders and Limit orders may freely change their prices. Unpriced Peg orders may be amended to include a price. No priced orders, Limit or Peg, can be amended to remove the price.

If MinQty tag is not present IEX will preserve the original value for the order (no change to MinQty). MinQty=0 will remove the condition from the order altogether.

IEX accepts cancel requests for Market orders and orders marked with a TIF of IOC or FOK, however amendments are rejected for these types of orders

The IEX OrderID (37) need not be referenced, as IEX will validate the order using ClOrdID (11) and OrigClOrdID (41).

Changes to ExtendedExecInst (9416) are not accepted on RLP orders.

Discretionary Limit modifications to CxIPxBack (20050) will be ignored.

Discretionary Peg, Primary Peg, and Corporate Discretionary Peg modifications to SigVersion (20067) will be ignored.

## All required FIX tags/values from original order need to be preserved and resent in the Cancel / Replace request, optional tags/values may be omitted.

Orders in a terminal state (fully executed, cancelled, rejected) may not be cancel/replaced.

All Cancel / Replace requests must happen in sequence. If IEX receives consecutive Cancel / Replace requests before the initial Cancel / Replace request can be processed, the subsequent requests will be rejected.

Cancel / Replace requests are rejected for specific order types after an auction's Lock-In time:

- Opening Auction Lock-In Time (9:28 a.m.): Reject Cancel / Replace requests to LOO, MOO, Limit / Market with TIF of Day, and Limit with a TIF of Good 'til Extended Day.
- Closing Auction Lock-In Time (3:50 p.m.): Reject Cancel / Replace requests to LOC and MOC.

Tag	Field Name	Details	Guidelines
35	MsgType	G	
11	ClOrdID	Unique ID of cancel/replace request	
18	Execinst	Must match original ExecInst	
21	HandInst	Instructions for order handling.	Value ignored, if present.
38	OrderQty	Requested total shares for order to be amended to	Cannot be less than currently executed quantity
40	OrdType	Must match original OrdType	

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41	OrigClOrdID	ClOrdID referencing the order to be replaced	
47	OrderCapacity	Must match original OrderCapacity	
54	Side	Must match original Side.	
55	Symbol	Must match original Symbol	
59	TimeInForce	Must match original TimeInForce	
60	TransactTime	Time of cancel/replace creation expressed in UTC	
1	Account	Value received will overwrite Account value from original order. If original order was received with an Account value, and 35=G is sent without the Account tag, tag 1 will not be echoed back for the rest of the order	
44	Price	Requested price for the order to be amended to	
65	SymbolSfx	Must match original SymbolSfx, if applicable	
110	MinQty	If MinQty tag is not present IEX will preserve original value for the order (no change to MinQty).  MinQty=0 will remove the condition from the order altogether.	
9416	ExtendedExecInst	T=Retail Liquidity Provider orders	

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#### **Order Cancel Request**

Tag	Field Name	Details	Guidelines
35	MsgType	F	
11	ClOrdID	Unique ID of cancel request	
38	OrderQty	Must match original order quantity	
41	OrigClOrdID	ClOrdID referencing the order to be cancelled	
54	Side	Must match original side.	
55	Symbol	Must match original symbol	
60	TransactTime	Time of cancel/replace creation expressed in UTC	
65	SymbolSfx	Must match original SymbolSfx, if applicable	

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#### **Received from IEX - Execution Report**

In addition to the below fields common to all Execution Reports from IEX, please see sections below for Order Status specific fields.

Tag	Field Name	Details	Guidelines
35	MsgType	8=ExecutionReport	
6	AvgPrice	Calculated average price of all fills on this order	
11	ClOrdID	Will match confirmed ClOrdID of current order chain	
14	CumQty	Total number of shares filled	
17	ExecID	Unique identifier of execution message	
18	ExecInst	Will match original order	
37	OrderID	Unique IEX Order ID	
38	OrderQty	Will reflect last accepted value	
40	OrdType	Will match original order	
47	OrderCapacity	Will match original order	
54	Side	Will match original order	
55	Symbol	Will match original order	
59	TimeInForce	Will match original order	
60	TransactTime	Time of execution creation (in UTC)	
151	LeavesQty	Number of shares open for further execution.	
1	Account	Will match original order	
44	Price	Will reflect last accepted value	
58	Text		
65	SymbolSfx	Will match original order	
110	MinQty	Will reflect last accepted value	
111	MaxFloor	Will match original order	
126	ExpireTime	Will match original order	
9416	ExtendedExecInst	Will match original order	

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Tag	Field Name	Details	Guidelines
9690	EffectiveLimitPrice	New effective limit price of the order due to CQI price change	Only sent when ExecInst[18]=j Discretionary Limit If effective limit price was adjusted due to a CQI event, the adjusted effective limit price will be reported here.  Effective limit price will always be reported unless Member opts-out of receiving restatement messages via the IEX Equities Port Request Form.

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#### **Pending New**

Tag	Field Name	Details	Guidelines
20	ExecTransType	0=New	
39	OrderStatus	A=Pending New	
150	ЕхесТуре	A=Pending New	
151	LeavesQty	OrderQty	

#### Acknowledgment

Tag	Field Name	Details	Guidelines
20	ExecTransType	0=New	
39	OrderStatus	0=New	
150	ЕхесТуре	0=New	
151	LeavesQty	OrderQty	
9690	EffectiveLimitPrice	New effective limit price of the order due to CQI price change	Only sent when  ExecInst[18]=j Discretionary  Limit  If effective limit price was adjusted due to a CQI event, the adjusted effective limit price will be reported here.  Effective limit price will always be reported unless Member opts-out of receiving restatement messages via the IEX Equities Port Request Form.

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#### **Partially Filled**

Tag	Field Name	Details	Guidelines
20	ExecTransType	O=New	
30	LastMkt	Market of execution for last fill	
31	LastPx	Price of this (last) fill.	
32	LastShares	Quantity of shares executed on this (last) fill.	
39	OrderStatus	1=Partially Filled	
150	ЕхесТуре	1=Partially Filled	
151	LeavesQty	OrderQty - CumQty	
375	ContraBroker	Denoted with value "IEXG".	
382	NoContraBrokers	Denoted with value "1".	
851	Last Liquidity Ind	1=Added Liquidity 2=Removed Liquidity 3=Routed 4=Auction 9=Removed Liquidity on Recheck	Identifies whether an execution on IEX resulted from liquidity provision or removal, or from a single-price cross (e.g., auction).
9730	TradeLiquidityIndicator	Base Character(s)  MI=Add Non-Displayed Continuous Execution  ML=Add Displayed Continuous Execution  TI=Remove Non-Displayed Continuous Execution  TL=Remove Displayed Continuous Execution  X=Opening Process  O=Opening Auction  C=Closing Auction  H=Halt / Volatility Auction  P=IPO Auction  Appended Characters  D=Execution of displayed Continuous Book interest in a cross or auction (applied with X, O, or C, only)  R=Retail order removes liquidity  A=Member adds liquidity against a Retail order with a Retail Liquidity Provider order  W=Resting order removes against Post Only order  Y=Post Only order executes on entry	To be used in conjunction with LastMkt(30) to determine trading costs. If LastMkt is a non-IEX market, this field will pass through the Indicator value sent by that market center.  Opening, Closing, IPO, Halt, and Volatility Auctions are conducted for IEX-listed securities. See the IEX Auction Process Specification for details about each auction type.  Opening Process is conducted for non-IEX-listed securities.

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Tag	Field Name	Details	Guidelines
		[Passed through value from Market Centers if LastMkt is not IEX; See Appendix F for details about tag mapping.]	
		Specific fee code associated with execution on a non-IEX market.	To be used in conjunction with LastMkt(30) to determine trading costs. If LastMkt is a non-IEX
9882	FeeCode	[Passed through value from Market Centers if LastMkt is not IEX; See Appendix F for details about tag mapping.]	market, this field will pass through the Indicator value sent by that market center.

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#### Filled

Tag	Field Name	Details	Guidelines
20	ExecTransType	O=New	
30	LastMkt	Market of execution for last fill	
31	LastPx	Price of this (last) fill.	
32	LastShares	Quantity of shares executed on this (last) fill.	
39	OrderStatus	2=Filled	
150	ЕхесТуре	2=Filled	
151	LeavesQty	0	
375	ContraBroker	Denoted with value "IEXG"	
382	NoContraBrokers	Denoted with value "1"	
851	LastLiquidityInd	1=Added Liquidity 2=Removed Liquidity 3=Routed 4=Auction 9=Removed Liquidity on Recheck	Identifies source of execution and whether an execution on IEX resulted from liquidity provision or removal, or from a single-price cross (e.g., auction).
9730	TradeLiquidityIndicator	Base Character(s)  MI=Add Non-Displayed Continuous Execution  ML=Add Displayed Continuous Execution  TI=Remove Non-Displayed Continuous Execution  TL=Remove Displayed Continuous Execution  X=Opening Process  O=Opening Auction  C=Closing Auction  H=Halt / Volatility Auction  P=IPO Auction  Appended Characters  D=Execution of displayed Continuous Book interest in a cross or auction (applied with X, O, or C, only)  R=Retail order removes liquidity  A=Member adds liquidity against a Retail order with a Retail Liquidity Provider order  W=Resting dark order removes against Post-Only Y=Post Only adds/removes upon booking	To be used in conjunction with LastMkt(30) to determine trading costs. If LastMkt is a non-IEX market, this field will pass through the Indicator value sent by that market center.  Opening, Closing, IPO, Halt, and Volatility Auctions are conducted for IEX-listed securities. See the IEX Auction Process Specification for details about each auction type.  Opening Process is conducted for non-IEX-listed securities.

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Tag	Field Name	Details	Guidelines
		[Passed through value from Market Centers if LastMkt is not IEX; See Appendix F for details about tag mapping.]	
9882	FeeCode	Specific fee code associated with execution on a non-IEX market.	To be used in conjunction with LastMkt(30) to determine trading costs. If LastMkt is a non-IEX
		[Passed through value from Market Centers if LastMkt is not IEX; See Appendix F for details about tag mapping.]	market, this field will pass through the Indicator value sent by that market center.

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#### Canceled

Tag	Field Name	Details	Guidelines
20	ExecTransType	0=New	
31	LastPx	0.00	
32	LastShares	0	
39	OrderStatus	4=Cancelled	
41	OrigClOrdID	CIOrdID used to identify the referenced order in cancel request.	
150	ЕхесТуре	4=Cancelled	
151	LeavesQty	0	

#### **Unsolicited Cancel**

Tag	Field Name	Details	Guidelines
20	ExecTransType	0=New	
11	ClOrdID	ClOrdID of the cancelled order.	
31	LastPx	0.00	
32	LastShares	0	
39	OrderStatus	4=Cancelled	
41	OrigClOrdID	ClOrdID of the cancelled order, used to identify the referenced order in cancel request.	
150	ExecType	4=Cancelled	
151	LeavesQty	0	

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#### **Anti-Internalization Cancel/Restatement**

Tag	Field Name	Details	Guidelines
35	MsgType	8=ExecutionReport	
11	ClOrdID	Will match confirmed ClOrdID of current order chain	
37	OrderID	Unique IEX Order ID	
60	TransactTime	Time of execution creation (in UTC)	
1	Account	Will match original order	
31	LastPx	Price of this (last) fill.	This field is always provided on AIQ canceled/restated messages, but Members must opt in to receive the actual value associated with this field.  On an AIQ canceled/restated message, this is the price of the shares that would have matched.
32	LastShares	Quantity of shares executed on this (last) fill.	If the AIQ cancel pertains to a routable order (18=u), the value for LastPx will be 0.  This field is always provided on AIQ canceled/restated messages, but Members must opt in to receive the actual value associated with this field.  On an AIQ canceled/restated message, this the quantity of shares that would have matched.  If the AIQ cancel pertains to a routable order (18=u), the value for LastShares will be
39	OrderStatus	O=New 1=Partial fill 2=Fill 4=Canceled	O. Identifies current status of order.

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Tag	Field Name	Details	Guidelines
		5=Replace 6=Pending Cancel (e.g., result of Order Cancel Request) 8=Rejected E=Pending Replace (e.g., result of Order	Must request opt-in at firm or port level for "Report AIQ Fields" to receive this field.
102	CxlRejReason	Cancel/Replace Request)  0=Too late to cancel 1=Unknown order 2=Exchange Option 3=Already Pending Cancel or Pending Replace	Code to identify reason for cancel rejection.  Must request opt-in at firm or port level for "Report AIQ Fields" to receive this field.
150	ExecType	O=New 1=Partial fill 2=Fill 4=Canceled 5=Replace 6=Pending Cancel (e.g., result of Order Cancel Request) 8=Rejected D=Restated E=Pending Replace (e.g., result of Order Cancel/Replace Request)	Describes the specific Execution Report (i.e., Pending Cancel) while OrdStatus will always identify the current order status (i.e., Partially Filled)  Must request opt-in at firm or port level for "Report AIQ Fields" to receive this field. Value of D will be used for AIQ decrement ("D") values
151	LeavesQty	Number of shares open for further execution.	Must request opt-in at firm or port level for "Report AIQ Fields" to receive this field.  On an AIQ restated message this is what the liquidity values would have occurred on the trade.
851	Last Liquidity Ind	1=Added Liquidity 2=Removed Liquidity 3=Routed 4=Auction 9=Removed Liquidity on Recheck	Identifies source of execution and whether an execution on IEX resulted from liquidity provision or removal, or from a single- price cross (e.g., auction).  Must request opt-in at firm or port level for "Report AIQ Fields" to receive this field.

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Tag	Field Name	Details	Guidelines
			On an AIQ canceled/restated message, this is what the liquidity values would have been on the trade.  If the AIQ cancel pertains to a routable order (18=u), LastLiquidityInd will not be provided.
7928	Anti-Internalization Qualifiers (AIQ) ID	Anti-Internalization "AIQ group" must be enabled at the port level first in order for the AIQ identifiers and modifiers to be properly enforced if sent per order. Users have the choice of setting AIQ on a Member Affiliate, User or MPID basis. If an order is submitted on a port that is not AIQ enabled, this FIX tag will be disregarded.  3 Characters for self trade prevention:  • First 2 characters are the AIQ identifier to prevent orders that share the same value and originate from the same Member Affiliate (two or more Members that are affiliates), User (Member) or MPID (as set at the port level) from executing against each other.  • 3rd character is the 1 character AIQ modifier, which specifies the type of AIQ behavior	1st and 2nd character AIQ identifier Level:  Each character can be "0-9", "A-Z", "a-z".  Case sensitive (i.e., 5B!= 5b).  User should input either "" or "" - which signifies "free-to-trade" (Anti-Internalization disabled for this order). Users can also completely disable their AIQ on a port level for all orders via the IEX Equities Port Request Form.
9730	TradeLiquidityIndicator	Base Character(s)  MI=Add Non-Displayed Continuous Execution  ML=Add Displayed Continuous Execution  TI=Remove Non-Displayed Continuous Execution  TL=Remove Displayed Continuous Execution  X=Opening Process  O=Opening Auction  C=Closing Auction  H=Halt / Volatility Auction  P=IPO Auction  Appended Characters	To be used in conjunction with LastMkt(30) to determine trading costs. If LastMkt is a non-IEX market, this field will pass through the Indicator value sent by that market center.  Opening, Closing, IPO, Halt, and Volatility Auctions are conducted for IEX-listed securities. See the IEX Auction Process

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Tag	Field Name	Details	Guidelines
		D=Execution of displayed Continuous Book interest in a cross or auction (applied with X, O, or C, only)	Specification for details about each auction type.
		R=Retail order removes liquidity A=Member adds liquidity against a Retail order with a Retail Liquidity Provider order W=Resting dark order removes against Post-Only Y=Post Only adds/removes upon booking	Opening Process is conducted for non-IEX-listed securities.
		[Passed through value from Market Centers if LastMkt is not IEX; See Appendix F for details about tag mapping.]	Must request opt-in at firm or port level for "Report AIQ Fields" to receive this field.
			On an AIQ canceled/restated message, this is what the liquidity values would have been on the trade.
			If the AIQ cancel pertains to a routable order (18=u), TradeLiquidityIndicator will not be provided.
198	Secondary Orderld	IEX OrderID (FIX Tag 37 of the contra order)	New field on AIQ cancel messages which represents the contra side order ID that order would have traded against.
			Must request opt-in at firm or port level for "Report AIQ Fields" to receive this field.
378	ExecRestatementReason	4=State Change	Only present when 150=D
21004	STPReason	N - Cancel newest O - Cancel oldest B - Cancel both S - Cancel smaller	On an AIQ canceled/restated message, this is the AIQ scenario that caused the "execution".
		D - Decrement larger original order quantity and cancel smaller	Must request opt-in at firm or port level for "Report AIQ Fields" to receive this field.

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#### Replaced

Tag	Field Name	Details	Guidelines
20	ExecTransType	0=New	
31	LastPx	0.00	
32	LastShares	0	
39	OrderStatus	5=Replaced	
41	OrigClOrdID	ClOrdID of the replaced order, used to identify the referenced order in replace request.	
115	OnBehalfOfCompID	IEX-assigned value used to identify firm sending message. Applicable for Service Bureau connections.	
150	ExecType	5=Replaced	
151	LeavesQty	OrderQty - CumQty	

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#### **D-Limit Restatement (Slide / Reprice)**

Tag	Field Name	Details	Guidelines
11	CIOrdID	Unique identifier, per session, per trading day for Order as assigned by the Member	Max length: 20 chars
150	ЕхесТуре	D=Restated	Restatement message will be sent to user
378	ExecRestatementReason	3=Repricing of order	Only present when 150=D
			If effective limit price was adjusted due to a CQI event, the adjusted effective limit price will be reported here.
9690	EffectiveLimitPrice	New effective limit price of the order due to CQI price change	Effective limit price will always be reported unless Member opts-out of receiving restatement messages via the IEX Equities Port Request Form.

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#### **Display Price Restatement**

Tag	Field Name	Details	Guidelines
11	CIOrdID	Unique identifier, per session, per trading day for Order as assigned by the Member	Max length: 20 chars
150	ЕхесТуре	D=Restated	Restatement message will be sent to user whenever the display book price is adjusted, for any incoming displayed order that is not able to book at its limit price.  Must request opt-in at port level to receive Display Price Restatement message via the IEX Equities Port Request Form.
378	ExecRestatementReason	3=Repricing of order	Only present when 150=D
9692	DisplayPrice	Displayed order book price if different than Limit Price(44)	Only applicable when order is displayed

#### **Pending Cancel**

Tag	Field Name	Details	Guidelines
20	ExecTransType	0=New	
31	LastPx	0.00	
32	LastShares	0	
39	OrderStatus	6=Pending Cancel	
41	OrigClOrdID	ClOrdID of the pending cancel order, used to identify the referenced order in cancel/replace requests.	
150	ЕхесТуре	6=Pending Cancel	
151	LeavesQty	OrderQty - CumQty	

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#### Rejected

Tag	Field Name	Details	Guidelines
20	ExecTransType	0=New	
31	LastPx	0.00	
32	LastShares	0	
39	OrderStatus	8=Rejected	
103	OrdRejReason	O=Broker option 1=Unknown symbol 2=Exchange closed 3=Order exceeds limit 4=Too late to enter 5=Unknown order	Code to identify reason for order rejection.
150	ExecType	8=Rejected	
151	LeavesQty	0	

#### **Pending Replace**

Tag	Field Name	Details	Guidelines
20	ExecTransType	0=New	
31	LastPx	0.00	
32	LastShares	0	
39	OrderStatus	E=Pending Replace	
41	OrigClOrdID	ClOrdID of the pending replace order, used to identify the referenced order in cancel/replace requests.	
150	ExecType	E=Pending Replace	
151	LeavesQty	OrderQty - CumQty	

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#### **Trade Bust**

IEX currently supports Trade Busts via a custom message type "UCC" that can be enabled at the port level. Trade Busts do not alter live order state.

Tag	Field Name	Details	Guidelines
35	MsgType	UCC	
11	ClOrdID	Will match original execution	
17	ExecID	Unique identifier of execution message	
19	ExecRefID	Referenced ExecID of execution to apply trade bust to	
20	ExecTransType	1=Cancel	
31	LastPx	Price on the original trade being cancelled	
32	LastShares	Quantity of shares on the original trade being cancelled	
37	OrderID	Will match original execution	
42	OrigTime	Indicates TransactTime (60) of original execution.	
54	Side	Will match original execution	
55	Symbol	Will match original execution	
60	TransactTime	Time of trade bust expressed in UTC	
375	ContraBroker	Denoted with value "IEXG".	
382	NoContraBrokers	Denoted with value "1".	
9730	TradeLiquidityIndicator	Will match original execution	
9882	FeeCode	Will match original execution	
1	Account	Will match original order	
65	SymbolSfx	Will match original order	

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#### **Cancel Reject**

Tag	Field Name	Details	Guidelines
35	MsgType	9=OrderCancelReject	
11	ClOrdID	Will match cancel request	
37	OrderID	IEX Order ID, or "NONE" if this is an unknown order to IEX	
39	OrdStatus	OrdStatus value after this cancel reject is applied	
41	OrigClordID	CIOrdID of the referenced order which could not be cancelled	
102	CxlRejReason	O=Too late to cancel 1=Unknown order 2=Exchange Option 3=Already Pending Cancel or Pending Replace	
434	CxIRejResponseTo	1=Order Cancel Request	
1	Account	Will match original order	
58	Text	Reason for cancel reject	
65	SymbolSfx	Will match original order	

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#### Replace Reject

Tag	Field Name	Details	Guidelines
35	MsgType	9=OrderCancelReject	
11	ClOrdID	Will match cancel/replace request	
37	OrderID	IEX Order ID, or "NONE" if this is an unknown order to IEX	
39	OrdStatus	OrdStatus value after this cancel/replace reject is applied	
41	OrigClordID	ClOrdID of the referenced order which could not be replaced.	
		0=Too late to cancel 1=Unknown order	
102	CxlRejReason	2=Exchange Option	
		3=Already Pending Cancel or Pending Replace	
434	CxIRejResponseTo	2=Order Cancel/Replace Request	
1	Account	Will match original order	
58	Text	Reason for cancel/replace reject	
65	SymbolSfx	Will match original order	

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## **DROP COPY**

IEX will provide drop copies to another session specified by the Member. All execution report (35=8) messages from the original order entry line will be sent on the drop copy connection. In addition to the original execution report details, the drop copy messages will contain the below tags to help the Member identify the message sequence from the original order entry session.

Tag	Field Name	Details	Guidelines
109	ClientID	4 Character MPID if original order was sent via Service Bureau session (i.e., ABCD). 4 Character MPID + 3 digit integer representing original SenderCompID if original order was sent via Direct connection (i.e., ABCD001)	

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## **APPENDIX A: SYMBOLOGY**

Requires corresponding Symbology election to be enabled at the port level

Suffixes, when needed, are supported using 3 formats: 1) Tag 55 using Nasdaq Integrated 2) Tag 55 using CMS format (with SPACE delimited between the root and suffix) 3) Tag 55/65 using CMS format.

Security Categorization	NASDAQ Integrated	NASDAQ Example	СМЅ	CMS Concatenated Example	CMS 55/65 Example
Called	*		CL		
Class "A"	.A	55=AKO.A	А	55=AKO A	55= AKO 65=A
Class "A" Called	.A*		ACL		
Class "A" Convertible	.A%		ACV		
Class "A" When Issued	.A#		AWI		
Class "B"	.В		В		
Convertible	%		CV		
Convertible Called	%*		CVCL		
Emerging Company Marketplace	!		EC		
Partial Paid	@		PP		
Preferred	-	55=MTL-	PR	55=MTL PR	55=MTL 65=PR
Preferred "A" Called	-A*		PRACL		
Preferred "A" When Issued	-A#		PRAWI		
Preferred Called	_*		PRCL		
Preferred Class "A"	-A	55=ABR-A	PRA	55=ABR PRA	55=ABR 65=PRA
Preferred Class "A" Convertible	-A%		PRACV		
Preferred Class "A" When Distributed	-A\$		PRAWD		
Preferred Class "B"	-B		PRB		
Preferred When Distributed	-\$		PRWD		
Preferred When Issued	-#		PRWI		
Rights	^		RT		

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Security Categorization	NASDAQ Integrated	NASDAQ Example	СМЅ	CMS Concatenated Example	CMS 55/65 Example
Rights When Issued	^#		RTWI		
Test	~		TEST		
Units	=	55=GRP=	U	55=GRP U	55=GRP 65=U
Warrant When Issued	+#		WSWI		
Warrants	+		WS		
Warrants Class "A"	+A		WSA		
Warrants Class "B"	+B		WSB		
When Distributed	\$		WD		
When Issued	#		WI		

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# APPENDIX B: COMMON CERTIFICATION ISSUES

- Not sending required tag ExecInst (18)
- IEX Market orders sent with a TIF (59) of GTT (only accepted TIFs are IOC, FOK, or DAY)
- Routable Market orders sent with a TIF (59) of Day, GTT, or FOK (only accepted TIF is IOC)
- Using Minimum Quantity (110) with any routing instructions
- Using Minimum Quantity (110) with FOK TIF (59)
- Midpoint Peg Order (18=M), Primary Peg Order (18=R), Discretionary Peg Order (18=d) sent without the value "P" sent in OrdType (40)
- ISO orders (18=f, y) with anything other than OrdType (40)=2(Limit) and TIF (59)=3(IOC)
- Not enabling case sensitivity for ExecID (17)

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## APPENDIX C: ORDER REJECT AND CANCEL REASONS

The description of the reject or cancel will be sent back by IEX via "Text" (tag 58). The below lists common reasons and may not be exhaustive.

#### **Order Cancel Reasons**

- AdminCancel
- CrossedTradeThroughPrevented
- DiscretionaryLimitCancel
- ExceededMaxChildOrders
- ExceededMaxSnapshots
- lexOrderCollar
- InvalidBookPrice
- InvalidOrderQty
- MidpointTouched
- OrderExceedsLimit
- OrderSizeLessThanMinQty
- PostOnlyCancelled
- SelfTradePrevention
- UnmatchedIneligibleToRest
- UnmatchedIOC

#### Order Reject Reasons

- BrokerOption
- ExceededMaxNotionalPerOrder
- ExceededMaxSharesPerOrder
- ExchangeClosed
- InvalidAuctionOrder
- InvalidExecInst
- InvalidGoodTillTimeOrder
- InvalidOddLot
- InvalidSignalChoice
- InvalidPrice
- InvalidTagCombinationForDiscretionaryLimit
- InvalidTagCombinationForDiscretionaryPeg
- InvalidTagCombinationForIOC
- InvalidTagCombinationForMarketOrder
- InvalidTagCombinationForMidpointPeg
- InvalidTagCombinationForMinQty
- InvalidTagCombinationForOffsetPeg
- InvalidTagCombinationForPostOnlyOrder
- InvalidTagCombinationForPrimaryPeg
- InvalidTradeNowInstruction
- MarketOrdersNotAllowed
- MissingLocate
- MPIDUnknownOrDisabled
- OnlyTestSymbolsAllowed
- OrderInvalidInCurrentMarketSession
- OrderInvalidInPreMarketSession
- PostMarketNotAllowed
- PreMarketNotAllowed
- SymbolHalted
- SymbolNotActive
- TooLateToEnter

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• UnknownSymbol

## **APPENDIX D: LAST MARKET VALUES**

Venue	LastMkt<30>
Investors Exchange	IEXG
investors Exerialize	
New York Stock Exchange	XNYS
NYSE Arca	ARCX
NYSE American	XASE
NYSE Chicago	XCHI
NYSE National	XCIS
Cboe BZX Exchange	BATS
Cboe BYX Exchange	BATY
Cboe EDGA Exchange	EDGA
Cboe EDGX Exchange	EDGX
Nasdaq Stock Exchange	XNGS
Nasdaq BX	XBOS
Nasdaq PSX	XPHL
Long Term Stock Exchange	LTSE
MEMX LLC	MEMX
MIAX Pearl Equities	EPRL

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## **APPENDIX E: TIF MATRIX**

					(40 = 1	) Market				1				(40 = 2) Lim	14							(40 = P) Pegg	and .		
		(59 = 2) At the	(59 = 3)	(59 = 4)	(59 = 5)	(59 = 6)	(59 = 7) At the	(59 = M)	(59 = 0)	(59 = 2) At the	(59 = 3)	(59 = 4)	(59 = 5)	(59 = 6)	(59 = 7) At the	(59 = M)	(59 = 0)	(59 = 2) At the	(59 = 3)	(59 = 4)	(59 = 5)	(59 = 6)	(59 = 7) At the	(59 = M)	(59 = 0
		Open	IOC	FOK	GTX	GTT	Close	SYS	Day	Open	IOC	FOK	GTX	GTT	Close	SYS	Day	Open	IOC	FOK	GTX	GTT	Close	SYS	Day
	(18=M) Midpoint Peg	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Queue until
	(18=M) Midpoint Peg & (9416=F) Fixed Midpoint Peg	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Queue until
	(18=M) Midpoint Peg & (9416=R) Retail Order (18=M) Midpoint Peg & (9416=T) RLP Order	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject
	(18=R) Primary Peg	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Relect	Reject	Reject	Reject	Reject	Reject	Relect	Reject	Reject	Reject	Relect	Reject	Reject	Relect	Queue until
	(18=d) Discretionary Peg	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Queue until
	(18=d) Discretionary Peg & (9416=R) Retail Order	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Rejec
Pre-	(18=z) Corporate D-Peg	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Queue unt
1arket	(18=j) Discretionary Limit	Reject	Relect	Reject	Relect	Reject	Reject	Reject	Relect	Reject	Relect	Relect	Relect	Reject	Reject	Reject	Queue until	Relect	Relect	Reject	Reject	Relect	Reject	Reject	last sa Rejec
	(18-j) Discretionary Limit	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Auction / Open	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Rejec
ession†	(18=j) Discretionary Limit & (9140=P) Post Only	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Queue until Auction / Open	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reje
	(18=Q) Market Maker Peg	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Queue unt
	(18=o) Offset Peg	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Queue unt
	(18=P) Market Peg (18=f) ISO	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Queue unt
	(18=Y) Trade-At ISO	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	IOC	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reje
		Queue until	Reject	Reject	Reject	Reject	Queue until	Reject	Queue until	Queue until		Reject	Queue until	Reject	Queue until	Reject	Queue until	Reject	reject	Reject	reject	Reject	Reject	Reject	Rejo
	(18=i) Standard, "IEX Only"	Opening Auction	Reject	Reject	Reject	Reject	Closing Auction	Reject	Auction / Open	Opening Auction	IOC	FOK	Auction / Open	GTT	Closing Auction	SYS	Auction / Open	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reje
	(18=i) Standard, "IEX Only" & (9140=P) Post Only	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Queue until Auction /Open	GTT	Reject	SYS	Queue until Auction / Open	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reje
	(18=u) Router ('r' 's' and 't') accepted and converted to 'u')	Reject	Relect	Relect	Reject	Doloct	Reject	Relect	Reject	Reject	IOC	Relect	Queue until	GTT	Reject	SYS	Queue until	Relect	Relect	Reject	Reject	Relect	Reject	Reject	Reje
	(10-b) Rober (1-5 dia 1) decepted and contened to a)	Neject	reject	regeer	reject	reject	reject	regeer	regeer	reject	100	reject	Auction / Open	011	reject	5.5	Auction / Open	reject	reject	regeer	reject	reject	reject	reject	recje
																							_		
	(18=M) Midpoint Peg	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	IOC	FOK	GTX (Expire @ 4:00)	GTT (Evolve @ 4:00	Reject	SYS (Expire @ 4:00)	DAY
	(18=M) Midpoint Peg & (9416=F) Fixed Midpoint Peg	Reject	Relect	Reject	Relect	Reject	Reject	Reject	Reject	Reject	Relect	Relect	Relect	Relect	Relect	Relect	Relect	Relect	IOC	FOK	GTX	GTT	Relect	SYS	DAY
	(10-III) Pikipolik Peg & (3410-1) Piked Pikipolik Peg	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	ЮС	FOR	(Expire @ 4:00)	(Expire @ 4:00)	) Reject	(Expire @ 4:00)	0
	(18=M) Midpoint Peg & (9416=R) Retail Order	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	IOC^	FOK <sup>^</sup>	Processed as Midpoint Peg	Processed as Midpoint Peg	Reject	Processed as Midpoint Peg	Midpoir
	(18=M) Midpoint Peg & (9416=T) RLP Order	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	GTX	GTT	Reject	SYS	. DA
																					(Expire @ 4:00)	(Expire @ 4:00)	)	(Expire @ 4:00) SYS	0
	(18=R) Primary Peg	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	IOC	FOK	(Expire @ 4:00)	(Expire @ 4:00)	Reject	(Expire @ 4:00)	) DA
	(18=d) Discretionary Peg	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	IOC	FOK	GTX (Expire @ 4:00)	GTT (Expire @ 4:00)	Reject	SYS (Expire @ 4:00)	DA
) Ogular	(18=d) Discretionary Peg & (9416=R) Retail Order	Reject	Relect	Relect	Relect	Reject	Relect	Relect	Relect	Relect	Relect	Relect	Relect	Relect	Relect	Relect	Reject	Relect	IOC^	FOK^	Processed as	Processed as	Relect	Processed as	
Regular			-	,	-	,	, ,	,		,	-		,			,					Discretionary Per	GTT Discretionary Per	g	Discretionary Per SYS	g Discretion
Market	(18=z) Corporate D-Peg	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	IOC	FOK	(Expire @ 4:00)	(Expire @ 4:00)	Reject	(Expire @ 4:00)	DAY
ession	(18=j) Discretionary Limit	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	GTX (Expire @ 4:00)	GTT	Reject	SYS (Expire @ 4:00	Day (Expire @ 4:00)	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reje
	(18=j) Discretionary Limit & (9140=P) Post Only	Relect	Relect	Reject	Relect	Reject	Reject	Relect	Reject	Relect	Relect	Relect	GTX	(Expire @ 4:00	Relect	SYS	Day	Relect	Relect	Reject	Relect	Relect	Relect	Relect	Reie
		Dolort	Doloct	Dolost	Poloct	Reject	Dolort	Reject	Dolost	Dolort	Dolort	Dolost	(Expire @ 4:00)	(Expire @ 4:00	Polart	(Expire @ 4:00	(Expire @ 4:00)	Reject	Dolost	Dolost	Dolost	Reject	Dolost	Dolost	
	(18=Q) Market Maker Peg	regees	reject	Reject	reject	Reject	reject	Reject	Reject	regees	reject	Reject	Reject	Reject	reject	Reject	Reject	Reject	Reject	Reject	GTX	GTT	Reject	SYS	DA
	(18=o) Offset Peg	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	(Expire @ 4:00)	(Expire @ 4:00)	Reject	(Expire @ 4:00)	DA'
	(18=P) Market Peg	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	IOC	FOK	GTX (Expire @ 4:00)	GTT (Expire @ 4:00)	Reject	SYS (Expire @ 4:00)	DA
	(18=f) ISO	Relect	Relect	Relect	Relect	Relect	Relect	Relect	Relect	Relect	IOC	Relect	Relect	Relect	Relect	Relect	Relect	Reject	Relect	Relect	Relect	Relect	Relect	Relect	Rele
	(18=Y) Trade-At ISO	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	IOC	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reje
	(18=i) Standard, "IEX Only"	Reject	IOC	FOK	Reject	Reject	Queue until	Reject	Processed as	Reject	IOC	FOK	GTX	GTT	Queue until	SYS	Day	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reje
							Closing Auction		IOC*						Closing Auction		(Expire @ 4:00) Day								
	(18=i) Standard, "IEX Only" & (9140=P) Post Only	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	GTX	GTT	Reject	SYS	(Expire @ 4:00)	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reje
	(18=u) Router ('r' 's' and 't') accepted and converted to 'u')	Reject	IOC	Reject	Reject	Reject	Reject	Reject	Processed as	Reject	IOC	Reject	GTX	GTT	Reject	SYS	(Expire @ 4:00)	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Rej
					1				IOC								(Expire @ 4.00)	,			1				
	(18=M) Midpoint Peg	Relect	Relect	Reject	Relect	Dolort	Reject	Relect	Reject	Reject	Relect	Dolort	Relect	Relect	Reject	Relect	Relect	Relect	Relect	Reject	Relect	Relect	Reject	Relect	Rei
	(18=M) Midpoint Peg & (9416=F) Fixed Midpoint Peg	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Rei
	(18=M) Midpoint Peg & (9416=R) Retail Order	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Re)
	(18=M) Midpoint Peg & (9416=T) RLP Order	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Rej
	(18=R) Primary Peg	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Rej
	(18=d) Discretionary Peg	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Re
Post-	(18=d) Discretionary Peg & (9416=R) Retail Order	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Re
larket	(18=z) Corporate D-Peg (18=j) Discretionary Limit	Reject Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Re
ession†	(18=j) Discretionary Limit (18=j) Discretionary Limit & (9140=P) Post Only	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Re
	(18=Q) Market Maker Peg	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Re
	(18=o) Offset Peg	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Re
	(18=P) Market Peg	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Re
	(18=f) ISO	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	IOC	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Re
	(18=Y) Trade-At ISO	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	IOC	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Rej
	(18=i) Standard, "IEX Only"	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	IOC	FOK	GTX	GTT	Reject	SYS	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Rej
	(18=i) Standard, "IEX Only" & (9140=P) Post Only	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	GTX	GTT	Reject	SYS	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reje
		Reject	Relect	Relect	Relect		Relect	Reject	Relect	Relect	IOC	Relect	GTX	GTT	Relect	SYS	Relect	Relect		Relect	Relect		Reject	Reject	Rejec

<sup>\*</sup> IEX Members must request that their order-entry session(s) be enabled to accept Market Orders with a TIF of Day. These orders submitted in the Pre-Market will queue up for the Regular Market session and be processed with an IOC TIF.

<sup>1</sup> IEX Members must request that their order-entry session(s) be enabled to participate in Pre-Market and Post-Market Sessions.

1EX Members must submit Retail orders (Tag 9416 = 'R') as Discretionary Peg (18-d) or Midpoint Peg (18-M) with TIF = (FOK or IOC) and apply to become Retail Member Organizations to qualify for Retail Price Improvement program.

## **APPENDIX F: TAG MAPPING**

If LastMkt is a non-IEX market, TradeLiquidityIndicator (9730) and FeeCode (9882) will pass through the value sent by that market center. Below is the mapping from the away market center into either TradeLiquidityIndicator (9730) or FeeCode (9882):

Venue	LastMkt<30>	TradeLiquidityIndicator<9730>	FeeCode<9882>
New York Stock Exchange	XNYS	BillingIndicator	N/A
NYSE Arca	ARCX	LiquidityIndicator (9730)	N/A
NYSE American	XASE	LiquidityIndicator (9730)	N/A
NYSE National	XCIS	LiquidityIndicator (9730)	N/A
NYSE Chicago	XCHI	LastLiquidityInd (851)	N/A
Cboe BZX Exchange	BATS	TradeLiquidityIndicator (9730)	FeeCode (9882)
Cboe BYX Exchange	BATY	TradeLiquidityIndicator (9730)	FeeCode (9882)
Cboe EDGA Exchange	EDGA	TradeLiquidityIndicator (9730)	FeeCode (9882)
Cboe EDGX Exchange	EDGX	TradeLiquidityIndicator (9730)	FeeCode (9882)
Nasdag Stock Exchange	XNGS	LiquidityFlag (9882)	N/A
Nasdaq BX	XBOS	LiquidityFlag (9882)	N/A
Nasdaq PSX	XPHL	LiquidityFlag (9882)	N/A
Long Term Stock Exchange	LTSE	LiquidityIndicator (9730)	N/A
MEMX LLC	MEMX	LastLiquidityInd (851)	N/A
MIAX Pearl Equities	EPRL	TradeLiquidityIndicator (9730)	N/A



## **REVISION HISTORY**

Version	Date	Change
0.1	January 18, 2013	Document created with Market, Limit, Pegged
0.2	February 15, 2013	FOK     LastMkt     Unsolicited Cancel Updated:     Minimum Quantity - valid values tiers     RoutingInst     Symbology Removed:      MinQtyInstruction     Primary Peg     DirectedVenue     Discretion     DK     Trade Correction
0.3	April 30, 2013	<ul> <li>PegDifference</li> <li>Needs reject reason (103) for rejected</li> <li>Remove price from market order</li> <li>Remove duplicate price from limit order</li> <li>Changed TradeLiquidityIndicator and RoutingInst values to single characters</li> <li>RoutingInst conflated into ExecInst</li> <li>Unsolicited Cancels now has ClOrdID referencing OrigClOrdID as opposed to 0</li> <li>Pass through values for TradeLiquidityIndicator</li> <li>Added additional routing values to accommodate ability to re-sweep locked market</li> <li>Removed SelfTradePreventFlag</li> <li>Added OrdQty as required field in Cancel Request message</li> <li>Updated system availability times</li> </ul>
0.4	May 31, 2013	<ul> <li>Added restriction that booked (non-IOC, non-FOK) orders that are completely hidden (MaxFloor=0) cannot be marked as ISO</li> <li>Updated routing options for Market (now IEX and route to take only) and Limit (should have the resweep options available)</li> </ul>
1.0	June 7, 2013	<ul> <li>Added drop copy</li> <li>Miscellaneous cleanup</li> </ul>
1.10	July 31, 2013	<ul> <li>Removed LocateReqd from being echoed in execution reports</li> <li>ISO orders only compatible with IOC</li> <li>Included LeavesQty expectation in messages</li> <li>Corrected Pending Replace OrderStatus/ExecType</li> <li>Updated Voting symbology</li> <li>Max Shares allowed now set at 10,000,000</li> <li>Updated Order Reject Reasons table</li> <li>ClOrdID length now 20 characters</li> <li>Updated Trade Bust message to UCC</li> <li>Added reference to DeliverToCompID</li> <li>Added Pending New message type</li> </ul>

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		Added 100 and 200 MinQty tiers
1.20	September 27, 2013	<ul> <li>Amended to account for go-live conditions (no displayed, no pre/post sessions)</li> <li>Added additional MinQty tiers (300 - 900)</li> </ul>
1.30	November 18, 2013	<ul> <li>Removed tag 122 (OrigSendingTime) from Drop Copy</li> <li>Added 9730=S (Self Cross)</li> <li>Midpoint Peg now supports a non-priced order</li> <li>Updated routable support to include Route to Take with Resweep (in addition to Route to Take)</li> </ul>
1.40	January 6, 2014	Added LastMkt table (Appendix D) and CMS support
1.50	May 30, 2014	<ul> <li>Updated Hours of Operation</li> <li>Added Primary Peg (40=P, 18=R)</li> <li>Added Anti-internalization Group ID (7928)</li> <li>Added Route to Rest Away (18=v)</li> <li>Added ability to Cancel Replace MinQty</li> <li>Added LastLiquidityIndicator (851)</li> <li>Added InvestorID (8484)</li> <li>Removed MinQty Tiers</li> <li>Removed CBSX and NSX from Last Market Values</li> <li>Updated behavior for IOC for Route To Take with Resweep (accepting instead of rejecting)</li> <li>Updated Appendix B with Common Certification Issues</li> <li>Clarified that ExecID (17) is case sensitive</li> </ul>
1.60	September 18, 2014	<ul> <li>Added Discretionary Peg</li> <li>Added MinQtyInstruction (9500)</li> <li>Updated LastLiquidityIndicator (851) - added 3=Routed, updated Removed Liquidity on Recheck from value of 4 to value of 9</li> </ul>
1.70	November 26, 2014  December 4, 2014	<ul> <li>Added MinQtyInstruction=A (All or None Remaining)</li> <li>Clarified Drop Copy 109 format</li> <li>Added support for displayed orders</li> <li>Added support for Route to Rest (SweepPost+) and Route to Rest with</li> </ul>
2.00	December 22, 2014	<ul> <li>Re-sweep (Router+) routing strategies</li> <li>Updated the launch date for non-protected displayed functionality to Feb 27, 2015</li> <li>Revised "Display Attributes"</li> <li>Updated description of functionality in Route to Rest (SweepPost+) strategy</li> <li>Corrected MaxFloor guidelines</li> </ul>
2.10	March 9, 2015	<ul> <li>Renamed Routable orders (18=r, s, t, u, v)</li> <li>Renamed Exec Instruction= i to "Standard" from "IEX Only"</li> <li>Removed requirement for MaxFloor 111=0 for Peg orders</li> <li>Removed description of functional details and provided reference link to IEX Subscriber Manual</li> </ul>
2.20	April 2, 2015	<ul> <li>Added values 'SL' and 'L' to TradeLiquidityIndicator</li> <li>Removed Lava FLOW from Last Market values</li> <li>Added "also known as" labels to Routable orders</li> <li>Added "Long" after the "2" value for Tag 54</li> </ul>
2.30	June 30, 2015	<ul> <li>Updated Address and Market Ops #</li> <li>Added support for Extended Hours and System Hours</li> <li>Market orders may be sent with a TIF of DAY when the Subscriber's port is configured</li> <li>Amendments are no longer accepted for market orders and orders with a TIF of IOC or FOK</li> </ul>
2.31	September 22, 2015	Corrected typo involving MinQty and ISO. MinQty not supported for ISO orders.

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2.32	April 12, 2016	<ul> <li>Updated Last Market Values appendix with NSX</li> <li>Added clarification to Symbology Appendix A, noting corresponding port level configuration needs to be made</li> </ul>
2.40	May 19, 2016	Added ContraBroker (375) and NoContraBrokers (382) for Investors     Exchange execution and trade bust messages
2.50	June 27, 2016	<ul> <li>Updated routing options to align with Investors Exchange offering (removed Route to options; added Router and Router Basic routing options)</li> <li>Retired Route to Rest Away routing option (18=v)</li> <li>Updated end time of the Post-Market Session</li> <li>Consolidated change history with IEX ATS FIX Specification</li> <li>Updated Trade Busts to reflect that LastLiquidityInd (851) is not included</li> <li>Added Appendix E: TIF Matrix</li> </ul>
2.51	July 22, 2016	<ul> <li>ContraBroker (375) and NoContraBrokers (382) are now populated for execution and trade bust messages received from IEX or away venues</li> <li>Updated Appendix E: TIF Matrix</li> <li>Clarified Cancel / Replace (35=G) treatment of Account (1) tag</li> <li>Updated end of post-market session to 5:00 PM EST</li> <li>Added Trade At ISO (18=y)</li> <li>Updated definition of MPV to be \$0.05 increments for securities in the Tick Size Pilot Test Groups</li> </ul>
2.52	August 11, 2016	<ul> <li>Added 5 (Good 'til Extended) and M (System Hours) to TIFs that are supported by Peg orders</li> </ul>
2.60	May 25, 2017	<ul> <li>Added clarification in FIX Tags section for how to identify required tags per message type</li> <li>Added support for accepting Market orders with a TIF of Day prior to the start of the Regular Market Session</li> <li>Added MOO, LOO, MOC, LOC</li> <li>Updated permitted TIF values</li> <li>Amended cancel/replace acceptance conditions</li> <li>851=4 (Auction)</li> <li>Added Single-price Opening, Reopening, Closing Transaction TradeLiquidityIndicator values</li> <li>9730=X (Opening Match on IEX)</li> <li>9730=O (Opening Auction on IEX)</li> <li>9730=C (Closing Auction on IEX)</li> <li>9730=H (Halt / Volatility Auction on IEX)</li> <li>9730=Q (Trade on IEX during a crumbling quote)</li> <li>Added note that certain TradeLiquidityIndicator values (9730=L,S,Q) may be used in conjunction with other TradeLiquidityIndicator values</li> <li>Updated Appendix E: TIF Matrix</li> </ul>
2.61	July 3, 2017	Clarified that 9730=Q is provided to the liquidity remover
2.62	July 13, 2017	<ul> <li>18=Q (Market Maker Peg)</li> <li>Corrected Execlnst values accepted for Market Orders</li> <li>MinQty is not compatible with Market Orders with 59=0 submitted during the Pre-Market Session</li> <li>Removed 9730=Q</li> </ul>
2.63 z2.64	October 19, 2017 February 21, 2018	<ul> <li>Added Crumbling Quote liquidity indicator code</li> <li>9730=Q (Trade on IEX during a crumbling quote)</li> <li>Removed the port setting requirement to accept market orders marked with a TIF of DAY</li> <li>Updated the description of 9730=Q (Removed liquidity on IEX during a crumbling quote)</li> <li>Updated NYSE Mkt to NYSE American.</li> </ul>

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		Updated the names of the Bats exchanges to Cboe exchanges.
2.65	April 11, 2018	Added FeeCode (9882)
2.00	, (pm 11, 2010	<ul> <li>Added Appendix F to identify tag mapping for values received from away</li> </ul>
		markets to TradeLiquidityIndicator (9730) and FeeCode (9882).
		• Updated Handlinst (21) to be an optional tag and ignored if present.
2.66	April 20, 2018	Updated the description of 9730=N (Removed liquidity on IEX with a buy
		(sell) order that is executable at the NBO (NBB))
		Updated IPO Auction TradeLiquidityIndicator value     O770-P (IPO Auction on IFX)
		<ul> <li>9730=P (IPO Auction on IEX)</li> <li>Added NYSE National tag mapping to Appendix F</li> </ul>
		Added NTSE National tag mapping to Appendix I
2.67	May 9, 2018	• Updated the description of 9730=I (Trade involves non-displayed liquidity)
		• Updated the descriptions of each 9730 value (cosmetic updates)
		<ul> <li>Added execution of displayed Continuous Book interest in a cross or</li> </ul>
		auction indicator code
		9730=D (Execution of displayed Continuous Book interest in a cross or
		auction (applied with X, O, or C, only))
		Added NYSE National to Appendix D
2.68	July 9, 2018	• Remove Router Basic and map 18=s to Router (18=u)
		<ul> <li>This change is effective August 9, 2018</li> </ul>
2.69	March 27, 2019	Updated to Reject Market Day orders during the pre-market session for
2.03	MaiCi1 27, 2019	non-IEX listed securities
		<ul> <li>This change is effective March 25, 2019</li> </ul>
		,
2.7	August 20, 2019	Update to remove references to retired industry Tick Pilot pricing
		increments
		Added Retail order type  Added Betail Lincillo Brazilan and an type
		<ul> <li>Added Retail Liquidity Provider order type</li> <li>Added Tag 9416 = 'R' (Retail) and 'T" (Retail Liquidity Provider)</li> </ul>
		This change will be effective on the launch of the IEX Retail Price
		Improvement program, communicated in an IEX Trading Alert
2.71	October 1, 2019	Removed value 'N' from tag 9730
		Added value 'R' and 'A' to tag 9730
		Removed wording around Tick Size Pilot
		Added new order type Corporate D-Peg  Added Everyland (10) = a few Corporate D-Peg  Addd (10) = a few Corpora
		Added ExecInst(18) = z for Corporate D-Peg (C-PEG) orders     Undated Appendix E (TIE Matrix)
		Updated Appendix E (TIF Matrix)
2.72	February 5, 2020	Added Anti-Internalization Qualifiers to tag 7928
		This change will be effective on the launch of the IEX AIQ modifier,
		communicated in an IEX Trading Alert
2.73	May 28, 2020	Added new D-Limit order type functionality
	1 10, 20, 2020	Added New D. Entire order type functionality
2.74	July 16, 2020	Removed Market Maker Peg Order Type

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2.75	August 25, 2020	Updated Last Market Codes in Appendix D and Appendix F to include new exchanges (LTSE, MEMX and EPRL)
2.76	August 28, 2020	Removed "pending SEC Approval" text for D-Limit order type
2.77	November 5, 2020	Added new O-Peg order type functionality
2.78	November 28, 2020	<ul> <li>Amended OrderType (40) being populated with value of [P] when ExecInst (18) is populated</li> </ul>
2.79	January 11, 2021	<ul> <li>Allowed PegDifference (211) as an amendable field</li> <li>Removed in AIQ cancel message receiving LastPx (31), LastShares (32), LeavesQty(151), LastLiquidityInd(851), TradeLiquidityIndicator(9730)</li> </ul>
2.80	March, 2021	<ul> <li>Removed MaxFloor restriction for odd lot sizes (to allow displayed odd lot orders) and updated MaxFloor description throughout specs to clarify how it effects displayed/non-displayed status of orders</li> <li>Removed values 'I' and 'L' from Tag 9730</li> <li>Added Values 'MI', 'ML', 'TI' and 'TL' to Tag 9730</li> </ul>
2.81	March 24, 2021	<ul> <li>Removal of Fee Code 'N' from page 69</li> <li>Updated TradeLiquidityIndicator (9730) to reflect availability of certain codes until April 1st 2021</li> </ul>
2.82	April 21, 2021	<ul> <li>Added additional FIX Tags to Anti-Internalization Cancel Message</li> <li>Removed old fee codes from TradeLiquidityIndicator (9730) &amp; rollout dates for fee code transition</li> <li>Updated Tag 103 description to include Too late to enter (4)</li> </ul>
2.83	May 24, 2021	<ul> <li>Added clarification that enhancement of AIQ reportable fields is unavailable for routable orders</li> <li>Added clarification that only Cancel Oldest (O) is accepted for Anti-Internalization Qualifiers (AIQ) ID (7928) for routable orders</li> <li>Updated Discretionary Limit parameters for Reserve Orders</li> </ul>
2.84	October 5, 2021	<ul> <li>Updated future support of Midpoint Peg (18=M) only for RLP orders with highlights</li> <li>Discontinued future support of Discretionary Peg (18=d) for RLP orders with highlights</li> <li>Discontinued future support of Min Qty for RLP orders with highlights</li> </ul>
2.85	October 11, 2021	<ul> <li>Added a future supplemental FIX tag 8020 (DisplayRange) for reserve orders</li> </ul>
2.86	October 19, 2021	<ul> <li>Removed interim highlights</li> <li>Updated RLP order Execlnst to support Midpoint Peg (18=M) only</li> <li>Discontinued support of Discretionary Peg (18=d) for RLP orders</li> <li>Discontinued support of Min Qty for RLP orders</li> <li>Added a supplemental FIX tag 8020 (DisplayRange) for reserve orders</li> </ul>
2.87	December 17, 2021	<ul> <li>Added Tag 18= Q (Market Maker Peg Order Type)</li> <li>Updated clarity for Routed Peg orders in Tag 40</li> </ul>

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2.88	May 26, 2022	<ul> <li>Updated permitted characters for ClOrdId (11) and OrigClOrdId (41)</li> <li>Updated OrdRejRason to account for Order exceeded limit (103)</li> <li>Updated Order Transaction Fix Tags to note that O-Peg orders cannot be submitted with TIF of IOC or FOK (59)</li> <li>Updated Primary Peg orders to support TIF of IOC and FOK (59)</li> </ul>
2.89	July 14, 2022	<ul> <li>Updated Tags 42, 52, 60 and 122 to reflect planned introduction of higher resolution timestamps (i.e., microsecond and nanosecond-level granularity) on outbound messages*</li> </ul>
2.90	August 23, 2022	<ul> <li>Added new Market Peg order type functionality (including adding Tag 18=P for market pegs)</li> <li>Updated PegDifference description for Offset Peg orders.</li> <li>Removed highlighting of text regarding higher resolution timestamps (to reflect full implementation)</li> </ul>
2.91	November 18, 2022	<ul> <li>Added new AIQ Grouping for Member Affiliate and made clarifying revisions to AIQ FIX Tag descriptions.</li> <li>Removed highlighting of text regarding Market Peg (to reflect full implementation)</li> </ul>
2.92	February 14, 2023	<ul><li>Added new FIX Tag 21004 (STPReason)</li><li>Added new FIX Tag 20050 (CxIPxBack)</li></ul>
2.93	April 5, 2023	<ul> <li>Added new FIX Tag 20067 (SigVersion)</li> <li>Updated Order Cancel / Replace Request section for 20067 (SigVersion)</li> <li>Removed highlighting for features that have become operative</li> </ul>
2.94	June 8, 2023	<ul> <li>Updated Discretionary Limit order type to support MinQty for non-displayed orders</li> <li>Removed highlighting for features that have become operative</li> <li>Synchronized TIF definitions</li> </ul>
2.95	September 28, 2023	<ul> <li>Updated Appendix C with list of most common cancel and reject text reasons</li> <li>Added instructions for how to submit a Fixed Midpoint Peg order</li> <li>Updated FIX Tag 9614 (ExtendedExecInst) to support Fixed Midpoint Peg</li> <li>Removed highlighting for features that have become operative</li> <li>Updated Appendix E: TIF Matrix</li> </ul>
2.96	October 26, 2023	<ul> <li>Removed highlighting for features that have become operative</li> <li>Updated Discretionary Limit order type for incompatibility with 20067 (SigVersion)</li> <li>Updated Appendix C with new reject text reason</li> </ul>
2.97	November 15, 2023	<ul> <li>Removed highlighting for features that have become operative</li> <li>Updated Guidelines for EffectiveLimitPrice section of Acknowledgement message</li> </ul>
2.98	December 1, 2023	<ul> <li>Removed value 'S' from Tag 9730 to reflect pending fee change</li> <li>Removed value 'Q' from Tag 9730</li> <li>Updated Appendix E: TIF Matrix</li> </ul>

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2.99	January 11, 2024	<ul> <li>Removed highlighting for features that have become operative</li> <li>Added instructions for how to submit a Post Only order</li> <li>Added new FIX Tag 9140 (DisplayInst)</li> <li>Added new FIX Tag 2003 (CancelInsteadOfSlide)</li> <li>Added new FIX Tag 9303 (RoutingInst)</li> <li>Added value 'W' and 'Y' to Tag 9730</li> <li>Updated Appendix C: Order Reject and Cancel Reasons</li> <li>Updated Appendix E: TIF Matrix</li> </ul>
3.00	March 28, 2024	<ul> <li>Removed highlighting for features that have become operative</li> <li>Added new value '-' to Tag 9140</li> <li>Added new FIX Tag 9692 (DisplayPrice)</li> <li>Added new Display Price Restatement message</li> </ul>

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