## Scotia RED | ALGO MATRIX

ΑΟΑΡΤ							
Strategy	Description	Canada	U.S.	Mexico	Brazil	Chile	
WorkIt	Scales its rate of trading with market volume and relative price movements.	•	•				
Liquidity Seek	iquidity Seek Take advantage of meaningful liquidity opportunities without causing significant price impact.		•	•	•	•	

PARTICIPATE								
Strategy	Description	Canada	U.S.	Mexico	Brazil	Chile		
MPOV	Trades ranges and percentages of the non-block volume.	•	•	•	•	•		
Cruiser	Loosely targets a participation rate over time based on client instructions.	•	•					
POV	Trades a set percentage of the non-block volume.	•	•	•	•	•		

TRADER TOOLKIT							
Strategy	Description	Canada	U.S.	Mexico	Brazil	Chile	
SmartClose	Intelligently allocates order between the continuous market and the MOC facility, based on localized market structure.	•	•	•	•		
Peg & Seek	A flexible algo order type with the option to turn on any combination of the dark, take, and peg/penny functionalities. May optionally seek specified minimum size liquidity in dark/lit markets.	•	•	•	•	•	
Dark Smart	Places the order across Canadian and US dark liquidity sources and dynamically re-balances across venues as fills are received.	•	•				
Take	Does not book orders but will send immediate or cancel orders to pick up any available shares at its trigger price or better.	•	•	•	•	•	

SCHEDULE								
Strategy	Description	Canada	U.S.	Mexico	Brazil	Chile		
VWAP	Works the order over the specified time period, finishing at the end time unless constrained by a price or volume limit. VWAP weights its schedule according to historical volume distribution.	•	•	•	•	•		
TWAP	Works the order over the specified time period, finishing at the end time unless constrained by a price or volume limit. TWAP spreads the trade evenly over the period.	•	٠	•	•	•		

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	PARAMETERS (Parameters in red are required)										
<b>POV</b> (Percentage of Volume)	MPOV (Multiple Percentage of Volume)	VWAP (Volume- Weighted Average Price)	<b>TWAP</b> (Time- Weighted Average Price)	Cruiser	Liquidity Seek	<b>AP</b> (Arrival Price)	Workit	Smart Close	Dark Smart	Peg & Seek	Take
•		+  <b></b>   •   •   <b>-</b>	+ == • • • • •	•				•	•		+  <b></b>   •  • <b></b>
Start Time	Start Time	Start Time	Start Time	Start Time	Start Time	Start Time	Start Time	Start Time	Limit Price	Start Time	Start Time
End Time	End Time	End Time	End Time	End Time	End Time	End Time	End Time	End Time	Style	End Time	End Time
Limit Price	Limit Price	Limit Price	Limit Price	Limit Price	Limit Price	Limit Price	Limit Price	Limit Price	Exchange <sup>†</sup>	Limit Price	Limit Price
Target Volume %	Target Volume %	Max Volume %	Max Volume %	Target Volume %		Max Volume %	Max Volume %	Max Volume %	Minimum Quantity	Display Mode	Trigger Size
Include Interlisted Volume	Include Interlisted Volume	Include Interlisted Volume	Include Interlisted Volume	Include Interlisted Volume	Style	Include Interlisted Volume	l Would Price			Display Size	
I Would Price	I Would Price	I Would Price	I Would Price	l Would Price			Style	Style		Display Min. Join Size	
	Below this Px	l Would Dark Price				Style	Liquidity Seek			Liquidity Seek	
	Lower Volume %	l Would Dark %					Seek%			Seek Price <sup>†</sup>	
	At or Above Px						Seek Min. Quantity			Seek Min. Quantity	
Auction Flag	Upper Volume %	Auction Flag	Auction Flag	Auction Flag	Auction Flag						

<sup>†</sup>Required only when a parent parameter is selected.

## DESCRIPTION OF PARAMETERS:

Start Time	When to begin trading. Default is current time or	Style	Liquidity Seek: Passive, Normal, Aggressive. Default is Off.				
	when market opens if order is entered prior to primary market open.		WorkIt: Patient, In-line, Aggressive. Default is In-line.				
End Time	When to stop trading. Default is primary market close time.		Dark Smart: Passive, Normal, Aggressive. Default is Normal. Style only applicable for U.S.				
Limit Price	Execute only at a specified price or better.		Smart Close: Patient, In-line, Aggressive. Default is In-line.				
Target Volume %	Target to be this percentage of the non-block volume. Allowed to range from 1%-60%.	Display Mode	Off: Will not post any bids or offers. Peg: Keeps an order on the bid (or ask for sell orders). Penny: Keeps an order at the top of				
	Include volume from both U.S. & Canadian markets on		book. If the spread is just one tick, it will lift (or hit for sell orders).				
	interlisted names. Percent of volume limits will calculate based on combined volume.	Display Size	If not specified, picks order sizes appropriate to symbol being traded.				
l Would Price	Price at which the algorithm will try and complete the balance of your order (Irrespective of Percentage of Volume (POV) limits).	Display Minimum	Only join bids/asks when a minimum number of shares are displayed.				
At or Above Px	Starting at this price, use Upper Volume % instead of Target Volume %.	Join Size	Only join bids/asks when a minimum number of shares are displayed. Shares must be > = 100.				
Upper Volume %	Target Volume percentage for upper price range on MPOV	Trigger Size	Only take shares if at least this number are available.				
	orders. Allowed range is 1% – 60%.	Seek %	The percentage of the order that may be completed using				
Below This Px	Below this price, use Lower Volume % instead of Target Volume %.		Liquidity Seek. Default is one-third.				
		Seek Price	Price at which Liquidity Seek is activated.				
Lower Volume %	Target Volume percentage for lower price range on MPOV orders. Allowed range is $1\% - 60\%$ .	Exchange	Specifies which Canadian Dark exchange order type will be sent for a Dark Smart order.				
	Maximum percentage of the market volume to be over the course of the order.	Minimum Quantity	Minimum quantity of an order to be executed for Dark Smart orders only.				
	Dark*, Take, Dark + Take*. Grab larger liquidity opportunities at reasonable prices. May use dark pools,	Auction Flag	MOC, MOO, Both, Off. Default is Off.				
	taken from lit markets or both. Default is In-line. *This feature is not supported in Mexico, Brazil and Chile.	l Would Dark Price	Price at which the algorithm will try and complete the balance of your order in the dark (Irrespective of Percentage of Volume				
	Minimum size for liquidity seek to target in the dark.		(POV) limits).				
	Default is to calculate dynamically based on stock and market conditions.	I Would Dark %	Percentage of order that you are willing to trade the I Would Dark Price specified.				



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