



S-Trader



2673

14.86

12.28

8.81

12.07

2.77

10.97

21.72

12.59

6.98

3.15

5.28

2.11

3.09

7.87

16.84

13.03

12.24

15.97

1.62

0.77

1.95

8.45

4.52

1.11

1.51

2.58

1.53

+0.52%

+0.18%

+0.18%

+0.18%

+0.40%

+0.40%

12734

2918

20580

28025

9487

10383

18775

791

2000

1749

2673



RBO | Rainbow Oscillator

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Description

In 1997, to better determine stock market trends, Mel Widner, Ph.D. created the Rainbow Charts and Rainbow Oscillator and published them in the Stocks and Commodities magazine. The Rainbow Charts indicator is a trend-following indicator. It is based on a two-period moving average. Over that, recursive smoothing is applied to the original MA (moving average) to create nine additional moving averages, each being based on the previous MA. Through a process of repetitive smoothing, the result obtained is a full spectrum of trends, which plotted on a chart with continuous colors, have the appearance of a rainbow. The Rainbow Oscillator Indicator is, like the Rainbow Charts, an indicator used to follow trends and its graph is plotted based on the same calculations made to find the Rainbow Charts. The oscillator is a derivative from a consensus of the Rainbow Charts trends, defining the highest high value and lowest low value among those moving averages, and creates an oscillator and bandwidth lines according to those calculations.

Formula

Step 1: Calculate successive 2 period moving averages starting from the initial values;
Step 2: Calculate $RBO = \text{MAX}(\text{Moving Average}) - \text{Min}(\text{Moving Average})$.

Parameters

Source	Any price source (O, H, L, C, Vol, OI) or any other built-in or custom study
Levels	Any number of smoothing levels
MA Type	Any available moving average type



Output value(s)

There is one output value resulting from the formula, the Rainbow Oscillator.

Plot

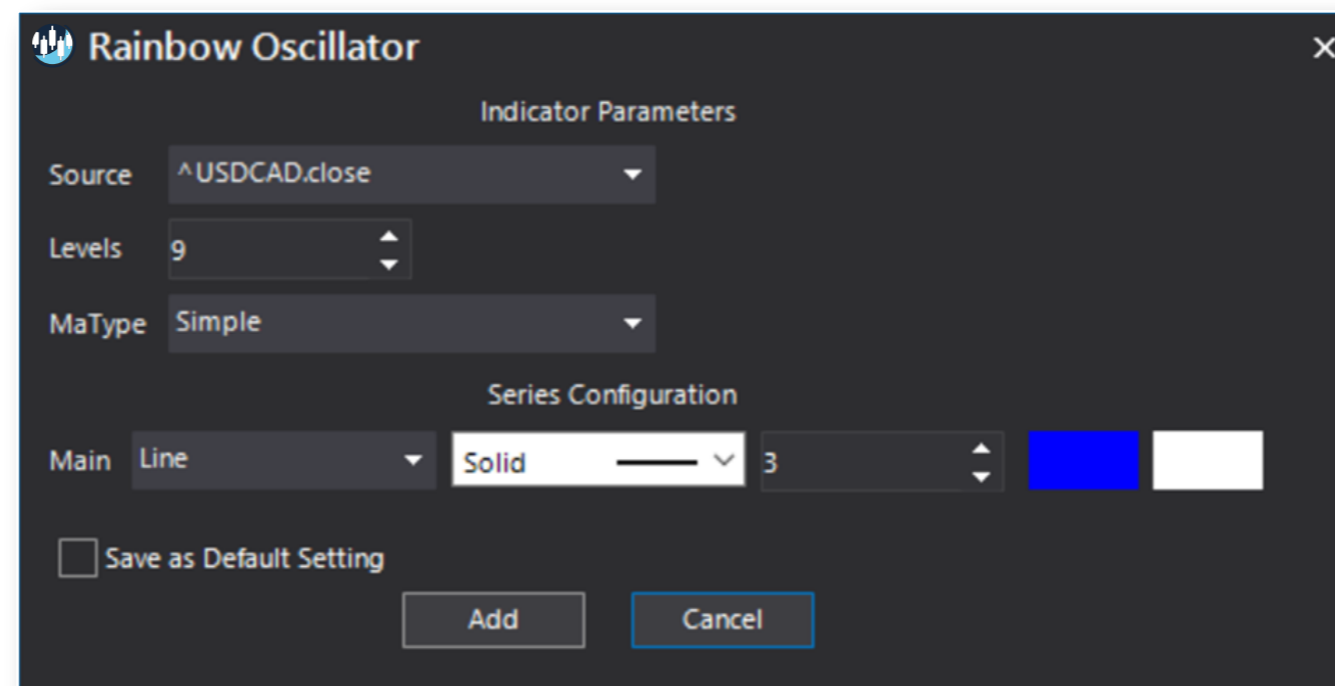
The plot is in a separate panel at the bottom.

Quant Script™ Syntax

Short Form	<i>RBO</i> (Source, Levels, MA Type)
Long Form	<i>RainbowOscillator</i> (Source, Levels, MA Type)

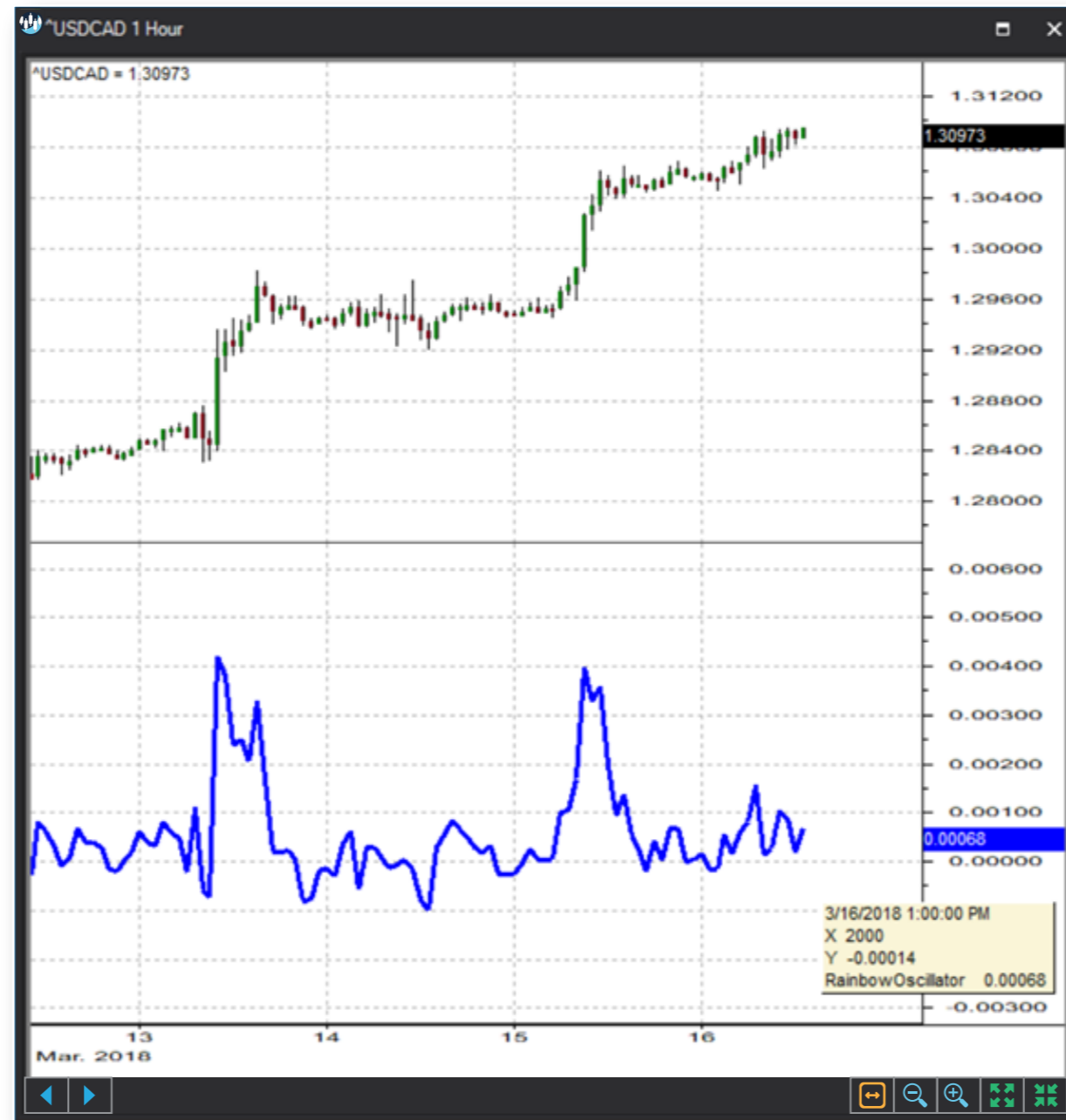
Dialogs

Chart Study Dialog





Sample Chart With Study





Quant Script™ Wizard Study Dialog

The image shows two overlapping dialog boxes in the S-Trader desktop platform. The 'Custom Study Wizard' dialog is on the left, and the 'Add Variable' dialog is on the right.

Custom Study Wizard

- Save To Group: Default
- Custom Study Name: [Empty text box]
- Password: [Empty text box]
- Result: Line, Solid, 2, [Color swatches]
- Reverse_Result: Line, Solid, 2, [Color swatches]
- Buttons: Add To New Panel (checked), Add New Variable, Edit Selected Variable
- Table:

Name	Description
------	-------------
- Buttons: OK, Cancel

Add Variable

- Name: [Empty text box]
- Description: [Empty text box]
- Variable List:
 - PercentagePriceOscillatorHistogram
 - PercentagePriceOscillatorSignal
 - PerformanceIndex
 - PFI
 - PGO
 - PNO
 - PPO
 - PPOH
 - PPOS
 - PrettyGoodOscillator
 - PrimeNumberOscillator
 - PSAR
 - Qstick
 - QSTK
 - RainbowOscillator
 - RateOfChange
 - RBO
- Source: CLOSE
- Levels: 5
- MaType: Simple
- Button: Create Script Line
- Preview: RainbowOscillator(CLOSE, 5, Simple)
- Buttons: OK, Cancel



Quant Script™ Study Dialog

Custom Study Editor

Save To Group: 3_OSCILLATORS_PRICE A 14.00

Custom Study Name: RBO

Password:

Result: Line Solid 2

Reverse_Result: Line Solid 2

Formula Add To New Panel

```
SET RESULT =RBO(CLOSE, 5, SIMPLE)
SET REVERSE_RESULT = RainbowOscillator(CLOSE, 5, SIMPLE)
```

OK Cancel