



S-Trader





DPO | Detrended Price Oscillator

Contents

Description	3
Formula	3
Parameters	3
Output value(s)	3
Plot	3
Quant Script™ Syntax	4
Dialogs	4
Chart Study Dialog	4
Sample Chart With Study	5
Quant Script™ Wizard Study Dialog	6
Quant Script™ Study Dialog	7



Description

The Detrended Price Oscillator (DPO) is an indicator designed to remove trend from price and make it easier to identify cycles. The DPO does not extend to the last date because it is based on a displaced moving average; however, the lack of alignment with the most recent date is not an issue because the DPO is not a momentum oscillator. Instead, the DPO is used to identify cycles highs/lows and estimate cycle length.

Formula

Step 1: Calculate a moving average of the requested type for n periods using existing formulas;
Step 2: $DPO = \text{Current Close} - \text{Moving Average at a point } (n/2) + 1 \text{ periods ago.}$

Parameters

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

Output value(s)

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

Plot

The plot is in a separate panel at the bottom.

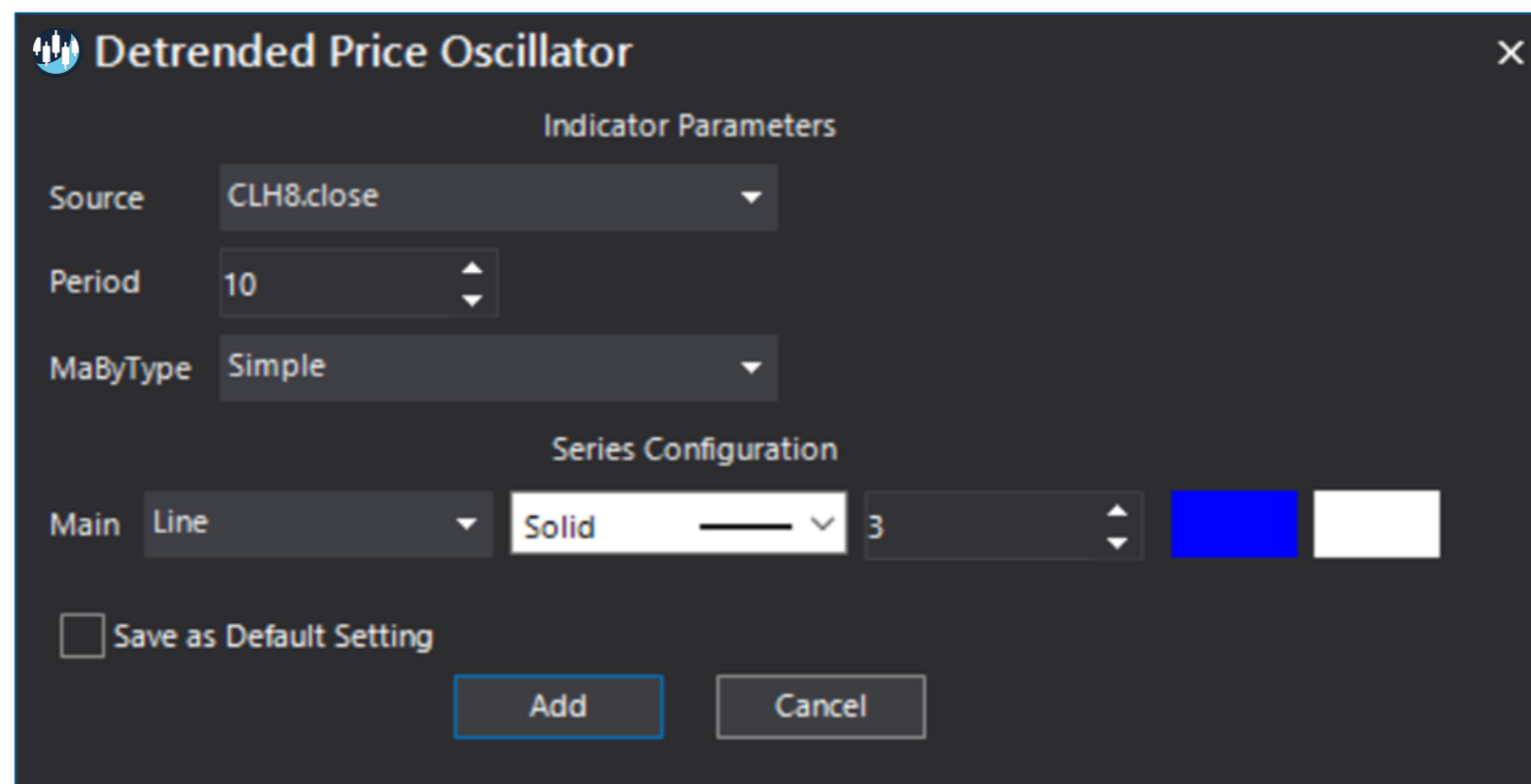


Quant Script™ Syntax

Short Form	<i>DPO</i> (Source, Periods, MA Type)
Long Form	<i>DetrendedPriceOscillator</i> (Source, Periods, MA Type)

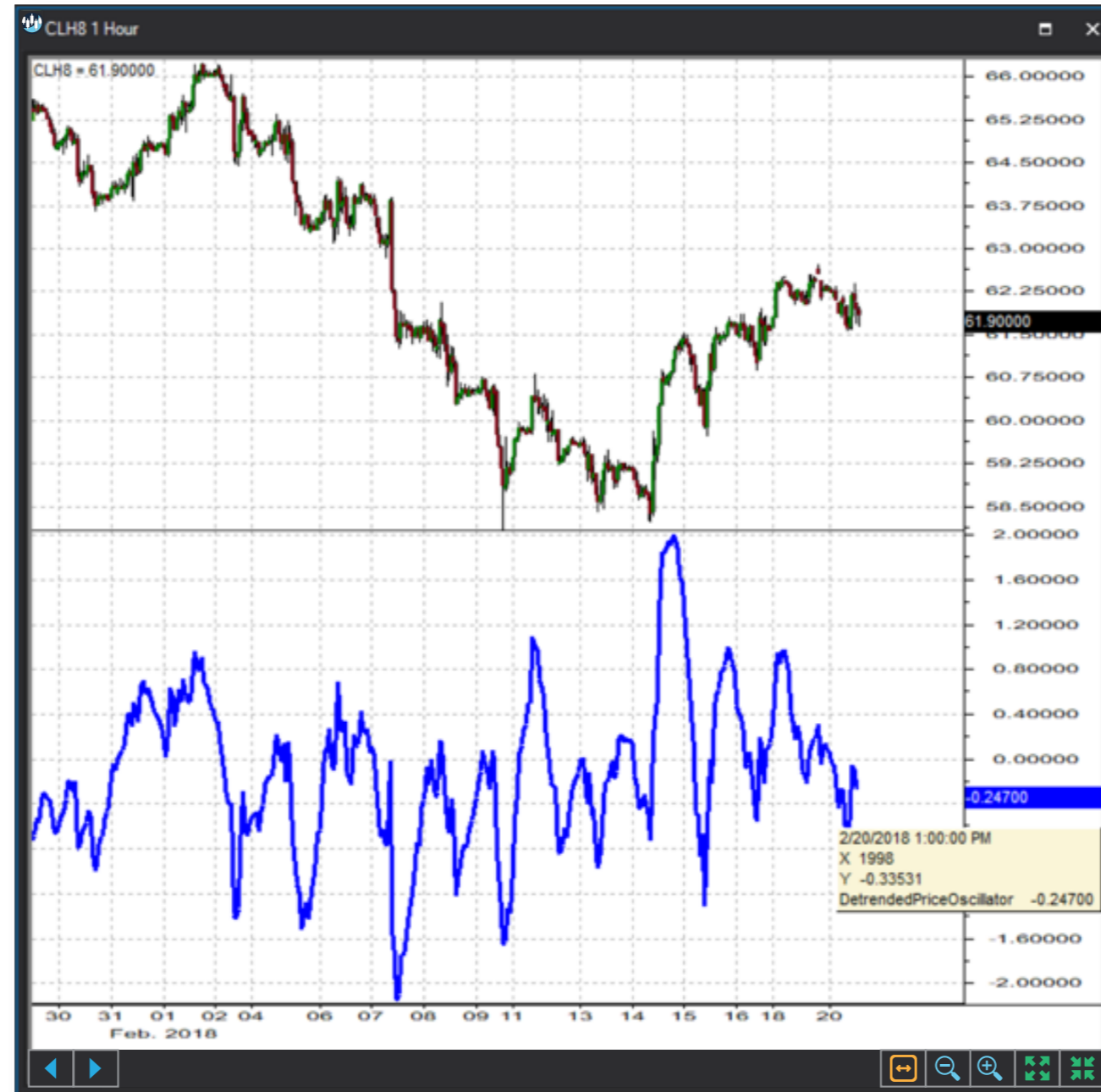
Dialogs

Chart Study Dialog





Sample Chart With Study





Quant Script™ Wizard Study Dialog

The image shows two overlapping dialog boxes from the S-Trader platform. The top dialog is titled "Custom Study Wizard" and contains the following fields and controls:

- Save To Group: Default (dropdown)
- Custom Study Name: [Empty text field]
- Password: [Empty text field]
- Result: Line (dropdown), DashDotDot (dropdown), 2 (spin box), [Color selection buttons]
- Reverse_Result: Line (dropdown), DashDot (dropdown), 2 (spin box), [Color selection buttons]
- Add To New Panel:
- Buttons: Add New Variable, Edit Selected Variable
- Table with columns: Name, Description

The bottom dialog is titled "Add Variable" and contains the following fields and controls:

- Name: [Empty text field]
- Description: [Empty text field]
- Source: CLOSE (dropdown)
- Period: 8 (spin box)
- MaByType: Simple (dropdown)
- Buttons: Create Script Line, OK, Cancel
- Text field at the bottom: DetrendedPriceOscillator(CLOSE, 8, Simple)



Quant Script™ Study Dialog

Custom Study Editor [Close]

Save To Group: 3_OSCILLATORS_PRICE [Dropdown] A 8.25 [Dropdown]

Custom Study Name:

Password:

Result: Line [Dropdown] DashDotDot [Dropdown] 2 [Spinner] [Color Picker]

Reverse_Result: Line [Dropdown] DashDot [Dropdown] 2 [Spinner] [Color Picker]

Formula Add To New Panel

```
SET RESULT = DPO(CLOSE,8,Simple)
SET REVERSE_RESULT = DetrendedPriceOscillator(CLOSE, 8, SIMPLE)
```

[OK] [Cancel]