



S-Trader





SOST | Stochastic Oscillator ST (S-Trader)

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Description

Developed by George C. Lane in the late 1950s, the Stochastic Oscillator is a momentum indicator that shows the location of the close relative to the high-low range over a set number of periods. According to an interview with Lane, the Stochastic Oscillator “doesn't follow price, it doesn't follow volume or anything like that. It follows the speed or the momentum of price. As a rule, the momentum changes direction before price.” As such, bullish and bearish divergences in the Stochastic Oscillator can be used to foreshadow reversals. This was the first, and most important, signal that Lane identified. Lane also used this oscillator to identify bull and bear set-ups to anticipate a future reversal. Because the Stochastic Oscillator is range bound, is also useful for identifying overbought and oversold levels.

The difference between the Stochastic Oscillator and the Stochastic Oscillator ST is that the ST study allows for using different types of moving averages when calculating the %K and %D values; whereas the Stochastic Oscillator study uses the same moving average type for both smoothings.

Formula

Step 1: Calculate $K = (\text{Current Close} - \text{Lowest Low } n \text{ Period}) / (\text{Highest High } n \text{ periods} - \text{Lowest low } n \text{ periods});$

Step 2: Calculate %K = a moving average of K for the selected %K Periods and the selected %K Smoothing moving average type using existing formulas;

Step 3: Calculate %D = a moving average of %K for the selected %D Periods and the selected %D Smoothing moving average type using existing formulas.



Parameters

K Periods	Any number of periods
%K Periods	Any number of periods
%D Periods	Any number of periods
%K Slowing MA Type	Any available moving average type
%D Slowing MA Type	Any available moving average type

Output value(s)

There are two output values resulting from the formula, the Stochastic Oscillator ST %K and Stochastic Oscillator ST %D.

Plot

The plot is in a separate panel at the bottom.

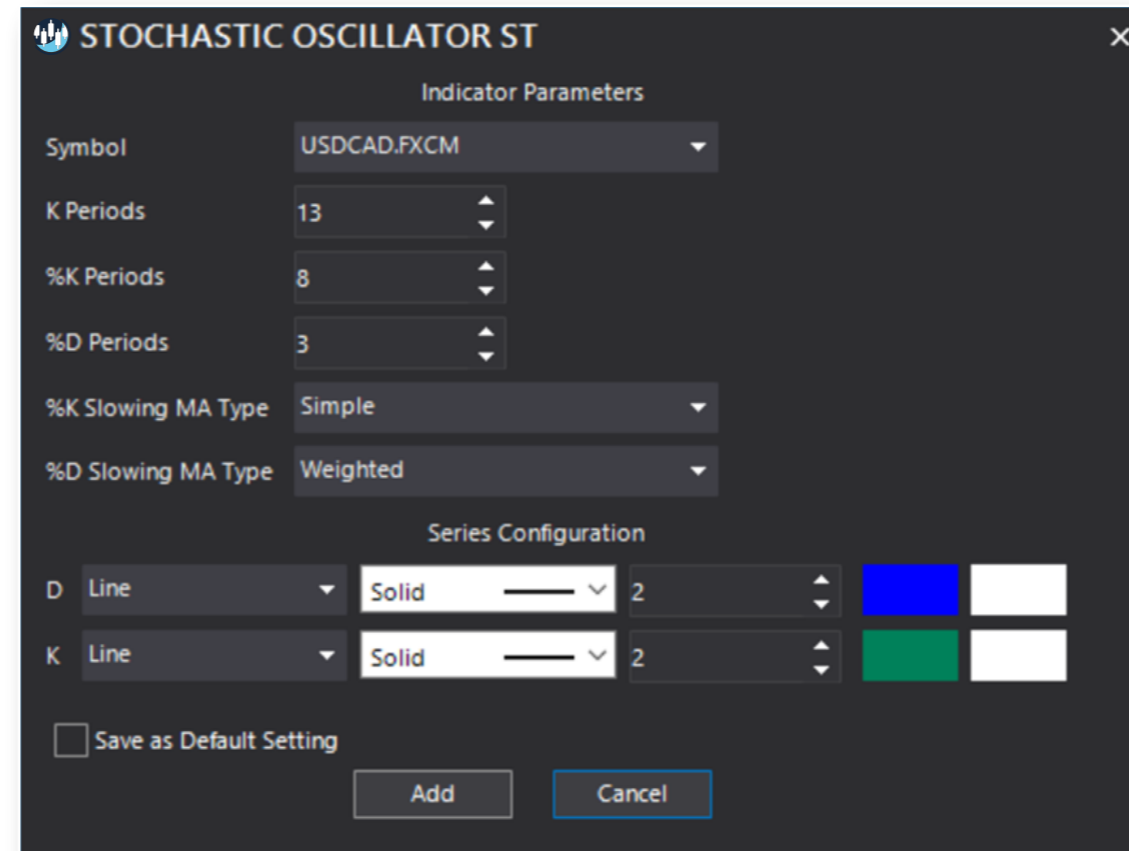


Quant Script™ Syntax

Short Form	<i>SOPKST</i> (K Periods, %K Periods, %D Periods, %K Slowing MA Type, %D Slowing MA Type)
	<i>SOPDST</i> (K Periods, %K Periods, %D Periods, %K Slowing MA Type, %D Slowing MA Type)
Long Form	<i>StochasticOscillatorPCTKST</i> (K Periods, %K Periods, %D Periods, %K Slowing MA Type, %D Slowing MA Type)
	<i>StochasticOscillatorPCTDST</i> (K Periods, %K Periods, %D Periods, %K Slowing MA Type, %D Slowing MA Type)

Dialogs

Chart Study Dialog





Sample Chart With Study





Quant Script™ Wizard Study Dialog

Custom Study Wizard

Save To Group: Default

Custom Study Name:

Password:

Result: Line Solid 2 █ █

Reverse_Result: Line Solid 2 █ █

Add To New Panel

Name	Description

Add Variable

Name:

Description:

- StochasticMomentumIndexD
- StochasticMomentumIndexK
- StochasticOscillatorPCTD
- StochasticOscillatorPCTDST**
- StochasticOscillatorPCTK
- StochasticOscillatorPCTKST
- TrueStrengthIndex
- TrueStrengthIndexSmooth
- TSI
- TSIS
- UltimateOscillator
- UO
- WilliamsPctR
- WPR
- Primitive - Extremes
- Primitive - Logical Operators
- Primitive - Summation
- Primitive - Trend

K Periods: 13
 %K Periods: 8
 %D Periods: 3
 %K Slowing MA Type: Simple
 %D Slowing MA Type: Weighted

StochasticOscillatorPCTDST(13, 8, 3, Simple, Weighted)



Quant Script™ Study Dialog

Custom Study Editor [X]

Save To Group: 3_OSCILLATORS_PRICE [A] 14.00

Custom Study Name: SOPKST

Password: []

Result: Line [Solid] 2 [Color: Teal]

Reverse_Result: Line [Solid] 2 [Color: Purple]

Formula [Add To New Panel]

```
SET A1 = SOPKST(13, 8, 3, SIMPLE, WEIGHTED)
SET B1 = SOPDST(13, 8, 3, SIMPLE, WEIGHTED)

SET A2 = StochasticOscillatorPCTKST(13, 8, 3, SIMPLE, WEIGHTED)
SET B2 = StochasticOscillatorPCTDST(13, 8, 3, SIMPLE, WEIGHTED)
```

[OK] [Cancel]