



S-Trader



2673



14.86
12.28



8.81
2.11

+0.52%

15.76
2.63

7.87
4.52

10.97
16.84

21.72
13.03

12.59
12.24

6.98
15.97

+0.18%

20580

12734

2918



KC | Keltner Channel

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Description

Keltner Channels are volatility-based envelopes set above and below a moving average. This indicator is similar to Bollinger Bands, which uses the standard deviation to set the bands. Instead of using the standard deviation, Keltner Channels use the Average True Range (ATR) to set channel distance. The channels are typically set two Average True Range values above and below the 20-day EMA. The exponential moving average dictates direction and the Average True Range sets channel width. Keltner Channels are a trend following indicator used to identify reversals with channel breakouts and channel direction. The channel can also be used to identify overbought and oversold levels when the trend is flat.

Formula

Step 1: Calculate the series MA of Typical Price and ATR using existing formulas;

Step 2: Actual bands calculation:

- Keltner Channel Top = MA of Typical Price + n ATRs
- Keltner Channel Bottom = MA of Typical Price - n ATRs

Parameters

MA Periods	Any number of periods
MA Type	Any available moving average
ATR Periods	Any number of periods



ATR MA Type	Any available moving average
ATR Shift	Any number of ATRs

Output value(s)

There are three output values resulting from the formula, the Keltner Channel Top, Median (or Middle) and Bottom.

Plot

The plot is an overlay inside the price series panel.

Quant Script™ Syntax

Short Form	<i>KCT</i> (MA Periods, MA Type, ATR Periods, ATR MA Type, ATR Shift)
	<i>KCM</i> (MA Periods, MA Type, ATR Periods, ATR MA Type, ATR Shift)
	<i>KCB</i> (MA Periods, MA Type, ATR Periods, ATR MA Type, ATR Shift)
Long Form	<i>KeltnerChannelTop</i> (MA Periods, MA Type, ATR Periods, ATR MA Type, ATR Shift)
	<i>KeltnerChannelMedian</i> (MA Periods, MA Type, ATR Periods, ATR MA Type, ATR Shift)
	<i>KeltnerChannelBottom</i> (MA Periods, MA Type, ATR Periods, ATR MA Type, ATR Shift)



Dialogs

Chart Study Dialog

Keltner Channel [Close]

Indicator Parameters

Period: 8

MaType: Simple

ATRPeriod: 5

ATRMaType: Simple

ATRShift: 2.00000

Symbol: @ESH18

Series Configuration

Series	Line Style	Color	Width	Color	Color
Top	Line	Solid	1	Magenta	White
Median	Line	Solid	1	Blue	White
Bottom	Line	Solid	1	Green	White

Save as Default Setting

Add Cancel



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 box]
- Password: [Empty text box]
- Result: Line (dropdown), DashDotDot (dropdown), 2 (spin box), [Color selection]
- Reverse_Result: Line (dropdown), DashDot (dropdown), 2 (spin box), [Color selection]
- Add To New Panel:
- Buttons: Add New Variable, Edit Selected Variable
- Table headers: Name, Description

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

- Name: [Empty text box]
- Description: [Empty text box]
- Variable list (left): HighLowBandsBottom, HighLowBandsMain, HighLowBandsTop, HLBB, HLBM, HLBT, KCB, KCM, KCT, KeltnerChannelBottom, KeltnerChannelMedian, KeltnerChannelTop (selected), MAEB, MAEM, MAET, MovingAverageEnvelopeBottom, MovingAverageEnvelopeMain, MovingAverageEnvelopeTop
- Parameters (right): Period: 8, MaType: Simple, ATRPeriod: 5, ATRMaType: Simple, ATRShift: 2.00
- Button: Create Script Line
- Preview: KeltnerChannelTop(8, Simple, 5, Simple, 2.00)
- Buttons: OK, Cancel



Quant Script™ Study Dialog

Custom Study Editor

Save To Group: 2_ENVELOPES

Custom Study Name: KCB

Password:

Result: Line, DashDotDot, 2

Reverse_Result: Line, DashDot, 2

Formula

```
SET KCBS = KCB(8, SIMPLE, 5, SIMPLE, 2.00)
SET KCBL = KeltnerChannelBottom(8, SIMPLE, 5, SIMPLE, 2.00)

SET KCMS = KCM(8, SIMPLE, 5, SIMPLE, 2.00)
SET KCML = KeltnerChannelMedian(8, SIMPLE, 5, SIMPLE, 2.00)

SET KCTS = KCT(8, SIMPLE, 5, SIMPLE, 2.00)
SET KCTL = KeltnerChannelTOP(8, SIMPLE, 5, SIMPLE, 2.00)
```

OK Cancel