Ehlers Decycler Oscillator

everget **WIZARD** · Mar 15, 2019 ✕

ABD Doları / İsviçre Frankı · 1G · FXCM · TradingView A1.00380 Y1.00408 D1.00319 K1.00391 +0.00011 (+0.01%)

Decycler Oscillator 125 1 100 1.2 close 0.1132 0.0422 u/d u/d

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Trend Analysis   Centered Oscillators   Moving Averages   ehlers   HP   highpass   decycler   decycle   trend   filter   filtering

💬 7   ⚑   ⤴   👍 618

This indicator was originally developed by John F. Ehlers (Stocks & Commodities , V.33:10 (September, 2015): "Decyclers").

The idea is still the same as for the Simple Decycler.
Mr. Ehlers suggested to virtually eliminate lag by getting rid of the very low-frequency components. So, he applied the high-pass filter to the simple decycler.

Mr. Ehlers recommended to use two instances of the Decycler Oscillator with different parameters (high-pass filter period and multiplier). As a result, he got the Decycler Oscillator pair.
The first oscillator (red line) has a period of 125 bars, the second one (yellow line) has a period of 100 bars.

The interpretation is straightforward:
- When the yellow line crosses over the red line, a trend reversal to the upside is indicated.
- When the yellow line crosses under the red line, a trend reversal to the downside is indicated.

Freelance -> Telegram: @alex_everget

A list of Free indicators:
https://bit.ly/2S7EPuN

A list of Paid indicators:
https://bit.ly/33MA81f

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https://www.tradingview.com/gopro/?share_your_love=everget

🌐 Website

```
1   //@version=3
2   // Copyright (c) 2019-present, Alex Orekhov (everget)
3   // Ehlers Decycler Oscillator script may be freely distributed under the MIT license.
4   study("Ehlers Decycler Oscillator", shorttitle="Decycler Oscillator")
5
6   hpPeriod = input(title="High-pass Filter Period", type=integer, defval=125)
7   k = input(title="K Multiplier", type=float, step=0.1, defval=1)
8   hpPeriod2 = input(title="High-pass Filter Period 2", type=integer, defval=100)
9   k2 = input(title="K Multiplier 2", type=float, step=0.1, defval=1.2)
10  src = input(title="Source", type=source, defval=close)
11  highlightCrossovers = input(title="Highlight Crossovers ?", type=bool, defval=true)
12  highlightZeroCrossovers = input(title="Highlight Zero Line Crossovers ?", type=bool, defval=false)
13  applyFilling = input(title="Apply Ribbon Filling ?", type=bool, defval=false)
14
15  PI = 2 * asin(1)
16
17  // High-pass Filter
18  _hp(src, hpPeriod, mult) =>
19      alphaArg = 2 * PI / (mult * hpPeriod * sqrt(2))
20
21      alpha = 0.0
22      alpha := cos(alphaArg) != 0
23          ? (cos(alphaArg) + sin(alphaArg) - 1) / cos(alphaArg)
24          : nz(alpha[1])
25
26      hp = 0.0
27      hp := pow(1 - (alpha / 2), 2) * (src - 2 * nz(src[1]) + nz(src[2])) + 2 * (1 - alpha) * nz(hp[1]) - pow(1 - alpha, 2) * nz(hp[2])
28      hp
29
30  hp = _hp(src, hpPeriod, 1)
31  decycler = src - hp
32  decosc = 100 * k * _hp(decycler, hpPeriod, 0.5) / src
33
34  hp2 = _hp(src, hpPeriod2, 1)
35  decycler2 = src - hp2
36  decosc2 = 100 * k2 * _hp(decycler2, hpPeriod2, 0.5) / src
37
38  trendColor = decosc2 > decosc ? #0ebb23 : red
```

```
39
40    decoscColor = applyFilling ? trendColor : #ff5048
41    decosc2Color = applyFilling ? trendColor : #f5c75e
42
43    decoscPlot = plot(decosc, title="1", linewidth=2, color=decoscColor, transp=0)
44    decosc2Plot = plot(decosc2, title="2", linewidth=2, color=decosc2Color, transp=0)
45    hline(0, title="Zero Level", linestyle=dotted)
46
47    transparent = color(white, 100)
48
49    fillColor = applyFilling ? trendColor : transparent
50    fill(decoscPlot, decosc2Plot, color=fillColor, transp=70)
51
52    zeroCrossBgColor = highlightZeroCrossovers ? (decosc > 0 or decosc2 > 0 ? green : red) : transparent
53    bgcolor(zeroCrossBgColor, transp=85)
54
55    plotshape(highlightCrossovers and crossover(decosc, decosc2) ? avg(decosc, decosc[1]) : na, title="Crossover", location=location.absolute, style=shape.circle, size=size.tiny, color=green, transp=0)
56    plotshape(highlightCrossovers and crossunder(decosc, decosc2) ? avg(decosc, decosc[1]) : na, title="Crossunder", location=location.absolute, style=shape.circle, size=size.tiny, color=red, transp=0)
57
```

Yorumlar

Yararlı veya teşvik edici bir yorum bırakın. Piyasalara birlikte hakim olalım

Alkışlarla yorum   Yorum Paylaş

nilux PREMIUM · Nis 9, 2019

Great stuff buddy! I appreciate your work. Thank you!

+3 ▲ Cevap Gönder

> **everget** WİZARD · Nis 9, 2019
>
> @nilux, thanks mate!
>
> +1 ▲ Cevap Gönder

djseddy333 PREMIUM · Haz 18, 2019

Great Work!

+2 ▲ Cevap Gönder

> **everget** WİZARD · Haz 18, 2019
>
> @djseddy333, glad to hear that!
>
> +2 ▲ Cevap Gönder

TradeIQ207 · Oca 14, 2020

Hello Everget, Thank you for another amazing script! What time-frame(s) would you recommend using it on?

+1 ▲ Cevap Gönder

> **everget** WİZARD · Oca 14, 2020
>
> @TradeIQ207, Hi, thank you. It depends on an asset/instrument
>
> ▲ Cevap Gönder

marketing001 · Oca 6, 2021

I don't understand how/why a high pass being applied to the decycler at half the high pass period, as indicated by the 0.5 in the code:
decosc = 100 * k * _hp(decycler, hpPeriod, 0.5) / src.

It makes no sense to have a high pass filter at half the period at which the decycler was calculated. It's like calculating for longer cycle periods and then removing them with the high pass filter.

▲ Cevap Gönder