



## Simple Harmonic Oscillator (SHO)

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The indicator is based on Akram El Sherbini's article "Time Cycle Oscillators" published in IFTA Journal 2018 (pages 78-80) (<http://www.ftaa.org.hk/Files/20181301017...>)

The **SHO** is a bounded oscillator for the simple harmonic index that calculates the period of the market's cycle. The oscillator is used for short and intermediate terms and moves within a range of -100 to 100 percent. The **SHO** has overbought and oversold levels at +40 and -40, respectively. At extreme periods, the oscillator may reach the levels of +60 and -60. The zero level demonstrates an equilibrium between the periods of bulls and bears. The **SHO** oscillates between +40 and -40. The crossover at those levels creates buy and sell signals. In an uptrend, the **SHO** fluctuates between 0 and +40 where the bulls are controlling the market. On the contrary, the **SHO** fluctuates between 0 and -40 during downtrends where the bears control the market. Reaching the extreme level -60 in an uptrend is a sign of weakness. Mostly, the oscillator will retrace from its centerline rather than the upper boundary +40. On the other hand, reaching +60 in a downtrend is a sign of strength and the oscillator will not be able to reach its lower boundary -40.

### Centerline Crossover Tactic

This tactic is tested during uptrends. The buy signals are generated when the WPO/ **SHI** cross their centerlines to the upside. The sell signals are generated when the WPO/ **SHI** cross down their centerlines. To define the uptrend in the system, stocks closing above their 50-day **EMA** are considered while the **ADX** is above 18.

### Uptrend Tactic

During uptrends, the bulls control the markets, and the oscillators will move above their centerline with an increase in the period of cycles. The lower boundaries and equilibrium line crossovers generate buy signals, while crossing the upper boundaries will generate sell signals. The "Re-entry" and "Exit at weakness" tactics are combined with the uptrend tactic. Consequently, we will have three buy signals and two sell signals.

### Sideways Tactic

During sideways, the oscillators fluctuate between their upper and lower boundaries. Crossing the lower boundary to the upside will generate a buy signal. On the other hand, crossing the upper boundary to the downside will generate a sell signal. When the bears take control, the oscillators will cross down the lower boundaries, triggering exit signals. Therefore, this tactic will consist of one buy signal and two sell signals. The sideways tactic is defined when stocks close above their 50-day **EMA** and the **ADX** is below 18.

### Açık kaynak kodlu komut dosyası

Gerçek TradingView ruhuyla, bu betiğin yazarı, yatırımcının anlayabilmesi ve doğrulayabilmesi için onu açık kaynak olarak yayımladı. Yazarın eline sağlığı! Bunu ücretsiz olarak kullanabilirsiniz, ancak bu kodun bir yayında yeniden kullanımı **Kullanım Koşulları** ile yönetilir. Bir grafikte kullanmak için favorilere ekleyebilirsiniz.

### Feragatname

Bilgiler ve yayınlar, TradingView tarafından sağlanan veya onaylanan finansal, yatırım, işlem veya diğer türden tavsiye veya tavsiyeler anlamına gelmez ve teşkil etmez. **Kullanım Şartları**nda daha fazlasını okuyun.

Bu komut dosyasını bir grafikte kullanmak ister misiniz?

[★ Favori göstergelere ekle](#)

```
1 //@version=3
2 // Quick explanation how to trade this indicator:
3 // https://pau.sh/zVms/F9ec85413.jpg
4 //
5 study("Simple Harmonic Oscillator", overlay = false, precision=5)
6
7 src = input(close)
8 len = input(14, "SHO Length")
9 pl=3.14159265359
10
11 sho(s)>>
12 C = s
13 Cy = C[1]
14 Cby = C[2]
15 Vt = C - Cy
16 Vy = Cy - Cby
17 At = Vt - Vy
18 A = ema(At, len)
19 T = 2 * pi * (sqrt(abs(Vt / A)))
20 Ti = C > Cy ? T : T * -1
21 VP = ema(Ti, len)
22 TP = ema(T, len)
23 SHO= (VP / TP) * 100
24
25 cgreen = green
26 cred = red
27
28 sho_line = sho(src)
29 signal=sma(sho_line, 3)
30
31 plot(signal, color = sho_line > 0 ? cgreen : cred, style = histogram, linewidth=2, transp=0, title="SHO")
32 plot(sho_line, color = silver, linewidth=1, transp=50, title="Signal")
33 plot(signal, color = rising(signal, 1) ? green:red, linewidth=2, transp=50, title="Signal")
34
35 hline(40, title="")
36 hline(0, title="")
37 hline(-40, title="")
38
39 div_max = 40
40 p1 = plot(div_max, color = silver, style = circles, title="")
41 p2 = plot(div_max * -1, color = silver, style = circles, title="")
42
43 pmax = plot(max(div_max, sho_line), color = na, title="")
44 pmin = plot(min(div_max * -1, sho_line), color = na, title="")
45
46 cred_overbought = red
47 cgreen_oversold = green
48 fill(p1, pmax, color = cred_overbought, transp = 50)
49 fill(p2, pmin, color = cgreen_oversold, transp = 50)
```

## Yorumlar

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

Alkışlarla yorum

Yorum Paylaş



Karthi056

Şub 11

10:50



Another precious kit, Thank you. It is also one among very useful indicators for beginners like me.

▲ Cevap Gönder