



Levels

- `hline()` levels
- Fills between levels

`hline()` levels

Levels are lines plotted using the `hline()` function. It is designed to plot **horizontal** levels using a **single color**, i.e., it does not change on different bars. See the [Levels](#) section of the page on `plot()` for alternative ways to plot levels when `hline()` won't do what you need.



```
hline(price, title, color, linestyle, linewidth, editable) → hline
```

`hline()` has a few constraints when compared to `plot()`:

- Since the function's objective is to plot horizontal lines, its `price` parameter requires an "input int/float" argument, which means that "series float" values such as `close` or dynamically-calculated values cannot be used.
- Its `color` parameter requires an "input int" argument, which precludes the use of dynamic colors, i.e., colors calculated on each bar – or "series color" values.
- Three different line styles are supported through the `linestyle` parameter: `hline.style_solid`, `hline.style_dotted` and `hline.style_dashed`.

Let's see `hline()` in action in the "True Strength Index" indicator:

```
//@version=5
indicator("TSI")
myTSI = 100 * ta.tsi(close, 25, 13)

hline( 50, "+50", color.lime)
hline( 25, "+25", color.green)
hline( 0, "Zero", color.gray, linestyle = hline.style_dotted)
hline(-25, "-25", color.maroon)
hline(-50, "-50", color.red)

plot(myTSI)
```



Note that:

- We display 5 levels, each of a different color.
- We use a different line style for the zero centerline.
- We choose colors that will work well on both light and dark themes.
- The usual range for the indicator's values is +100 to -100. Since the `ta.tsi()` built-in returns values in the +1 to -1 range, we make the adjustment in our code.

Fills between levels

The space between two levels plotted with `hline()` can be colored using `fill()`. Keep in mind that **both** plots must have been plotted with `hline()`.

Let's put some background colors in our TSI indicator:

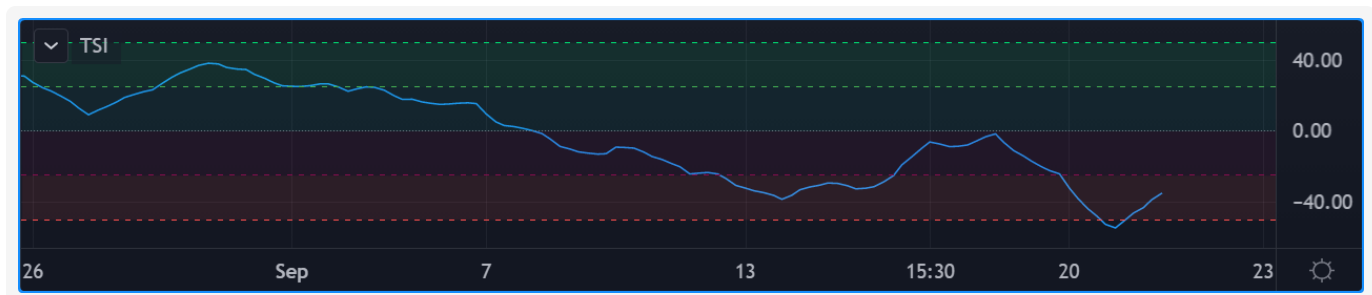
```
//@version=5
indicator("TSI")
myTSI = 100 * ta.tsi(close, 25, 13)

plus50Hline = hline( 50, "+50", color.lime)
plus25Hline = hline( 25, "+25", color.green)
zeroHline   = hline(  0, "Zero", color.gray, linestyle = hline.style_dotted)
minus25Hline = hline(-25, "-25", color.maroon)
minus50Hline = hline(-50, "-50", color.red)

// ——— Function returns a color in a light shade for use as a background.
fillColor(color col) =>
    color.new(col, 90)

fill(plus50Hline, plus25Hline, fillColor(color.lime))
fill(plus25Hline, zeroHline, fillColor(color.teal))
fill(zeroHline, minus25Hline, fillColor(color.maroon))
fill(minus25Hline, minus50Hline, fillColor(color.red))

plot(myTSI)
```



Note that:

- We have now used the return value of our `hline()` function calls, which is of the `hline` special type. We use the `plus50Hline`, `plus25Hline`, `zeroHline`, `minus25Hline` and `minus50Hline` variables to store those “hline” IDs because we will need them in our `fill()` calls later.
- To generate lighter color shades for the background colors, we declare a `fillColor()` function that accepts a color and returns its 90 transparency. We use calls to that function for the `color` arguments in our `fill()` calls.
- We make our `fill()` calls for each of the four different fills we want, between four different pairs of levels.
- We use `color.teal` in our second fill because it produces a green that fits the color scheme better than the `color.green` used for the 25 level.

