# **Logarithmic Scale**

TrendSpider offers the traders to plot logarithmic scale on the chart and structure the Y-axis to view the values using the price scaling where the distance between the prices displays a percentage change of the symbol. In this documentation, we will explore:

- Activating Logarithmic Scale on the Chart
- Linear Scale Vs. Logarithmic Scale
- Drawing on Linear & Logarithmic Scale
- When to Use Linear Scale & Logarithmic Scale

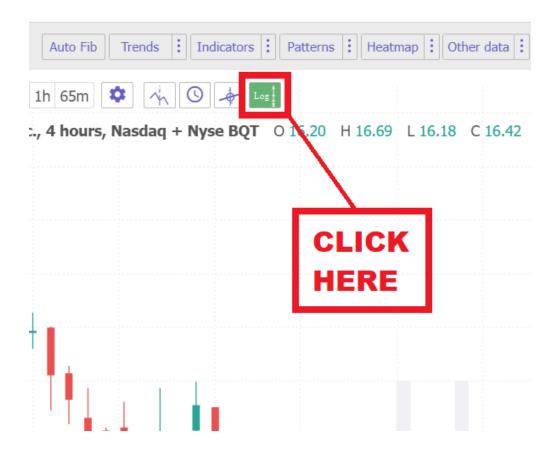
Let's get started 🚀

#### **Activating Logarithmic Scale on the Chart**

By default, the charts in TrendSpider are graphed in a linear scale style where the price values on the Y-axis are displayed in an equal distribution. In the snippet below, you can observe the equal spacing between the price values with a difference of 0.5 dollars linearly.



To change this default configuration on the chart and replace it with the Logarithmic Scale, simply click on the **Log** button as can be observed in the snippet below.

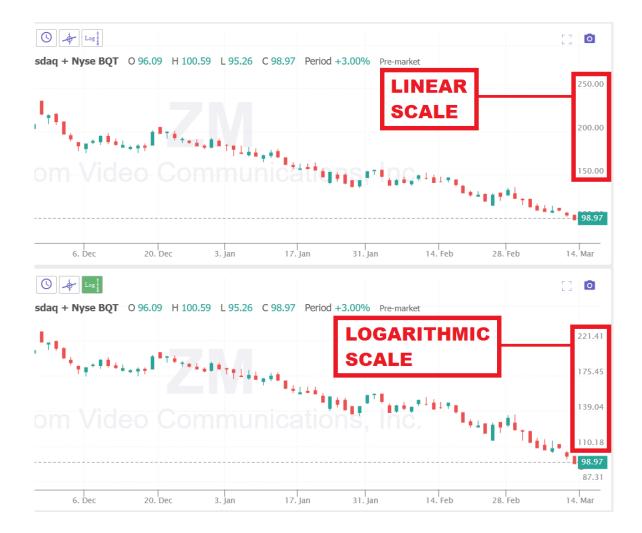


As a result of this action, the prices on the Y-axis would display a percentage increase rather than increasing absolute values. In the snippet below, there is a constant 4.8% (approx) increase in the price.



## Linear Scale Vs. Logarithmic Scale

The core difference between Linear Scale and Logarithmic Scale is how the prices are arranged on the Y-axis of a chart. Linear scale display dollar price increase and the Logarithmic Scale display percentage points.



## **Drawings on Linear & Logarithmic Scale**

TrendSpider calculates the drawing plotted on the chart accurately even if the trader decides to switch from linear scale to logarithmic scale or vice versa.

In this snippet below, you can observe how the two Segment Lines are making contact with the candles at different timeframes on the chart graphed at a linear scale.



However, if the trader decides to switch to the Logarithmic scale, the Segment Lines will be curved but they will still touch those same candles with absolute accuracy that it contacted earlier when the chart was graphed at a Linear Scale. This is one of the powerful and unique features of TrendSpider that allows the drawings to stay accurate despite making the switch.



On top of that, the traders can also create alerts on a curved trendline as well.



### When to Use Linear Scale & Logarithmic Scale

If a symbol has small movements in price, then a linear scale could be the best charting option, however, if the price volatility is significant, then it is recommended to use the logarithmic scale as it can prove to be more effective while visually capturing the larger price moves.

For example, if a symbol price falls from \$150 to \$50, the distance between each dollar will be smaller if viewed on a linear scale, hence making it difficult for a trader to view the significant movements. This is where Logarithmic Scale saves the day by adjusting the price movements on the basis of percentage changes so that the traders can easily see the detail within sharp price movements.

#### **Related Articles**

Chart Settings and Customization

- Drawing and Annotating Charts
- **❖** Indicator Definitions