

The RSI

The RSI (Relative Strength Index) is one of the most popular and widely used counter-trend indicators;

- This indicator was developed by **J.W. Wilder** in 1978 in his book "New Concepts in Technical Trading."
- As a bounded indicator, it is formed based on the averages of rises and falls in securities, according to the formula:

$$RSI = 100 - [100 / (1 + RS)]$$

where RS represents the average of closing increases divided by the average of closing decreases over the chosen period.

The significance of the formula

$$RSI = 100 - [100 / (1 + RS)]$$

- **When the RS ratio is very high:** $100 / (1 + RS)$ tends towards 0, and the RSI tends towards 100, indicating an overbought market;
- **When the RS ratio is very low:** $100 / (1 + RS)$ tends towards 100, and the RSI tends towards 0, indicating an oversold market;
- Finally, **when RS tends towards 1**, that is, when the average of rises equals the average of falls, then the RSI tends towards 50%. This situation corresponds to a balance between sellers and buyers.

Use of the RSI in Practice

The RSI allows:

- To detect a trend reversal at the very beginning, thanks to bearish and bullish divergences (see following examples);

- But also to enter a bullish or bearish trend at the right moment thanks to the identification of supports/resistances.

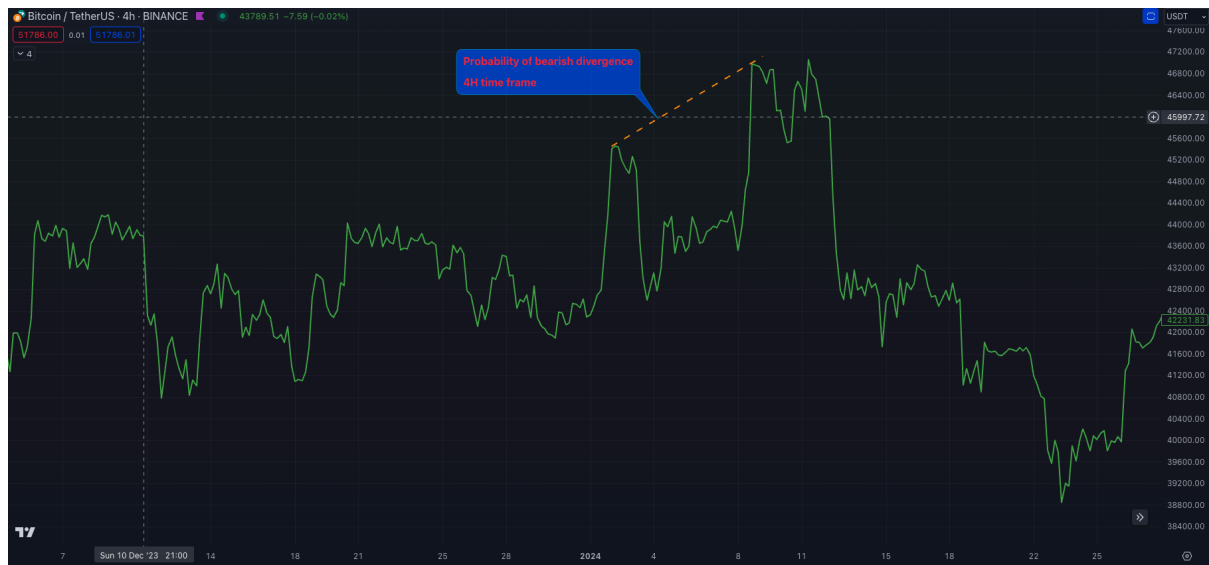
Bullish Divergence





Bearish Divergence





The RSI

- In a **bullish trend**, the RSI generally evolves above the neutral zone around **40/50%**

- In a **bearish trend**, the RSI generally fluctuates between the neutral zone around **60/50%** and **the oversold zone of 25/30%**.

- In any case, **the 50% neutral zone** constitutes a balance between buyers and sellers.

$RS = 1 \Rightarrow \text{average of rises} = \text{average of falls}$

RSI as Support





RSI as Resistance



