

Candlestick Patterns

What is a candlestick pattern?

A candlestick pattern is a way of displaying the price movement of any asset. Information can be obtained very quickly using a few points of data. With respect to the amount of the data taken into consideration, it is relatively accurate. In this project, we will be measuring the accuracy of these candlestick patterns and how they work. There are different kinds of patterns. They have the same basic structure though, they consist of:

- Body: Indicates the open-close range
- Wick: Indicates the low and the high
- Colour: The following colours mean:
 - White/Green: Price increase
 - Black/Red: Price decrease

Note: These patterns must always be used with some other kind of technical analysis

Important Terminologies

- Buying Pressure: Occurs when majority of the traders are buying the stock, indicating market price will increase
- Selling Pressure: Occurs when majority of the traders are selling the stock, indicating market price will decrease
- Bullish: When the market is showing an upward trend
- Bearish: When the market is showing a downward trend

Bullish Candlestick Patterns

These patterns may be formed after a market downtrend and mainly signal a reversal of price movement.

Hammer Pattern

The hammer pattern has a short body along with a long wick. It is mostly found at the bottom of a downward trend. It shows that even though the price was really low at some point, buying pressure sold it back again. The colour can vary but a green hammer indicate a stronger bullish trend than a red hammer.

Inverse Hammer

As the name suggests, this is an inverse hammer, an upside down hammer. In this type of pattern, the wick above is longer than the wick below. It indicated buying pressure followed by selling pressure which was not strong enough to drive the price back down completely. This shows that the stock price will be in the control of the buyers.

Bullish Engulfing

This pattern is formed by two candlesticks. The first has a short red body while the second one has a large green body. This shows an upward trend in the stock price.

Piercing Line

This is also a two stick pattern. The first line consists of a large red body, the second line consists of a large green body. **Note: The close on the second bar must be more than halfway up the body of the first bar**

Morning Star

This pattern is considered a sign of hope in a very bleak market. It is a three stick pattern. The pattern is:

- One long red bodied candle
 - One short bodied candle
 - One long green bodies candle
- It indicates that the selling pressure has subsided and a bull market is on its way

Three White soldiers

This pattern takes place over three days. It consists of three consecutive green sticks with long bodies and short wicks, each body slightly longer than the

previous body. Indicates strong bullish period ahead.

Bearish Candlestick Patterns

These patterns may be formed after a market downtrend and mainly signal a reversal of price movement. Heavy pessimism about the market causes traders to close their long positions and open up short positions to take advantage of the falling price.

Hanging man

This is the hammer equivalent of the bearish patterns. It has the same shape as the hammer but forms at the end of an upward trend. It indicates that there was significant sell off during the day but the buyers were able to push the price back up again. The large sell off indicates that the buyers are losing control of the market

Shooting star

This is the same shape as the inverse hammer but is formed in an upward trend. It has a smaller lower body and an longer upper wick. Usually, the next day of this pattern, the market will open at its high and keep falling

Bearish Engulfing

This pattern occurs at the end of an upward trend. The first candle has a small green body, the second one consists of a long red body. This signifies a slowdown of market price movement. The lower the second candle goes, the stronger the bearish trend would be.

Evening Star

This is a three candle pattern which is equivalent of a bullish morning star. It occurs when a short candle is sandwiched between a large green candle and a large red candlestick. It indicates reversal of an upward trend

Three black crows

This is the downward equivalent of its bullish counterpart "Three White Soldiers".

Dark Cloud Cover

The dark cloud cover candlestick pattern indicates a bearish reversal – a black cloud over the previous day's optimism. It comprises two candlesticks: a red candlestick which opens above the previous green body, and closes below its midpoint. It signals that the bears have taken over the session, pushing the price sharply lower.