

1 ACCUMULATION & DISTRIBUTION INDICATOR

Whenever an asset is being bought by a specific buyer or a small group of buyers repeatedly, it is said that the asset is being 'Accumulated'. The intentions of the buyer can be anything, i.e. long term investment, sale in near future at profit, etc. Irrespective of the intentions, there is a possibility that the buyer will come back and buy the stock in higher quantities again. In the case of accumulation, two things happen –the price of the asset goes up and this happens at high volumes.



On the other hand, when the asset prices go down and do so at higher volumes, we can say that the same is being 'Distributed'. The reason being, the ownership is now moving from a concentrated buyer or buyer group to general people who have much lower buying capacity.

The accumulation/ distribution technical indicator takes into account the volume and price movements which tells us if the asset is being accumulated or distributed. This means if the asset price is increasing and the indicator value is also increasing in a similar fashion, the asset is being accumulated and a specific buyer or group of buyers, who are buying in higher quantities repeatedly might be responsible for this. At the same time, if the asset price is increasing but the indicator value is not increasing, it shows that the buyer is not backed by high volumes and as a result, it is unlikely that the price increase will sustain itself for a considerable length of time.

On the contrary, if the asset price is declining and the A/D indicator is decreasing, then we can say that the asset is being distributed. The asset does not have buyers to support the asset and sellers are selling in higher volumes. As a result, the asset's price decline may continue for longer. However, if the asset price is declining but A/D indicator is flat or upwards, then it shows that the trend might reverse soon as the decline is not backed by volume.

So, this is what A/D indicator points out the volume and if they are associated with a price decline or a price increase of the asset. We will want to be on the side where the volumes are higher because the chances of sustained movement in that direction are much higher.



ELEMENTS

The A/D indicator is a single line that can take any value i.e. positive or negative. The direction and speed of the movement of the A/D indicator reflect whether the movement is currently backed by volumes or not. There is no other elements or parameters involved in the working of the AD indicator.

**POSITIVE
VALUE ONLY**

**GROWTH BACKED
BY VOLUME**

PURPOSE OF THE INDICATOR

A/D indicator's main purpose is to tell us whether or not the current movement is backed by volumes. If the trend is backed by volumes, it will require larger opposition to revert and as a result, the trend may continue. The opposite is true in case the trend is not backed by volumes.

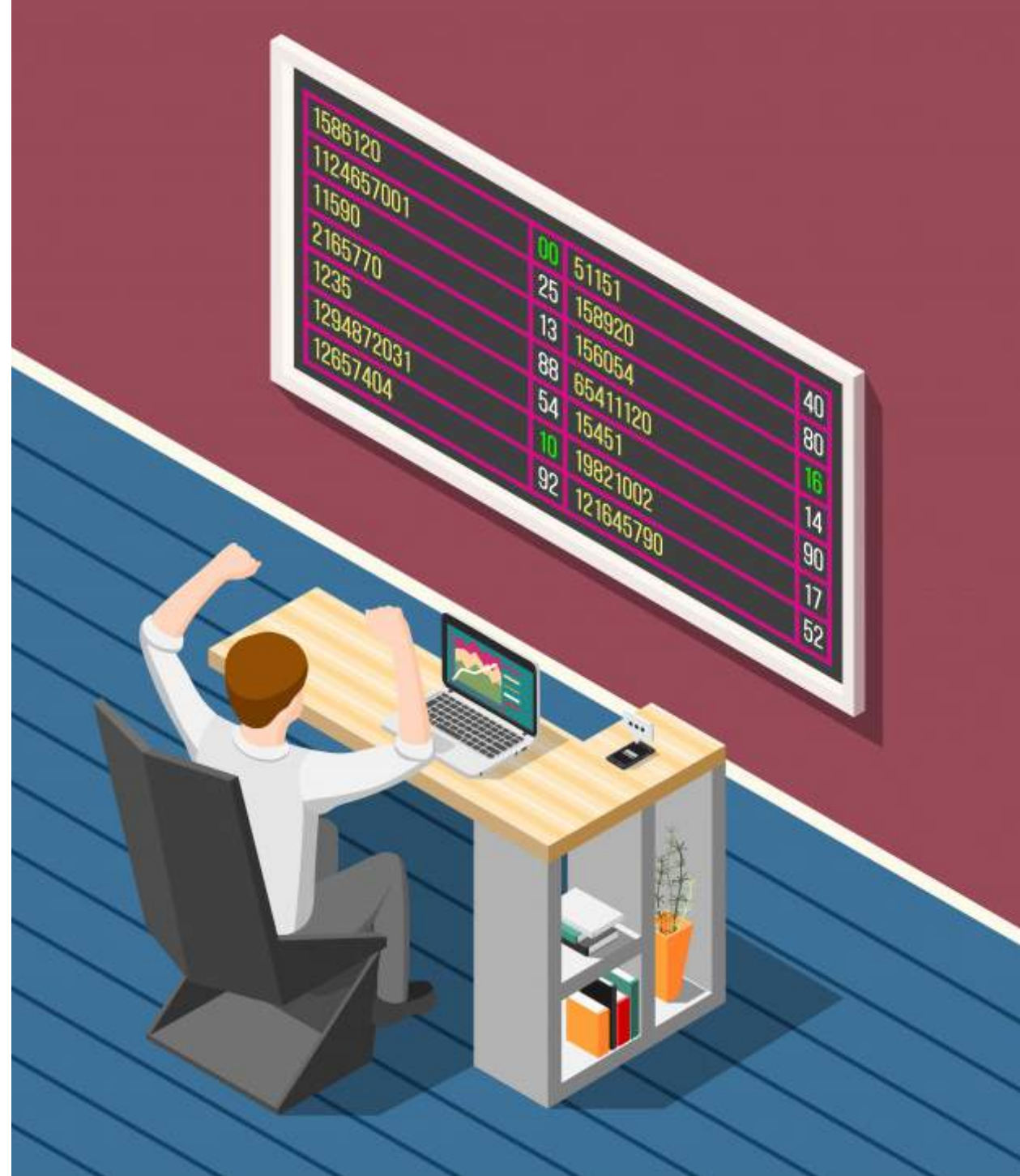
HOW TO TRADE?

To trade, we will look for divergences between price movement and A/D indicator. When the price is increasing but the A/D indicator is flat or is south, we can say that the increase is not backed by higher volumes and can revert soon. So, we will keep an eye on the asset price, if it shows any sign of reversal and enters a trade accordingly.

So, we will not accept any trade solely based on A/D indicator. However, it can be used as a leading indicator. We can track wherever divergences are being formed and then enter a trade based on other indicators when we get reversal signs. This is one of the ways to use A/D indicator. An analyst can get creative, look for other ways to use the same, and then backtest to validate their hypothesis.

SUITABILITY

'Accumulation/ Distribution Indicator' is most suitable for large caps and indices. We will avoid small caps and mid-caps as a single participant's actions can influence the entire chart and behavior significantly.





This is how the A/D indicator looks like in practice. A positive value indicates the association of more volume with the upwards trend and a negative value tells us that a higher value is associated with negative prices. Here we will get signals based on divergences between the direction of A/D indicator and the price. In the highlighted zone, despite the indicator heading upwards, the prices are decreasing, thus showing a divergence. As a result, we shall now track the asset for a reversal and use other indicators to enter the trade.



We have marked wherever the A/D indicator crosses the zero line. This means that the volume has shifted between the bearish candles and bullish candles. Hence, it should boost the analyst's confidence to take trades accordingly. These should not be used as indicators. This is another way to use A/D indicator in our trading system.



This is yet another example of A/D indicator. There are no divergences between price and A/D line in this case. However, we can use the same to take trades based on whether A/D is positive or not. We can take trades then using other indicators. This is how we will use A/D indicator. An analyst will get fluent with the same based on the practice they put into it. It is advised that they spend time experimenting with the indicator on multiple charts to understand more about it. With this, we end our discussion for the first indicator. Let us now move to the next indicator.

2 AROON OSCILLATORS

Aroon Oscillator is a technical oscillator that focuses on the price movement that represents the direction of the trend in the prices besides focusing on the strength of the movement. In the A/D indicator, we used volume to understand the strength of the trend. However, in the case of Aroon oscillator, we will use the time between consecutive highs and consecutive lows to understand the strength of the trend. Aroon oscillator is built with the assumption that strong up-trends will create new highs very regularly and strong down-trends will create new lows frequently.

A statistical operation is conducted to come up with a value of Aroon up and Aroon down which shows the strength of uptrend and downtrend respectively. The difference between Aroon up and Aroon down forms the Aroon oscillator. So, in simple terms, Aroon oscillator is the difference between the strength of the uptrend and strength of the downtrend. The oscillator moves within the range of 100 and -100. A positive number in oscillator means that the uptrend is more powerful than the downtrend and a negative number means that the downtrend is more valuable than the uptrend.





HOW IT WORKS?

A period is fixed for the Aroon oscillator. We can fix this by changing parameters in the Chartink or Tradingview interface. By default, the period is set for 25. So, an Aroon up of 50 will represent the achievement of a new high in the last 50% of the periods i.e. in last 12.5 (50% of 25) days whereas an Aroon up of 0 will mean that the price has never gone higher than what it was at the start of 25 days. An Aroon up of 100 means that a high has been formed very recently. The same is true for Aroon down as well. Also, $\text{Aroon up} = 100 - \text{Aroon down}$ and vice versa. So, we will subtract Aroon down from up and obtain the Aroon oscillator value. Higher the Aroon oscillator value, higher is the strength in an uptrend and vice versa.

ELEMENTS

The single Aroon oscillator line is the core element that we will be dealing with. Secondly, Aroon oscillator is the difference between Aroon up and down. We cannot see these lines here, but upon enabling them separately, we will be able to see them. These are important as they indicate the strength of the upside and downside of the same. Lastly, we can change the periods that we intend to take into consideration. For instance, we can change the periods to 50 or even higher, all based on our trading timeframe.

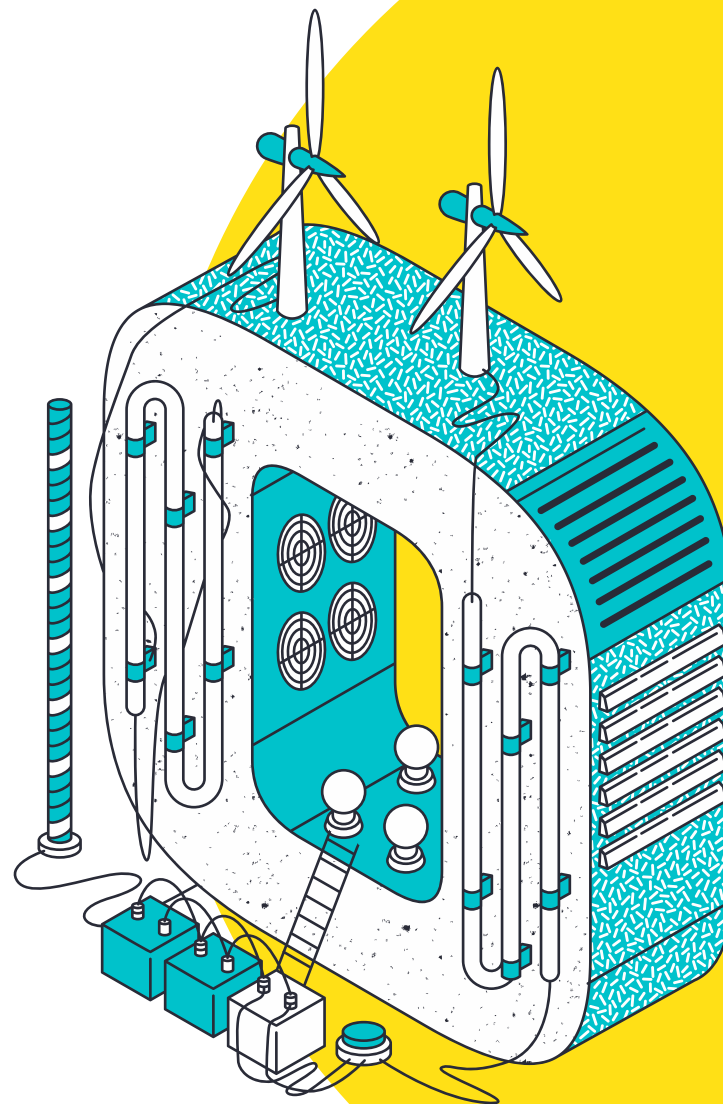
TRADING SIGNALS

Aroon oscillators enable us to submit trades solely based on these. We can enter a trade whenever the oscillator crosses the 'Zero' line i.e. it goes from negative to positive or positive to negative. The Aroon oscillator becoming positive is a bullish sign that indicates the Aroon up becoming more powerful than Aroon down. When Aroon oscillator becomes negative from positive, it shows that Aroon down is becoming more powerful and it is becoming a bearish or sells signal.

When Aroon oscillator is at zero, it means that Aroon up and down are same i.e. uptrend and downtrend is in the same strength.

SUITABILITY

Again, we will use most of the indicators on indices and large-cap stocks only. We will not use in mid-caps and small caps generally. Finally, these decisions are to be made by the analyst while preparing their strategy and system for trading.





This is how Aroon oscillator looks like in real life. It oscillates around zero. Every time it becomes positive from negative, it is a buy signal and every time it becomes negative from positive, it is a sell signal.

Aroon oscillator is one of the efficient indicators. We can change the time frame for the same. Here, we use 25 periods as the time period which is also the default setting.



The arrows that we have marked in red are the sell signals and those in green are the buy signals. We see that Aroon oscillator performs well in trending markets.

We will have to combine them with other indicators such that we can avoid the sideways market.

Every time it crosses the zero line, it produces a trade signal that we can act upon.

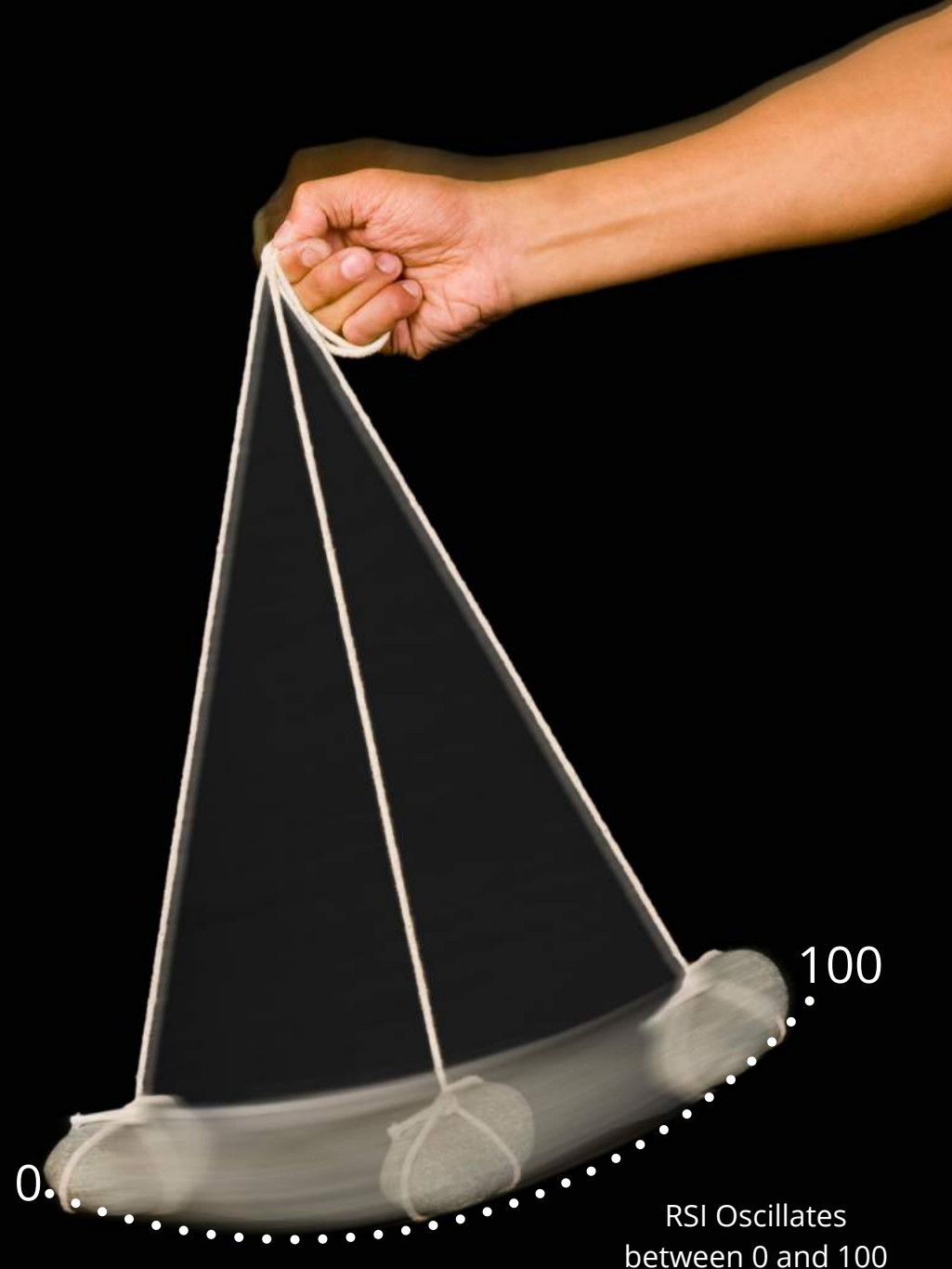


Analysts will backtest the same regarding its performance and application in their strategy. Aroon oscillator can be relied upon to generate trading signals. However, different analysts have a different experience with different indicators based on how they use them.

3 RELATIVE STRENGTH INDEX

Relative strength index is a technical oscillator that indicates the point in time when the asset is overbought or oversold and when the trend can be expected to have a reversal. It is calculated based on recent price changes and its value moves between 0 and 100. An oversold situation indicates that a reversal can be expected and the asset price should start moving back up soon. An overbought situation indicates that a reversal can be expected in near future.

To calculate RSI, a statistical operation is conducted where we first fixate on a fixed time frame based on our trading practices and average holding period. By default, it is set at 14 periods. Next, periods of positive and negative price movement are segregated. Then the average gain and loss are calculated for the set of periods. Using the average gain and loss, a mathematical operation is conducted to derive the RSI value. Hence, average loss and average gain in the specific time period become the major factors that affect RSI.



RSI Oscillates
between 0 and 100

HOW IT WORKS ?

We just saw that we get a value between 0 and 100. When the RSI value is below 30, it is said to be in the oversold zone and when it is above 70, it is said to be in the overbought zone. When the RSI is between 30 and 70, we can say that it is in the normal trading zone. But whenever RSI enters the overbought or oversold zone, an analyst can actively start tracking the asset hoping for a reversal confirmation using other indicators.

ELEMENTS

RSI mainly has two components that an analyst needs to deal with. First, the RSI line itself. the behaviour of the RSI graph determines the trend, its strength and the momentum in the asset. Second, time period. To change the time period, we will need to make changes in the 'Parameters' option on ChartInk and 'Settings' option on Tradingview.

TRADE SIGNAL

RSI by itself does not give reliable signals to buy or sell an asset. At times, despite being overbought, the bulls may have a strong grip over the market due to which the trend might continue for a while. Even after entering the overbought zone, the asset may stay in the zone for a while and anyone who goes short expecting a reversal might incur significant losses. The same is true on the other side as well. The asset can remain in the oversold zone for quite some time. As a result, RSI cannot be used to generate buy and sell signals.

RSI should rather be seen as an early indicator of an upcoming reversal. Whenever an asset enters the overbought or oversold zone, the analyst should start actively tracking the asset. However, they must confirm the reversal with other indicators as well before entering into any trade. RSI works well in combination with other tools to conduct our analysis.

SUITABILITY

RSI is suitable on large-cap, indices, currencies and commodities. Analysts use it on small-cap and mid-cap too with varying degrees of success. Thus, the application of the RSI depends on the combination in use.

NSE:KOTAKBANK, 1D 1846.95 ▼ -16.95 (-0.91%) O:1870.50 H:1872.25 L:1838.85 C:1846.95



TradingView

This is how RSI looks. It is an oscillator that moves between 0 and 100. The general zone in which it moves is between 30 and 70. This zone has been shown in blue on the RSI graph. Whenever RSI indicator moves out of the coloured zone, it goes into an overbought or oversold category. Whenever it enters these categories, we can expect a reversal around the corner.

NSE:NIFTY, 1D 14281.30 ▼ -152.40 (-1.06%) O:14453.30 H:14459.15 L:14222.80 C:14281.30



TradingView

RSI enters the oversold zone i.e. less than 30, around March. There was an instant reversal at this time and the prices reverted. Combining with other indicators a profitable long signal would have been generated over here. After November, RSI entered the overbought zone i.e. more than 70. However, as expected a reversal is due but is not instant. The RSI has been in the overbought zone for a while and has not yet reverted. Any trader who shorts purely based on RSI would have made significant losses here. This is why we use other indicators to confirm entry and exit when using RSI.

NSE:MINDAIND, 1D 406.25 ▲ +1.00 (+0.25%) O:412.00 H:413.00 L:402.40 C:406.25



TradingView

The RSI entered the oversold zone and even after entering the same, the prices went substantially lower. This is why we cannot make trades based on RSI solely. The second time around when it entered the overbought zone, the reversal was fairly quick. The third time around when the RSI enters the overbought zone, that it sustained there for quite some time. It is a good leading indicator for upcoming reversals. However, we will use RSI in combination with other indicators and oscillators.

NSE:MINDAIND, 1D 406.25 ▲ +1.00 (+0.25%) O:412.00 H:413.00 L:402.40 C:406.25



TradingView

We see that we can experiment with RSI and many other indicators in terms of time period that is included in calculation. For instance, here we see that we have changed the time frame of RSI from 14 periods to 11 candles. Changes in time period of candles at times changes the timing when the signal is received. However, shortening the time period gives more volatility and false moves. Increasing the length gives more stability but lagging indicator at times. So, we will decide upon a length based on our strategy. With this, we end our discussion on RSI. Lets move to the next indicator.