Andrews' Pitchfork

By

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ANDREWS' PITCHFORK

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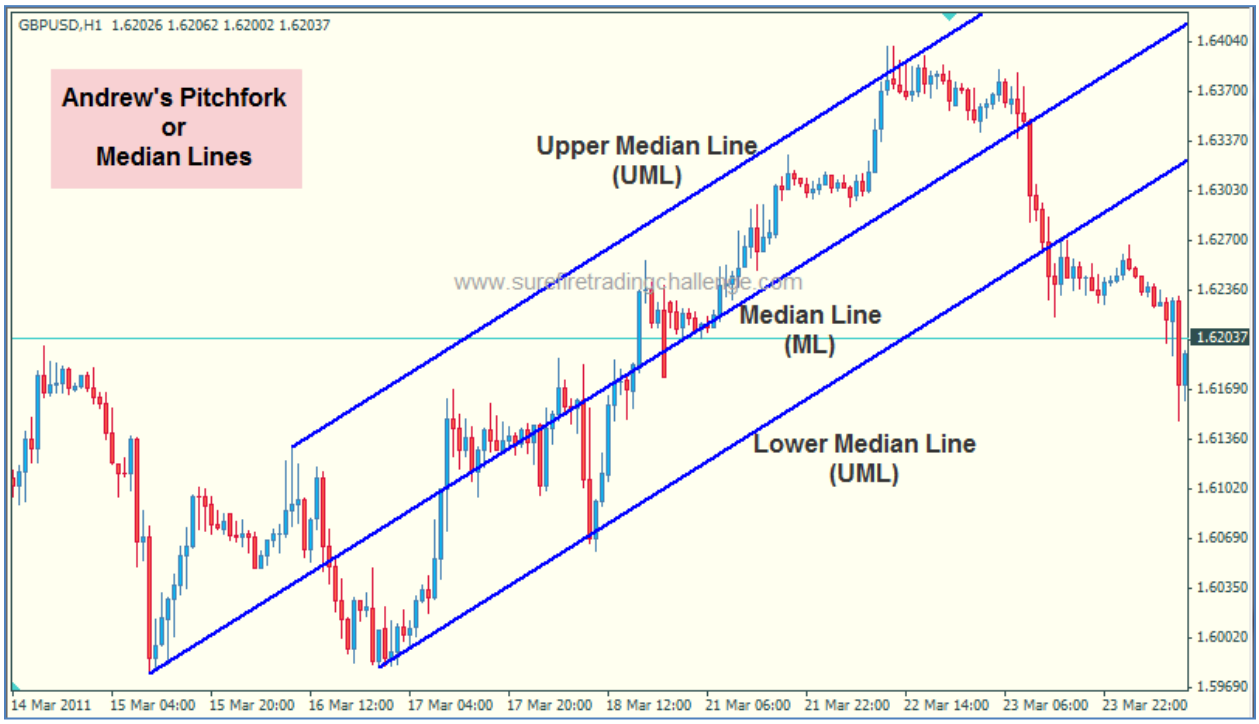
ANDREWS' PITCHFORK

Introduction

Andrews' Pitchfork is a technical indicator used to draw trend channels to identify possible areas of trade opportunities. It was originally known as median lines but later on, it also became known as the Andrews' Pitchfork, as it was developed by Dr. Alan H. Andrews and it resembled a farmer's pitchfork.



Andrews introduced this technique in his book about action-reaction during the 1960s. Andrews' book contains his case study which was highly influenced by the works of two important individuals, Isaac Newton and Roger Babson.

Isaac Newton, an English physicist and mathematician, influenced Andrews' work through his three universal laws of motion, specifically the third, which states that "For every action there is an equal and opposite reaction." With this, he means that any force exerted by one object onto another object has an equivalent force exerted in the opposite direction towards the first object.

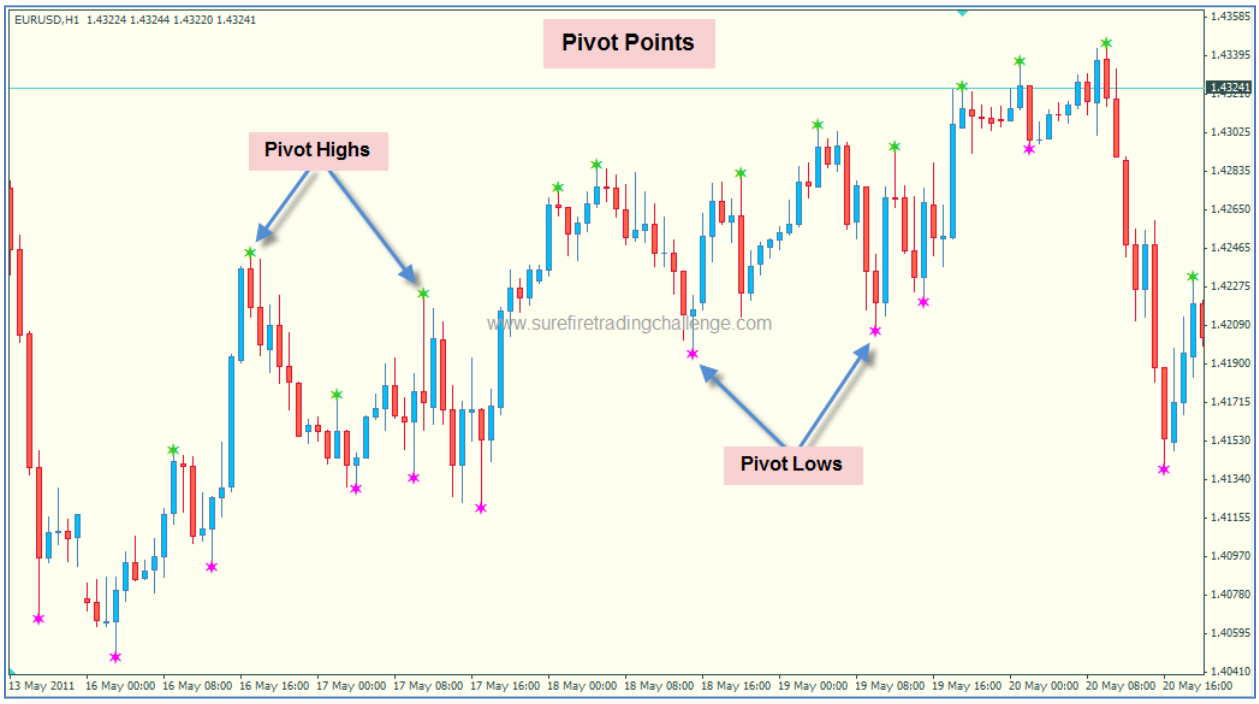
Roger Babson, entrepreneur and business theorist, centered most of his economic studies on Newton's third law. He applied this law on Professor George F. Swain's "normal line", which is a central line cutting through the market movement. Babson identified how a central line can be the basis of the stock market's possible direction by using action and reaction techniques, which he used to earn more than $50,000,000.

Definition of Terms & Related Concepts

Before proceeding, let's define some important terms that we'll be using often as we talk about the Andrews' Pitchfork.

When drawing median lines, one must start at certain points on the price chart. These points are called pivot points, but they're not the same as the pivot points you calculate to forecast price.

The **Pivot Points** are the axis points at which the price turns to the opposite direction. They are also referred to as reaction highs/lows or swing highs/lows. Have a look at the image below.



I just used the Infocator to make the pivots easier to visualize with the Fractal count set at 7. The Pivot Highs are indicated by green stars while the Pivot Lows are indicated by pink stars.

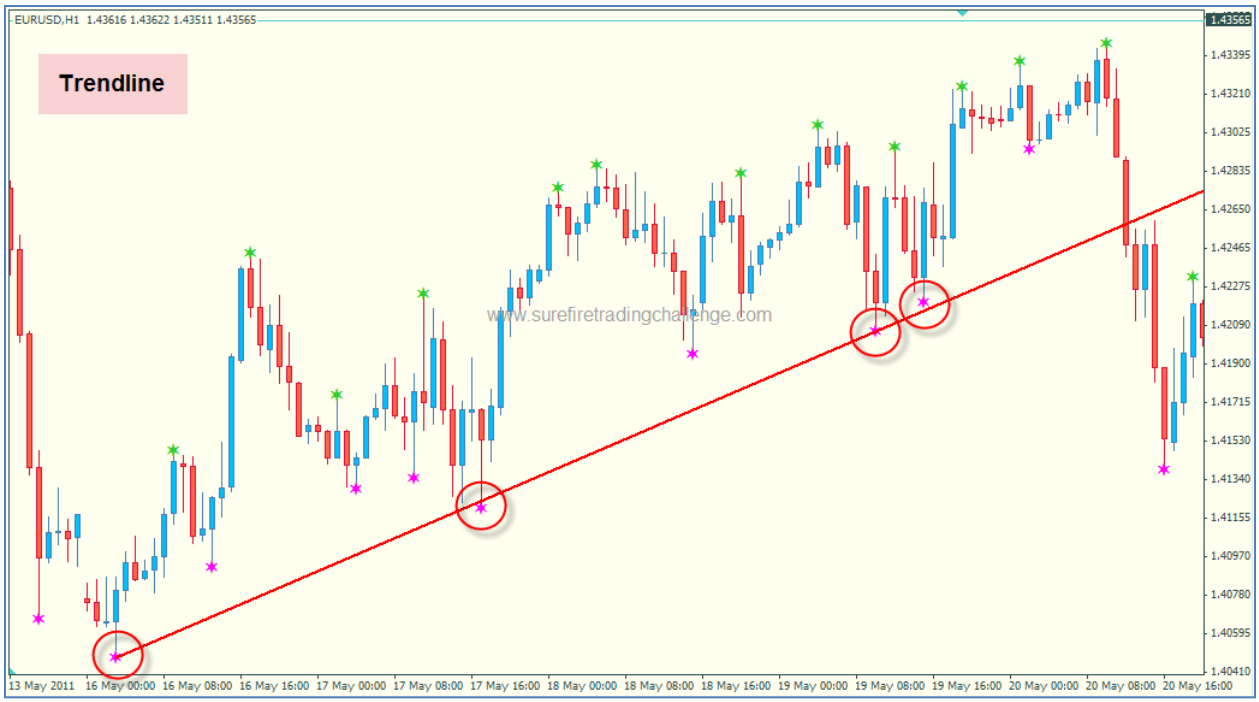
Pivot points can be determined by identifying the highest High or the lowest Low in the middle of an odd number of candles (the minimum is 3 candles). Because we are using 7 candles in this

example, the Pivot High/Low is identified as a candle's High/Low which is higher/lower than at least 3 previous candles and at least 3 subsequent candles.

The most prominent pivot points are used as the basis for drawing trendlines and line studies to identify the prevailing areas or levels of support and resistance.

Once the starting points are identified, drawing the pitchfork requires three parallel trendlines. A **Trendline** is a straight line drawn over the price to connect the swing highs in a downtrend, or under the price to connect the swing lows in an uptrend. It can also be drawn above or below a ranging market. Trendlines are mainly used to represent the main direction of price and to identify areas of support and resistance.

To draw a valid trendline, there must be at least two pivot lows or swing low points that can be connected to represent the trend. Below is an example of a trendline drawn on an uptrend.



As you can see, the trendline connects the swing lows of the price. As long as the price does not break below the trendline, the trend remains in an uptrend. This is because the trendline is indicating an area of support.

Support refers to the level at which the price is unable to decline any further. As price decreases, the demand by the buyers increases because the financial asset is cheaper, while the supply by the sellers decreases because not many are willing to sell at low prices. Eventually, price reaches a level where demand overcomes supply, preventing the price from falling any

lower. This level is the support level and is often described as a “floor” because it prevents price from going down.

If the trend was a downtrend, the trendline would be drawn above the price and it would indicate the area of resistance.

Opposite to support, **Resistance** is the price level at which the price is unable to exceed. This is because the sellers are more willing to sell when prices are increasing, while buyers are less likely to buy. At the resistance level, the supply overcomes demand and price is unable to rise any higher. Because of this, it is often described as the “ceiling” of the price.

Support & Resistance are not exact levels, and so they are often referred to as areas. Traders take note of these areas because it allows them to make investment decisions, buying along support areas and selling along resistance areas. Just take a look at this image below.

In a ranging market, the trendlines indicate the areas at which price tends to bounce away from. In a downtrend, you can find that the trendline connecting the Highs represents the resistance area that is preventing price from moving higher. When price broke off from that trendline, it began to form a new uptrend where the trendline connecting the Lows offers a support area that prevents price from going down.

If you draw another trendline on the other side, as with the broken gray line in our example above, to connect the Lows of a downtrend, the trendline represents the support area. The trendlines on both sides of the price now serve as a **Channel**.

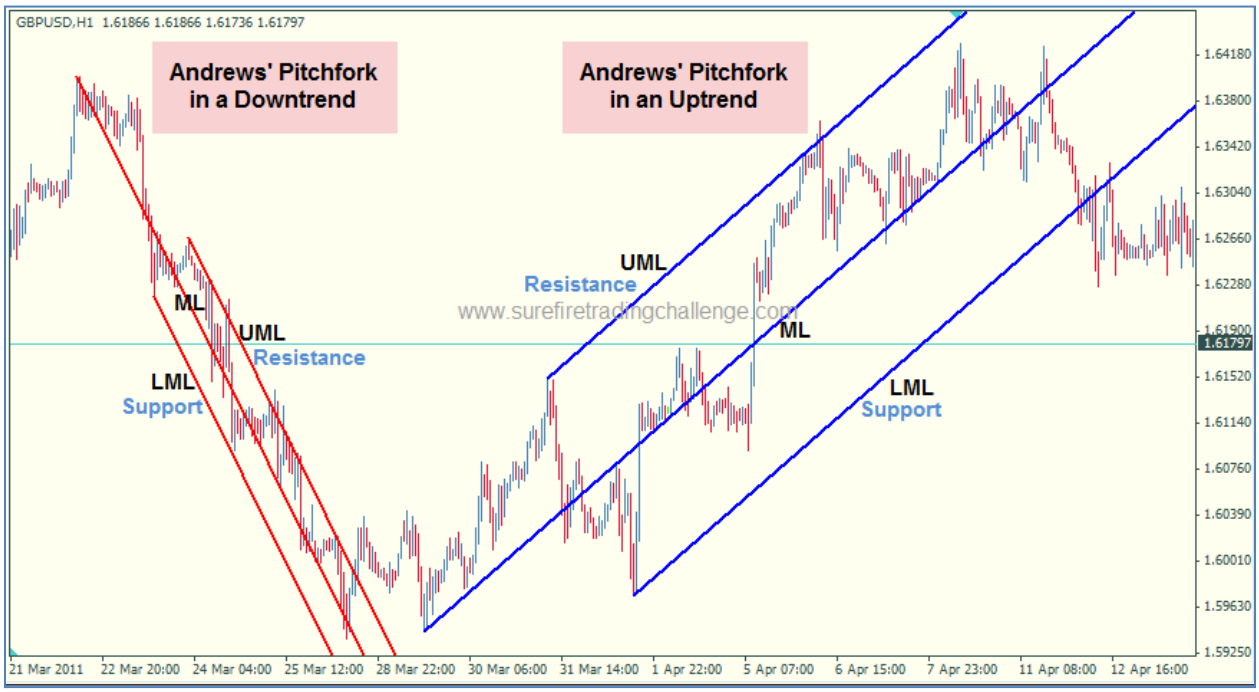
Now that we have a little background on pivots, trendlines and support & resistance, we will move on with the more sophisticated Andrews' Pitchfork.

The **Andrews' Pitchfork** is a technical analysis tool that draws a channel to represent the range between support and resistance levels that the price has been trading in and will most likely continue to trade in. It's important to note it is only useful for trending markets.

The Andrews' Pitchfork is composed of three trendlines, one of which is the **Median Line (ML)** which is found at the center, and two outer trendlines called the **Upper Median Line (UML)** and the Lower **Median Line (LML)** that serve as support and resistance levels respectively. The Median Line can also serve as either support or resistance.

Andrews' technique of using the median line is based on the assumption that price tends to move towards the median line about 80% of the time. The channel created by the median lines would represent the trend until the price escapes the channel because of a major change in market direction, and a new trend is formed.

Here's how the Andrews' Pitchfork looks like in a downtrend and in an uptrend.



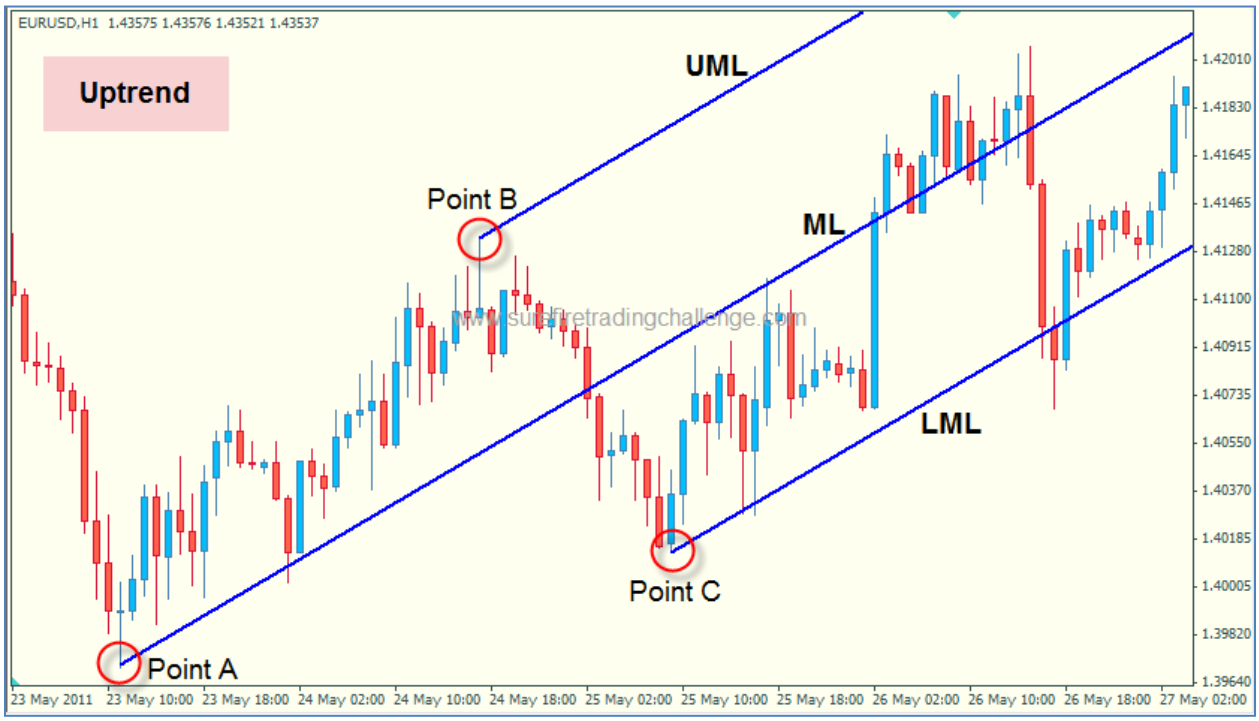
You'll notice that price tends to move back to the Median Line (ML) as it flows within the channels. In a downtrend, price does not go past the Lower Median Line (LML) and does not exceed the Upper Median Line (UML) until price broke out of the trend to form a new uptrend. When the uptrend has formed, another pitchfork can be drawn. Again, price remained within the boundaries of the UML and LML.

Drawing the Pitchfork

With the help of charting software, it has become much easier to draw the Andrews' Pitchfork. All that's needed is to select the Andrews' Pitchfork tool on your platform then select three major pivot points on the chart.

Points	Uptrend	Downtrend
Point A	Pivot Low or swing low that has previously occurred.	Pivot High or swing high which has previously occurred.
Point B	Pivot High or swing high at the right side of Point A.	Pivot Low or swing low at the right side of Point A.
Point C	Pivot Low or swing low at the right side of Point B.	Pivot High or swing high at the right side of Point B.

Once the points above have been selected, the charting software will automatically draw the pitchfork for you. Here's an example drawn on an uptrend.



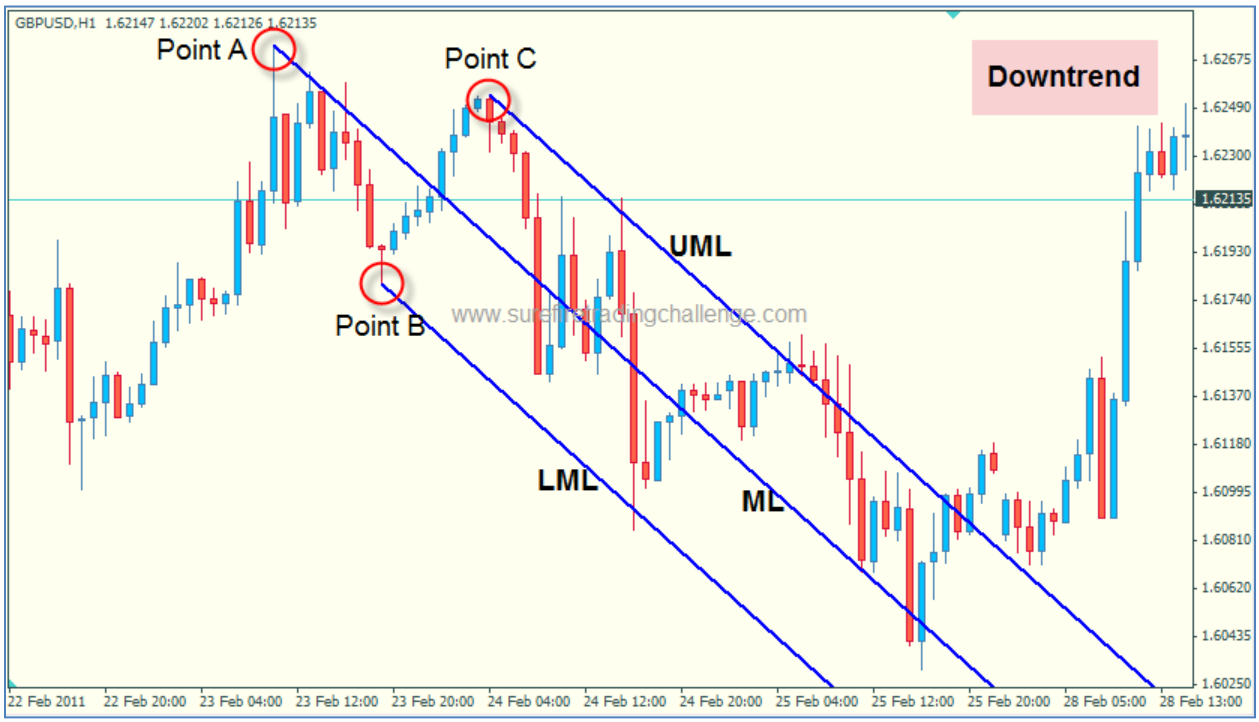
As you can see, the Pitchfork begins with the pivot point where the price began to reverse from a downtrend.

The Median Line (ML) looks like the handle of a pitchfork, and it originates from Point A and passes right along the midpoint between Points B and C. The Median line controls the angle of the pitchfork because of the position of Point A. If Point A is moved higher, it will make the angle flatter. On the other hand, moving it lower will make the angle steeper. With regards to

the angle of the pitchfork, it is most important to note that a very steep or a very flat angle may not be accurate enough to represent the trend.

Forming the tines or prongs are 2 parallel outer lines: the Upper Median Line (UML), which serves as the resistance area, and the Lower Median Line (LML) which serves as the support area.

Here's a chart with a downtrend.



In a downtrend, the same principle applies, only that it is in the opposite direction. Point A is the pivot high where price began to reverse. Point B is the swing low next to Point A, while Point C is the swing high following Point B.

The ML starts from Point A then passes right at the midpoint of Points B and C. If you raise the level of Point A, the pitchfork becomes steeper. The LML and UML still serve as support and resistance areas accordingly.

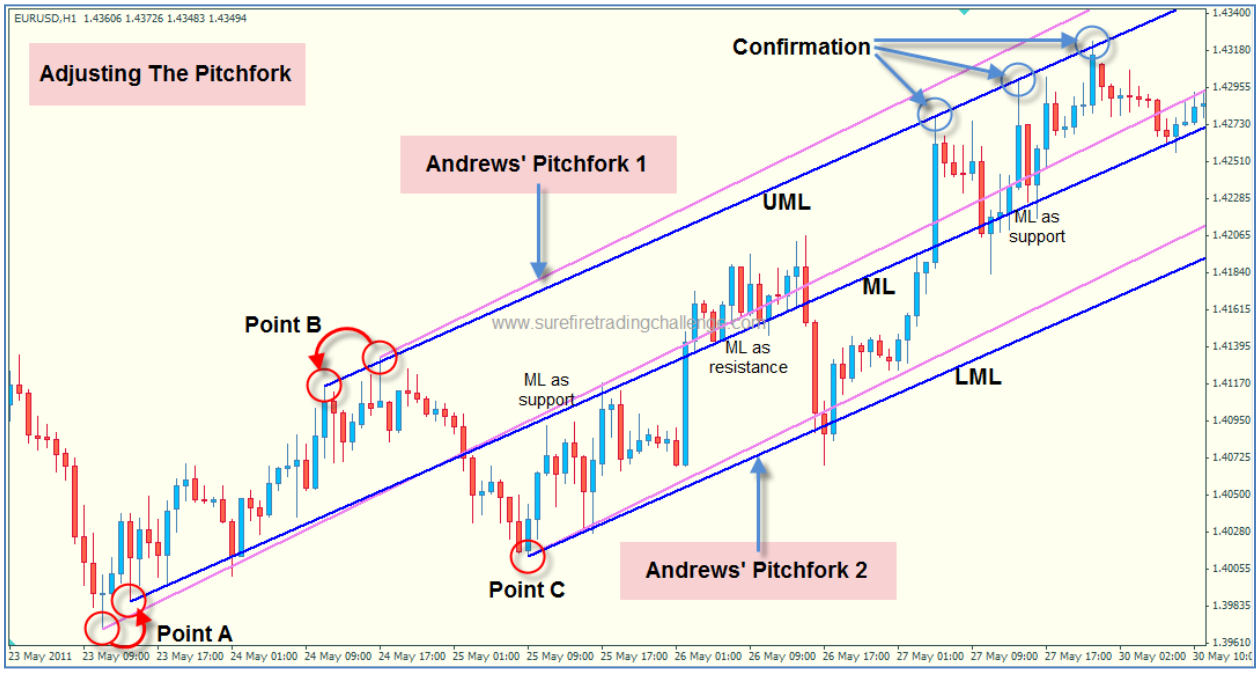
Have a look at what happens after price breaks off from the pitchfork. Notice how the UML, which was previously acting as resistance, acts as support.

Adjustments

There is always a certain degree of subjectivity when drawing the Andrews Pitchfork. The best way to check if you are doing it correctly is to get confirmation from the price. If price tests and retests the lines of the pitchfork, then you are in the right track.

There may be times when there's a need to adjust the Andrews' Pitchfork. By moving any of its points, you will be able to appropriately confine the price movement within the trend.

Here's an example. The original pitchfork is pink while the adjusted pitchfork is in blue.



In ideal conditions, the Andrews' Pitchfork 1 (pink) is drawn using the initial pivot points, with Point A at the pivot low where the trend began to reverse to an upward direction. To the right is Point B at the major pivot high and Point C at the pivot low.

However, the first pitchfork is unable to truly define the resistance areas that the price has tested and retested a few times, thus the need to adjust the pitchfork.

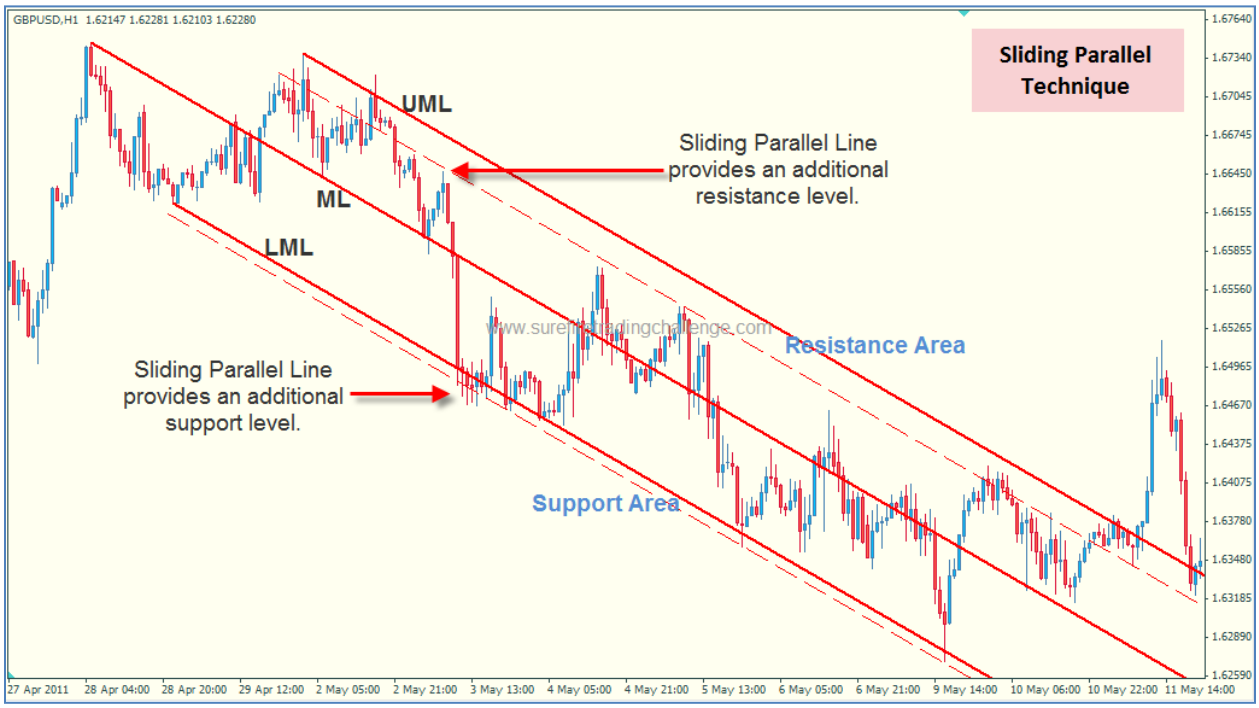
As seen on Andrews Pitchfork 2 (blue), moving the initial Point A to a higher Low and the initial Point B to a lower high is all that's needed. The channel created by the UML and LML better describes the price's support and resistance levels. Notice how the price has retested the UML a few times; this serves as the confirmation.

Also, while the ML tends to magnetize the price to move towards it, the ML can also serve as support or resistance. In the example, there are instances when the price was not able to cut through the ML.

Sliding Parallel Lines

Just as support and resistance are areas and not exact levels where price bounces from, the price may not necessarily turn exactly along the lines of the Andrews' Pitchfork. So aside from adjusting the points of the pitchfork, another technique that is commonly used to make the pitchfork better represent price movement is the Sliding Parallel Method. It is done by simply adding parallel lines within or outside of the channel.

Have a look at the example below.



In the image above, a trendline is drawn right under and parallel to the Upper Median Line (UML) to identify another level of resistance. Another trendline is added under and parallel to the Lower Median Line (LML) to identify another level of resistance. Trade setups can be found based on these parallel lines since they too represent support and resistance.

Uses

There are a number of ways in which to trade with the Andrews' Pitchfork. The channel created by the pitchfork helps traders identify the best areas to buy near the bottoms and sell near the tops. So, not only does it give you opportunities to enter trades according to the trend, it also provides counter-trend entries.

The most basic way to trade is buying when price reaches the Lower Median Line (LML) and selling when price reaches the Upper Median Line (UML).

The chart below is an example of an uptrend.

In the image above, you can see how the UML and the LML are acting as good identifiers of support and resistance levels. When price reaches the resistance area, you can enter a sell trade, which is a counter-trend trade. When price reaches the support area, you can enter a buy trade.

You can also observe how the price tends to gravitate towards the Median Line (ML). This makes it an ideal target for exiting the trades.

If you placed a buy trade, which is according to the direction of the trend in our example, the ML could serve as the initial target and the UML is the secondary target.

If you placed a sell trade, which is a counter-trend trade, you are actually trading during price retracement. In this case, the ML is the best target because price may not go any lower than the ML before going back up to continue to main uptrend.

Below is an example of a downtrend.

In the chart above, the price has been moving well within the outer lines of the pitchfork. The Upper Median Line (UML) represents the resistance area while the Lower Median Line (LML) represents the support area.

The entries for a downtrend are similar to the entries for an uptrend. The support area is where you enter sell trades while the resistance area is where you enter buy trades.

For the target exit, the Median Line (ML) still remains to be a good target, especially when you are in a buy trade, which is a counter-trend trade. For sell trades, you can set the ML as the first goal and the UML as the second goal.

As with any trading tool or technique, it's not advisable to use the Andrews' Pitchfork as a stand-alone trading method. It is best to use other indicators or techniques to confirm the signal and find strategic entry and exit points.

In the next section, I will go into more detail regarding more techniques on using the Andrews' Pitchfork and the possible tools and indicators that can be used with it.

Identifying Tops & Bottoms

One of the common challenges that arise when trading with the Andrews' Pitchfork is how to make sure that the price has reached the bottom before entering a buy trade, or if it has reached its peak before entering a sell trade. The simple solution is to wait for a confirmation by using additional techniques such as candlestick patterns and indicators such as the Stochastic Oscillator or the MACD.

Have a look at the example below.

As soon as the price has reached the resistance area, check for confirmation by waiting for the Stochastic Oscillator crossover to the downside. This indicates that price may now be going down. As you can see, a sell trade is placed at the close of the candle when the crossover occurred.

Breakout Entries

There are instances when the price temporarily escapes outside the boundaries of the pitchfork. In these instances, make sure that the price is not forming a new trend before entering a trade. To do this, make sure that the price has returned within the boundaries of the pitchfork.

It is also uncommon for the price tends to range along the pitchfork lines. When that happens, wait for price to break out of that range before entering a trade.

Have a look at the trade examples below.

As you can see, a buy trade is entered once the price has returned within the channel, which occurred when it crossed and closed above the LML.

On the upper right, the price escaped the UML and has been ranging for several hours. A sell trade was entered after the price returned within the boundaries of the channel and broke out of the range.

Identifying Reversal

The Andrews' Pitchfork provides a good channel for identifying price support and resistance. The strength of the pitchfork depends on the ability of the Median Line (ML) to pull the price toward it. However, this channel may eventually weaken, and the ML fails to attract the price. This is an indication that the price may now reverse and move to the opposite direction.

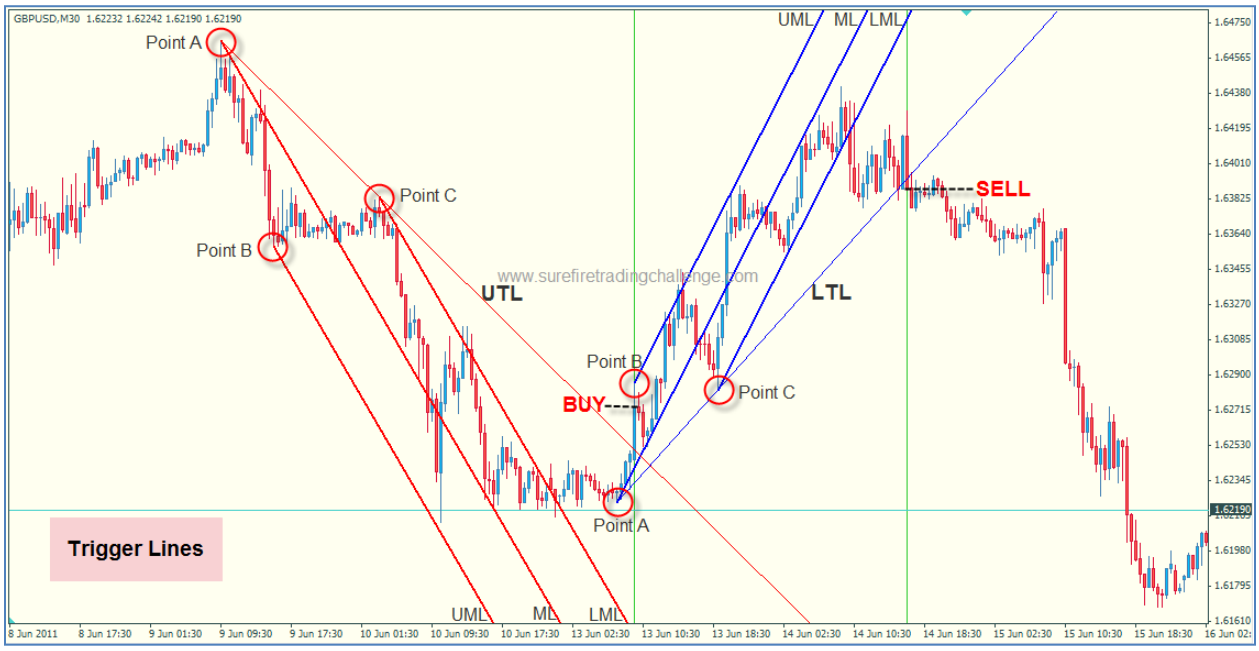
Have a look at some examples below.

Trigger Lines

When the price has broken out of the Andrews' Pitchfork, this doesn't necessarily mean that the price is now reversing. There are times when the breakout is just temporary, and the price would go back to move within the channel. Because of this, caution must be taken when placing trades. Entries should not be based just on this breakout.

This is where trigger lines come in handy. Once the price has broken out of the pitchfork, applying a trigger line gives you another opportunity to trade.

Simply put, trigger lines are trendlines (rays) drawn from Point A to point C of an existing pitchfork. Have a look at these examples:



On the left side of the chart, you can see that the **Upper Trigger Line** (UTL) was drawn from Point A to Point C of the downtrend pitchfork (red). The price broke out of that pitchfork, and was ranging for several hours, during which no exact confirmation was present to indicate that the downtrend is reversing to an uptrend. Eventually, the price crossed above the UTL along the first green line. A buy trade is then entered as soon as the candle closes because the new uptrend is now forming.

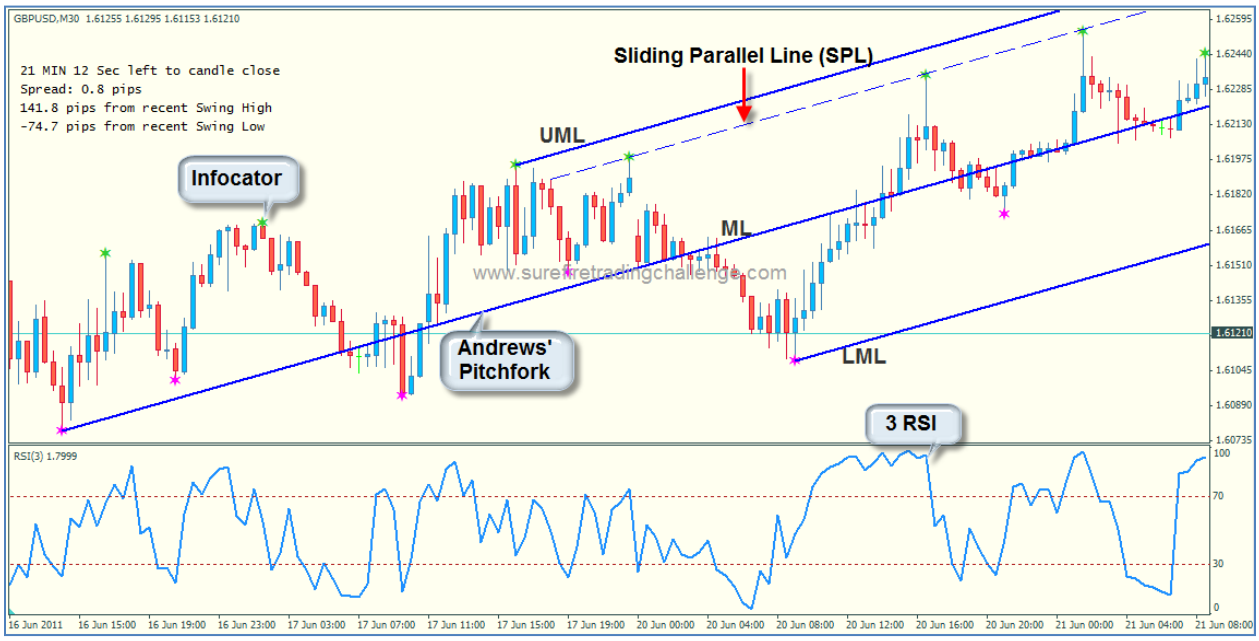
On the right side, the **Lower Trigger Line** (LTL) was drawn from Point A to Point C of the uptrend pitchfork (blue). Once again price broke out of this pitchfork began to range. If you look closely, you could easily mistaken price to continue the uptrend move. However, as soon as it crossed under the LTL, you can see that the new downtrend is now imminent. A sell trade is then entered as soon as this candle closes.

Application: Andrews' Pitchfork & RSI System

In this section, I will show you a simple system for trading with the Andrews' Pitchfork. I will use the Relative Strength Index (RSI) to confirm the entry signals.

Basically, when the price reaches the Upper Median Line (UML)/Lower Median Line (LML), the RSI enters the overbought/oversold area. When the RSI leaves the overbought or oversold area, it means that the price is now moving back to the opposite direction, which is towards the Median Line (ML). If you would like to know more about the RSI and its various uses, please check out my previous report HERE.

Below is the Andrews' Pitchfork & RSI System.



Currency Pair: EURUSD & GBPUSD

Timeframes:

I usually use the **1 Hour** timeframe to draw the Andrews' Pitchfork then go to the **15 Minute** or **30 Minute** timeframe to enter my trades.

Indicators:

Andrews' Pitchfork
Infocator (Fractal Count 15)
Relative Strength Index (Period 3, Applied to Close)

Rules:

Below are the Buy Trade Rules for my system. The exact opposite will hold true for Sell trade rules and will not be discussed.

1. On the 1 Hour chart, find 3 appropriate pivot points indicated by the Infocator, and apply the Andrews' Pitchfork. Add a Sliding Parallel Line (SPL) if necessary.

   The guidelines for drawing an Andrews' Pitchfork can be found on an earlier section, *Drawing the Pitchfork* (page 9). An SPL may be needed to accommodate the price's actual pivot points in the duration of the trend. Guidelines on drawing the SPL can be found under *Sliding Parallel Lines* (page 12).

2. On the 15 Minute or 30 Minute chart, wait for the price to reach the Lower Median Line (LML), or the Sliding Parallel Line (SPL) below the Median Line (ML) if any.

   The LML and the SPL serve as support levels. When price reaches any of these levels, the price tends to bounce away from it and moves toward the Median Line (ML).

3. The RSI is under the 30 level and is crossing back above it. Enter a buy trade at the close of the candle as soon as the RSI crosses back above the 30 level.

   Because of its 3 period setting, the RSI shall have crossed under the 30 level (oversold level) by the time price touched the Lower Median Line (LML). The main purpose of the RSI is to determine when the price has begun to go up and leaves the oversold area. This will serve as confirmation that indeed, the price has bounced off from the LML and is now moving towards the Median Line (ML).

4. Set the stop loss level below the most recent swing low.

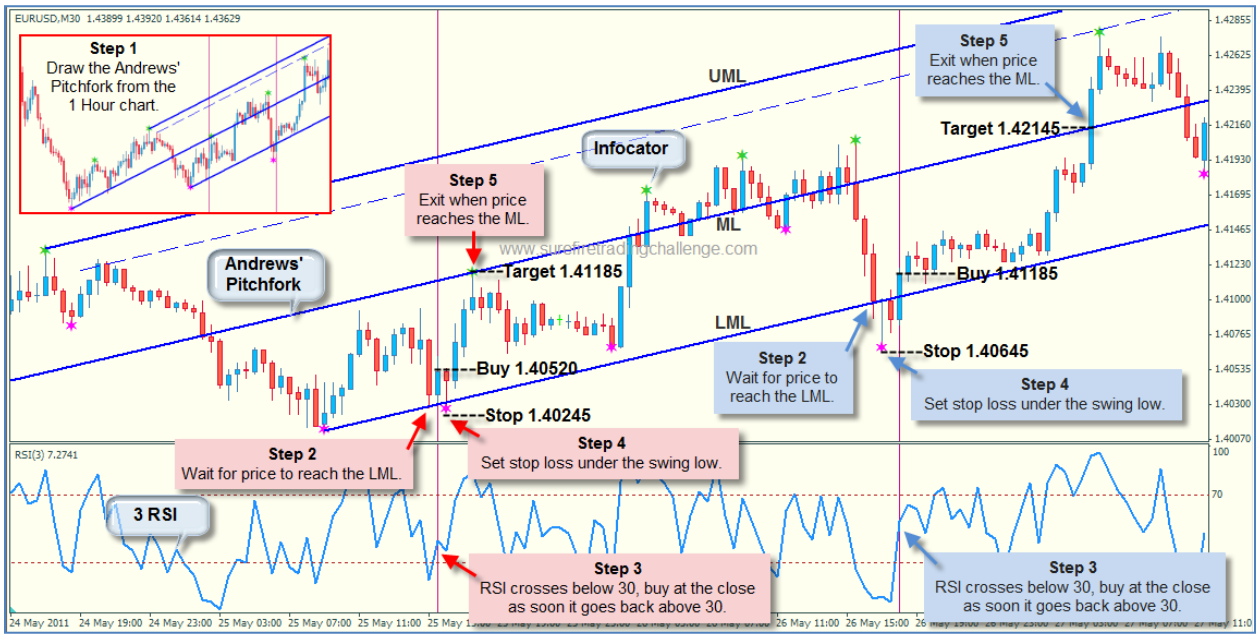
   In case price goes against the expected direction, the stop is sufficient to protect the account from unnecessary losses.

5. Exit the trade in profit when the price touches the Median Line (ML).

   Price tends to gravitate towards the Median Line (ML), which makes it an ideal target to exit the trade in profit.

Examples

Buy Trade Example 1 & 2:



After I drew the Andrews' Pitchfork on the EURUSD 1 Hour chart, I shifted to the 30 Minute chart to look for trade setups. There are two buy trade examples on the chart above.

As you can see, the price touched the Lower Median Line (LML) and started to go up. Simultaneously, the RSI crossed under the 30 level and as soon it crossed back above the line and the candle closed, I entered the first buy trade at 1.40520.

I then set the stop loss level below the most recent swing low, which was at 1.40245. I went on to monitor the trade. As soon as price touched the Median Line (ML) at 1.41185, I exited the trade and got out with more than $55 or 27 pips.

Using the same pitchfork, I saw that the price touched the LML once again. The RSI had been below the 30 level, so I waited for it to cross above that level and entered a buy trade as soon as the candle closed at 1.41185.

Once again, I set the stop loss level under the most recent swing low, at 1.40645. The price began to range but eventually went up to reach the ML at 1.42145, where I exited my trade with about $192 or 96 pips.

Buy Trade Example 3:

As soon as I have drawn the pitchfork in the GBPUSD 1 Hour timeframe, I shifted to the 30 Minute timeframe to find trade setups. When the price touched the Lower Median Line (LML), I checked on the RSI and found that it had already crossed under the 30 level.

I then waited for the RSI to cross above the 30 level then entered a buy trade at the close of the candle, at 1.61870. I set the stop loss level under the most recent swing low, at 1.61640. The price continued to go up and reached the ML. I then exited the trade at 1.62455 with $117 or 59 pips.

Video

Watch this video to see how I use the Andrews' Pitchfork and the RSI to trade.

Comments/Notes/Conclusion

Identifying support and resistance levels have been proven over time to help traders become more profitable. This is because it gives traders a good idea of the probable price movements, thereby improving trading decisions.

Although there are many different ways of identifying support and resistance levels (or areas), the Andrews' Pitchfork is one of a few that can provide trading opportunities both in the direction of the trend or countering the trend. However, if you'd like to minimize your losses, it's best to trade with the trend.

As I have previously mentioned, there's always a degree of subjectivity when using the pitchfork. There are other ways in interpreting and/or using it, which haven't been included in this report, so I suggest that you continue learning and gaining more experience.

The best thing about the Andrews' Pitchfork is that it helps traders identify appropriate swings to trade at. Since trades are basically entered along support and resistance areas provided by the channel it creates, traders are able to avoid bad trade setups caused by choppy or ranging market movement.

When used with a combination of complimentary and confirmatory technical analysis tools, plus appropriate money management, the Andrews' Pitchfork can definitely help improve your trading results.

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