Getting the most out of the Alfano lap timer Part 1.

The Alfano gathers a lot of information that everyday kart either dismisses or simply just doesn't know what to do with. This article is going to give some more insight on getting the most out the data that is acquired during a session.

Lap times

Most tracks in Australia have multiple timing strips, creating split times the Alfano records during a lap. Split lap times are commonly overlooked by the pit crew or racer focusing on the end goal or overall lap time. Knowing where the timing strips are on the track can be very beneficial in making decisions on kart setup even choosing gearing for that particular track.

Example let's say you are looking at a split in a tight turn, you make a setup change and that particular split reduces your time but subsequently the other split times stay the same, overall giving you a faster lap you know you are heading in the right direction for that particular setup.

The same goes the other way, you make a change to the kart and that particular split time increases with no change to the other split times, you will know what area to focus on first, helping to avoid those scratching your head moments.

Looking at split times can help you select the right gearing. For example reducing you rear sprocket until your tight turn split increases and you start seeing the split on your straights decrease. This doesn't always give you a faster overall lap time, it may give you better split time in an area that is more beneficial for passing moves i.e. on straights or you want a quicker time in the tight section of the track for a specific passing corner.

Rpm

All engines produce maximum engine power at different rpm and torque ranges; your engine builder should be able to give you a rough maximum rpm for your engine. Finding the best gearing for a particular track is not always looking at your maximum rpm, the Aflano also records the lower rpm. Example keep reducing gear ratio till you see the lower rpm reduce, sometimes your higher rpm can be affected on a race day with other factors i.e. head wind. This will ensure you are still getting the maximum amount of corner speed.

Speed

Maximum and minimum track speed can be done in either of two modes on the Alfano, theoretical or live with a speed sensor, both work just as good but for theoretical keep in mind it uses a calculation and when you raise or lower your tyre pressure this will affect the wheel circumference also changing gearing will affect this calculation.

This is also a great function to help when selecting the correct gearing keeping the right balance with corner speed and straight line speed. It is as simple as increasing the gear ratio until you see a drop of maximum speed, this will give you the perfect balance of maximum top speed and maximum of the lowest speed.