

# Stafford RCMCC The GT-12 Class



This class is based on the principals of close, fair racing. This class is an ideal entry level class for the driver who wishes to try his or her hand at RC racing for the first time, but the rules for the class will also cater for the more competent driver who wishes to take their racing further.

The performance of each car is more dependent on driver ability and good setup than on budget.

The guidance outlined below may not necessarily cover every single aspect of car available but will give you a good idea to costs and assist with choosing the correct equipment required to run this class

At Stafford RCMCC we run to the current BRCA rules for the GT12 class which can be found here <https://www.brca.org/gt-circuit-documents/4-archive/1316-brca-gt12-technical-rules-v4-0>

## CHASSIS / KITS

There are several manufacturers of GT12 chassis

These are the latest chassis offered by the manufactures but there's plenty of pervious chassis's available second hand and offer good value to some just starting up as they can come with electrics and spares

Below is a list of the current crop of chassis offered by the manufacturers

### Schumacher – [www.racing-cars.com](http://www.racing-cars.com)

Atom 2 C/F GT12 kit – K184

Atom 2 S2 GT12 kit – K179



Supastox ATOM pro Kit – K164



### Zen-Racing – [www.zen-racing.co.uk](http://www.zen-racing.co.uk)

RXGT12 Race Kit – ZENK126 – RRP£174.99

RXGT12 Race Kit with Carbon Chassis – ZENK128 – RRP£174.99



**Mardave** – [www.mardave.co.uk](http://www.mardave.co.uk)

Venom Pulsar Carbon kit – RRP£199.95

Venom Pulsar GRP Kit – RRP£169.95



All the above kits are sold solely in kit form and will require building and all other items required to race such as electrics, radio gear, tyres and bodyshell

### Racers Tip

*Visit your local track to see what the popular chassis is being used, that way there's plenty of advice on setup's from the other drivers*

*Never be afraid to ask for help, we are a friendly bunch*

## **Electrics**

The electrical components required are available from any good RC model shop

The GT12 class runs with the following types of electrics

1s ESC (electronic speed controller)

13.5t Brushless motor

1s Lipo batteries

1/12<sup>th</sup> size servo

Also required but not specific to GT12 is

Radio Gear – Transmitter and receiver

Battery Charger – must be a lipo specific charger capable of charging 1s lipo batteries

Below is by no means a comprehensive list but will give you a good idea of cost of the various bits, it's recommended that you buy the best you can afford so that as you progress and develop your skills you don't need to keep upgrading your kit

## ESC

There are several makes of ESC but Hobbywing seem to be the most popular and they offer a few 1s ESC's for example

XERUN XR10 Pro - Stock Spec 1s - £114.94



XERUN XR10 Pro – 1s - £189.99



A good entry level ESC would be the  
Pace 60R v2 Brushless ESC 1s/2s - £59.99



### Racers tip

*As always there's plenty of second-hand kit about, but please remember that you need a 1s ESC*

## Motor

There are plenty of motors currently on the market and vary in price but are capped at £89.99, only 13.5t motors are permitted in the GT12 class BRCA rules

The current track favourites seem to be Hobbywing G3R, Trinity xFactor and Surpass V5R



### Racers tip

*Having the latest, fastest motor doesn't mean that you'll be the fastest on track, not crashing and having good racing lines is the key to victory*

## 1s Lipo Battery and Lipo Charger

Again, there's plenty of batteries currently on the market and prices vary from make to make, you will need a minimum of 2 batteries to complete a typical race night of 3 heats and 1 final

Some of the popular makes are Intellect, Arrowmax, LRP

Specs of the batteries vary but they must be 1s (single cell) batteries of 3.7v or 3.8v, the mAh (milliamps per hour) relates to the capacity of the battery and ideally should be above 6000mAh



You will also need a LIPO sack to charge your batteries in, this rule must be followed at all race events



There's plenty of chargers available on the market and range in price starting around £40 for a good entry level all the way to £300 or more for the top end iChargers. Most clubs have a max amp rating that you're allowed to charge at so most entry level chargers are fine for club racing, just make sure that the charger you purchase is capable of charging 1s batteries

Racers tip

*Lipo batteries can be dangerous if miss treated all ways follow the manufacturer's instructions when charging and storing your batteries*

**1/12<sup>th</sup> size servo's**

Again, there's plenty of servo's currently on the market and prices vary from make to make, You must make sure that the servo you purchase is suitable for 1/12<sup>th</sup> cars

A good starter servo would be the CORE RC 5008 12<sup>th</sup> servo – CR194 - £35.99



Ko Propo and Sanwa for example are the more top end spec servo's and can cost up to £100, but are not required for club racing

Racers Tip

*Always run a servo saver to avoid expensive servo damage, make sure you purchase the*

*correct spline fitting for your servo, these are either 25t*



or



23t

## Radio Gear

Transmitters come in 2 types

Stick Type



And Wheel type



All new transmitters are 2.4ghz and come with 1 receiver

There are 3 main makes Sanwa, Futaba and Ko Propo

Prices vary massively from around £80 for the entry level transmitters up to £650 for the very top end equipment

Ideally you want to get a transmitter that has all the needed adjustments that as you progress you will start to use these settings

Popular stick transmitter is the Futaba 4GRS and TPV3 for the wheel type transmitter

### Racers Tip

*This is 1 area where spending that bit more on a top end transmitter is very worthwhile, as they will last a long time and not require upgrading for many years*

*Bargains can be had on the second-hand market*

## Tyres

So that's the chassis and electrics sorted, so now we need to look at tyres

Foam tyres are used on GT12 cars and come pre mounted on plastic wheels, there are 2 main makes that are used, these are "CONTACT RC" and "JFT", these are available from all good RC shops and retail between £4.99 to £7.99 a pair

The foam comes in various hardness' known as shore rating, the higher the shore rating and harder the foam and a lower shore rating equals a softer foam

The softer the foam the more grip the tyre has, but this also means higher wear rates of the foam

Also, there are different foam types such as, A Foam, S Foam, T Foam amongst others, again the types of foam offer different levels of grip and wear

Tyre additive is also used on foam tyres, this softens the foam and provides more grip, there's a strict additive list that all club members have to adhere to and this can be found on the club website

Another aspect of the tyres is their size, the foam can be trued down to any size using a tyre truer, but this really is getting into advanced racing and not required if your just starting out on your GT12 journey (A tyre truing guide will be available soon)

Racers tip

*The following tyres and additive are most commonly used by racers at the club so is a good starting point for any racer*

CONTACT RC  
GT12 REAR T FOAM 35SH - 46MM  
Item No. JG35RT



CONTACT RC  
GT12-1/12 FRONT T FOAM 35SH - 44MM  
Item No. JT2-35FT



GT12 JFT "S" FOAM 35 SHORE  
[JFT-0535R]



LMP/GT12 JFT "S" FOAM MOUNTED 35 SHORE FRONT  
[JFT-0435F]



SPIDER GRIP BLUE STRONG 125ML - £15.99  
[SGBS-125]



## Body Shells

Now we are part that give us all the chance to show off our creative side, body shells and painting them

All body shells are supplied in clear lexan and require cutting out and painting (Guides on both these processes are in production, but there's plenty of how to videos on the net)

So let's just focus on the body itself, there are many manufacturers of GT12 shells which are based loosely on actual GT cars and their design features are heavily based around aerodynamic performance and each shell can give slightly different handling characteristics

Shells normally sell for around £16

Below are some examples of shells available



Kamtec Ascari 1/12 GT12 - available from [www.kamtec.co.uk](http://www.kamtec.co.uk)

This is an excellent shell for the beginner as it offers very neutral handling



ZEN-RACING PHAT BODIES GTM GT12 LIGHTWEIGHT  
[PBG02-L]



MONTECH ITALIA GT12 BODY

Item No. MT019015



BITTYDESIGN AGATA GT12 BODY

[BD-GT12-AGT]

Phat Bodies, Montech, Bittydesign shells are more of a race shell and are all used by the racers at the club, it can bit of trial and error to find a shell design that suits your driving style

## Racing and Chassis setup

You have your chassis all built, kitted out with electrics, tyres, nicely painted shell and you're ready to hit the track and start racing, this is where the fun starts and you will start to honing your driving and chassis setup skills

Here's some pointers which hopefully will get you the most enjoyment out of the sport and improving your results

When you build the chassis make sure you follow the build manual and build it to kit settings, as the manufacturer's kit setup is a very good starting point for all carpet types used, ensure that all moving parts move freely and screws are tight etc, as binding parts and loose screws will have a detrimental effect on the car's handling.

It's always good to start with a slower car (either by turning down the motor timing or full throttle end point on the transmitter) so that you can get used to how the car handles and to get used to the track layout, crashing at every corner can not only damage the car but will also knock your confidence and reduce your enjoyment, the key here is to gradually build you the car's speed as you improve your driving skills before you even start to think making chassis setup changes

When you come to setup changes again the instruction manual gives good information on what changes to make and what each change does in way of handling etc, also there's plenty of setup sheets (normally found on the manufacturer's website) from team drivers, and there's the racers at the club that are always willing to lend a hand and give advice and tips (never be afraid to ask)

1 thing to remember is to only make 1 change at a time, go out on track see if the change you've made has the desired effect, it may make the car better or worse that way you can revert back and try something else

Also make notes (you can never make too many notes) record your setup on the supplied blank setup sheets in the manual, especially when you go to different tracks or if the track layout changes from week to week at the club, these are invaluable as you'll have a setup that works when you visit these tracks again

You will also need some additional parts like spring sets, different camber straps and a selection of damper oils (7k cst, 12k cst, 30k cst and 50k cst should cover most conditions)

Tyre prep also plays a massive part in handling, so experiment with additive timing and the amount to apply

The rears will need to have additive applied across the whole width of the tyre for as long as possible, around 30 minutes if you have the time between heats

The fronts start with applying additive to the inside edge, half width of the tyre for about 5 minutes and wipe all tyres about 5 minutes before you race starts to let them air dry a little, if you start the race with wet tyres the car will have very little grip for the first few laps

Hopefully these tips will help you get started, but experimenting and taking notes is the way to learn what setups etc work for your driving style



