

Connections for ClubSpec 4S Receiver Board  
(Programmable)

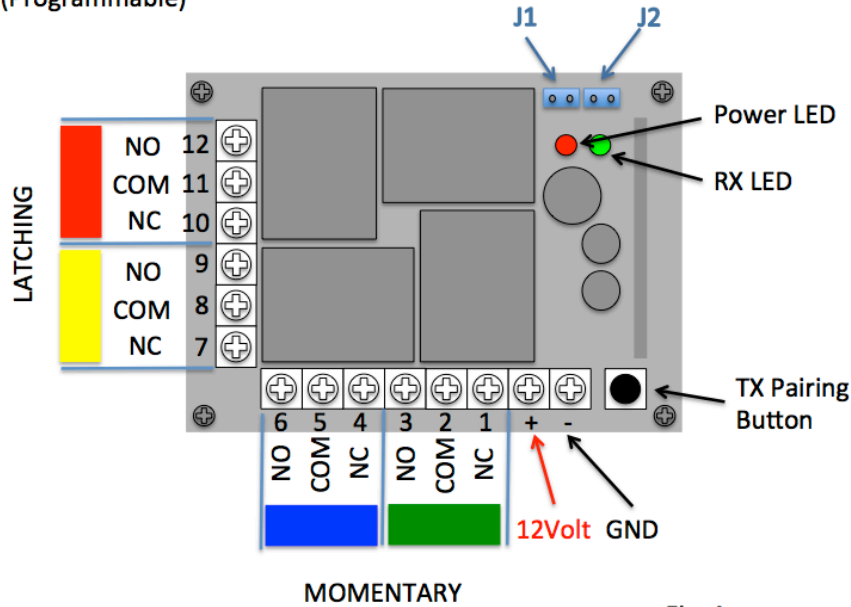


Fig. A



**CLUB SPEC 4S**

**INSTRUCTIONS  
FOR USE**

DETACH THIS SECTION AND RETURN TO SUMMIT TECHNOLOGIES FOR WARRANTY PURPOSES

**OWNER DETAILS**

Full Name \_\_\_\_\_  
 Address 1 \_\_\_\_\_  
 Address 2 \_\_\_\_\_  
 Address 3 \_\_\_\_\_  
 Address 4 \_\_\_\_\_  
 POSTCODE \_\_\_\_\_  
 CONTACT TELEPHONE NUMBER (DAY) \_\_\_\_\_  
 SERIAL NUMBER \_\_\_\_\_



**FITTER DETAILS**

COMPANY \_\_\_\_\_  
 Address 1 \_\_\_\_\_  
 Address 2 \_\_\_\_\_  
 POSTCODE \_\_\_\_\_  
 CONTACT TELEPHONE NUMBER (DAY) \_\_\_\_\_

RETURN TO SUMMIT TECHNOLOGIES AT  
**SUMMIT TECHNOLOGIES**  
 38 CORNHILL AVENUE  
 HOCKLEY, ESSEX, S55 5BZ  
 INFO@SUMMITTECH.CO.UK

## Foreword by the Director of Summit Technologies, Lee McCormack.

Lee McCormack is a Motorsport Racer in the United Kingdom and creator of the ClubSpec 4S system.



"Firstly, many thanks for purchasing the ClubSpec 4S Wireless Control System for your vehicle. The ClubSpec 4S has been designed, built and developed by Summit Technologies in the UK using specialist parts and technologies that conform to British Standards.

Connecting your steering wheel buttons to your race cars peripherals has always been a problem due to the connectivity required. I have tried numerous coiled cables and connections in the past but I needed something reliable and completely wireless – So I designed my own wire free system from the ground up.

The ClubSpec 4S is the culmination of all of the development and testing that has taken place to come up with a professional grade, hard wearing, totally reliable control system for removing the need to have any hard wiring from your steering wheel controls to your race cars peripherals.

I hope you enjoy using the system as much as I have over the years and once fitted, you can

enjoy the benefits that this system brings for many years. The difficult part is choosing what you want each button to do !"

## The ClubSpec 4S - Overview

In the box you will find two parts to the system, the Button Plate and Transmitter assembly (with a battery already installed) and the 12 volt Receiver Module.

### The Button Plate and Transmitter Assembly

You will have noticed that the entire button plate is made from a 3.2mm FR4 (RoHS Compliant) custom circuit board. This not only gives you an extremely hard wearing button plate, it integrates the wiring right into the design. FR4 is a composite material comprised of woven fiberglass cloth with an epoxy resin binder that is flame resistant (self extinguishing). It also has impressive water resistant characteristics so it's ideal for open cockpit cars.

Although the ClubSpec 4S is a 4 channel system, there are 5 buttons on the plate. The 5<sup>th</sup> Button (BLACK) is used to start and stop the X-Monitor SP1 timer. **You will find the instructions for the SP1 separately in the box.** The push buttons have been soldered to the board and bonded in, complete with protecting caps. There are no user serviceable parts on the button plate, apart from battery replacement for either the SP1 or the transmitter. Instructions for replacing the SP1 battery are in the associated instructions.

The buttons have been specifically selected to provide the right level of tactile responsiveness (Positive Press) as well as being IP65 Rated for water ingress. Again, a great choice when using this system in an open cockpit race car.

The transmitter electronics are completely encased in resin. This ensures that no moisture can affect the components should your steering wheel or controls be exposed to a typical British summer !

The transmission system uses similar technology to that of a remote door locking for a regular passenger car, although we have 4 discrete channels. It uses the 315mhz band of license free radio waves to communicate and each transmitter is paired exclusively with one receiver during the manufacturing process. This ensures that no two systems are the same and you won't be flashing your competitors lights when you press your own button.

The typical range of transmission is in excess of 100ft LoS, so the receiver module can happily be fitted anywhere inside the vehicle. Ideally, up under the dashboard on the occupant side of the firewall.

## Transmitter Battery Replacement

Replacing the battery for the transmitter is design to be easy and can be performed by the consumer. Should the battery need replacing, hold the transmitter in one hand, while removing each of the 2 screws holding the transmitter to the rear of the plate with the other hand - the transmitter will drop away.

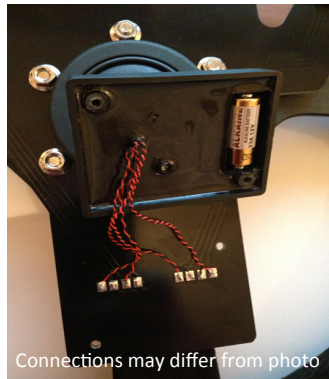
**BE CAREFUL NOT TO TUG OR PULL ON ANY OF THE WIRES EXPOSED.**

Replace the battery with one of the same type (A 12 volt 23A, also known as A23 or MN21) paying particular attention to insert the new battery with the correct way round (The spring will ALWAYS be the negative end of the battery).

Once the battery is replaced, align the transmitter screw holes with the button plate, ensure that you **do NOT trap any wires** as you tighten the unit again.

The battery should last a good while, but as with any battery left in the cold for a long time, it will eventually drain and need replacing. It is suggested to have a spare one available in your tool bag just to be on the safe side. They are not an expensive item.

You can also check the condition of the battery installed by checking the brightness of the LED inside the transmitter housing, using the removal procedure described above. A dim LED would suggest a replacement is necessary.



## IMPORTANT WARRANTY INFORMATION

We provide two types of warranty for your ClubSpec 4S;

**30 Day Return to Base Warranty** from the date of purchase

or

**12 Months from the date of purchase** Warranty

**AS WITH ANY AFTERMARKET ITEM FOR MOTORSPORT, WE RECOMMEND THAT THE CLUBSPEC 4S IS FITTED BY A PROFESSIONAL MOTORSPORT PREPARATION CENTRE OR QUALIFIED VEHICLE ELECTRICIAN.**

Only once a qualified fitter has signed and stamped the last page of this document, and the completed form is returned to us on the address shown will your remaining 12 month warranty be in force.

If the item is fitted by the consumer, only the 30 day Return to Base warranty will be in effect. Once expired, no further warranty can be implied or purchased separately.

### 30 DAY RETURN TO BASE WARRANTY

The **30 day Return to Base Warranty** is in effect from the date of purchase. Should the product fail in normal use (with no abuse and no customer changes or modifications to the component) within the first 30 days of ownership, then we will repair or replace it (at our option) at no charge to you except for your cost of shipping it to us. Foreign orders must pay shipping, handling, and any import or export related expenses for both directions of the shipment. For UK orders, there are no shipping charges for the shipment of the repaired product to the customer on warranted product repairs if ground shipping is selected. Please contact Summit Technologies on the details below should you wish to invoke the 30 Day Return to Base Warranty. Your Statutory Rights are in no way affected by means of this warranty.

### 12 MONTH WARRANTY

The **12 Month Warranty** is in effect from the date of purchase once a qualified fitter has signed and stamped the last page of this document, and the completed form is returned to us on the address shown. Should the product fail in normal use (with no abuse and no customer changes or modifications to the component) within 12 Months of ownership, then we will repair or replace it (at our option) at no charge to you except for your cost of shipping it to us. Foreign orders must pay shipping, handling, and any import or export related expenses for both directions of the shipment. For UK orders, there are no shipping charges for the shipment of the repaired product to the customer on warranted product repairs if ground shipping is selected. Please contact Summit Technologies on the details below should you wish to invoke the 12 Month Warranty. Your Statutory Rights are in no way affected by means of this warranty.

## Fitting Information

The ClubSpec 4S receiver Unit is programmable by the fitter for enabling the various relay states. The relay states are 1. ALL MOMENTARY, 2. ALL LATCHING or 3. TWO LATCHING and TWO MOMENTARY. By default, the receiver has been set to state 3. Please refer to the circuit diagram [FIG.A] when changing the settings. You will need to power cycle the receiver to effect the new settings.

Jumper on Pins 1 & 2 ONLY = ALL LATCHING (J1)

Jumper on Pins 3 & 4 ONLY = ALL MOMENTARY (J2)

Jumper on Pins 1,2,3 & 4 = TWO LATCHING and TWO MOMENTARY (DEFAULT) – (J1 and J2)

Your ClubSpec 4S has already been paired and tested at Summit Technologies. However, should your transmitter need pairing with your receiver again, this can be accomplished with the use of the TX Pairing Button. [FIG.A]

**To CLEAR any existing pairing from the factory**

Press and HOLD the button until a continuous set of flashes are seen from the RX LED. This will clear any current pairing to your transmitter.

**To PAIR your transmitter**

Press the TX Pairing button once, then press any button on your transmitter. Once the 2 have paired, the RX LED will flash twice to confirm the pairing. The pairing will not be lost should any power be lost as it is programmed on the boards EPROM.