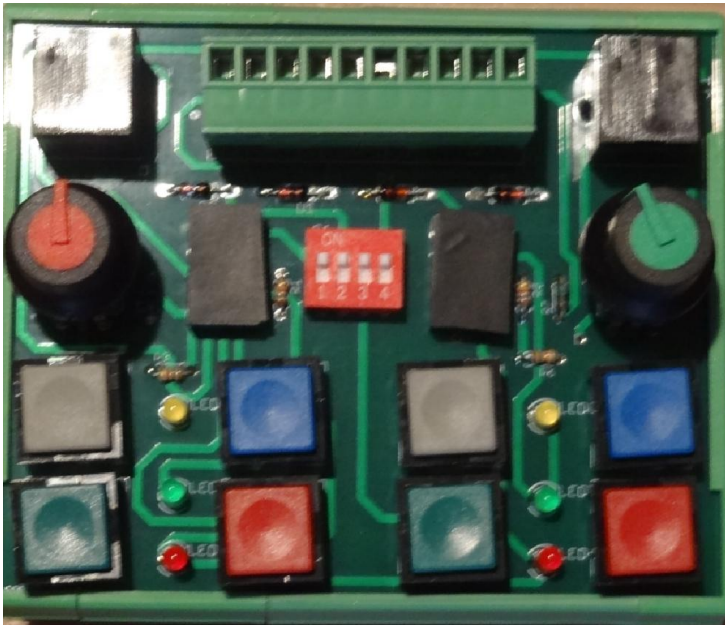


## Dual Speed Controller



Prototype Dual Speed Controller

Unlike the Single Speed Controller, this one has 2 controllers but also extra connections to further automate the Ghost car.

With this controller (up to 3 pieces), you can send any car down the racetrack at a fixed speed. Besides the speed, a switch "Switch" push button can be operated (or if the car is stationary the light). The car can also be stopped immediately ("Stop" push button) or started again with the "Go" push button (it then continues driving at the set fixed speed).

There is also a "DRS" push button to go directly to maximum speed. (As long as this button is pressed, the maximum speed is active).

The controller is connected with the supplied cable (2x 1 metre) to the dedicated RJ11 sockets of the CU 30352, i.e. to 1, 2, 5 or 6.



3 and 4 are only available via the special adapter 30348. (connection to 1, with 1, 3 and 4 then available via 30348)



### Combined use with wireless hand controllers:

If wireless hand controllers are also used, they will only work if no wired controller is connected.

## Example 1:

A receiver is connected to port 1, set to controller with ID-1 and ID2, Ports 5 and 6 can be used for a Speed Controller, but port 2 cannot.

## Example 2:

You have adapter 30348 connected to port 1, a receiver is connected to port 2. A Speed Controller can be connected to ports 1, 3 and 4 as can ports 5 and 6. A hand controller can then be connected to ID-2

With this method, you can still race 6 cars alone.

In addition to this connection, this controller can be connected (10-pin connector) to an external system, think relay outputs, where the following options are available:

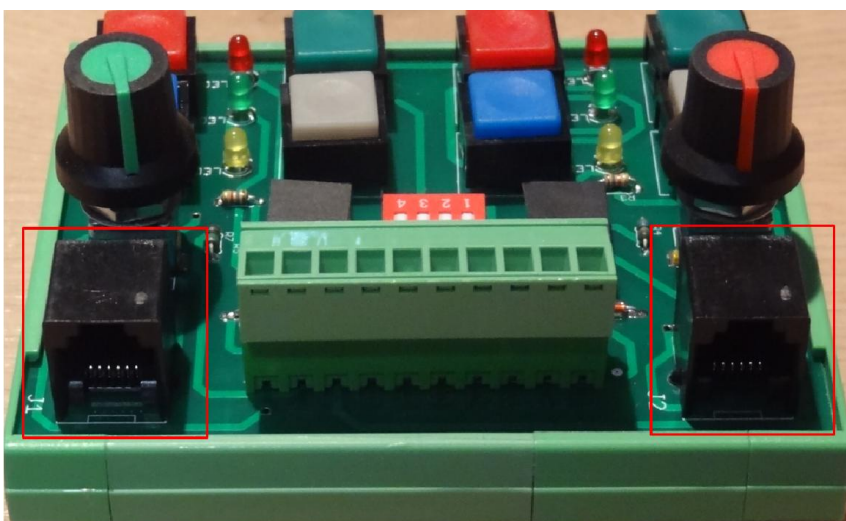
- 1) Stopping each car separately
- 2) Activating the "Switch" function separately for each car
- 3) Each car separately activating the "DRS" function
- 4) Starting all cars simultaneously

If these relays are connected to a computer (e.g. with Cockpit-XP and a USB-Box), these relays can be switched via the USB-Box.

Sensors in the race track "Checklane" or other sensors that recognise the car's ID can then activate the relay via sensors using AddOn in Cockpit-XP. De-activation of the relay can be by a 2nd sensor or on a time basis. With this control, the "DRS" function can be activated, causing the car to drive at full speed at the beginning of the straight. Using this function, the race against a Ghost car becomes even more combative.

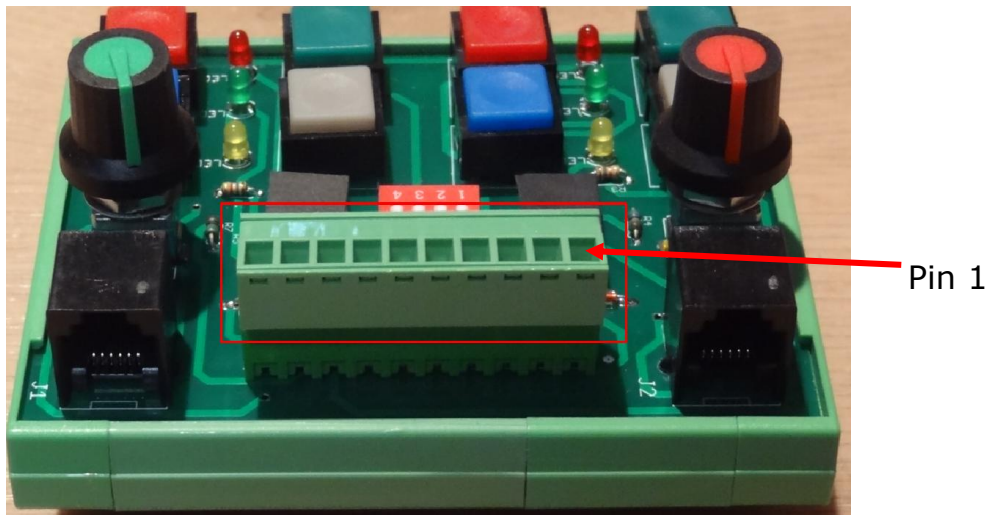
## Connections:

The connections to the CU 30352 are via an RJ11 cable (supplied 2x 1 metre). The other connections are via a screw connector.



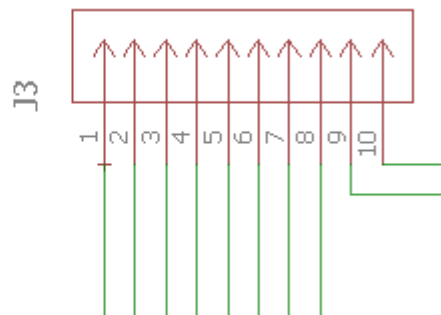
The RJ11 connector is connected to the CU 30352 and/or Adapter 30348

## Connection of other external signals:



### From right to left

- Pin 1 = Go
- Pin 2 = Stop-1
- Pin 3 = Stop-2
- Pin 4 = Switch-1
- Pin 5 = Switch-2
- Pin 6 = massa
- pin 7 - 8 = Boost-1
- pin 9 - 10 = Boost-2



As soon as pin 1 is connected to pin 6, all connected controllers (regardless of the position of the Dipswitch) will be set to the "Go" position. This could be done, for example, via an output of a USB-Box, as soon as the start traffic light turns **green**.

Pins 2 and 3 can be switched separately and could be switched via an output of the USB-Box as soon as the race is over and the respective car crosses the start/finish line.

Pins 4 and 5 could be used to remotely switch a switch from the car in question

Pin 7-8 would also be activated by an output of the USB-Box, as soon as the Checklane passes, e.g. at the beginning of the straight, after some seconds (mS) this contact is switched off again. This way, the "Ghost" car still gets a dynamic speed, making it even more challenging to keep up with it.

The same then applies to pins 9-10.

**Pin 1...5 are switched by connecting it to Pin 6**

**Pins 7-8 must be connected by a potential contact**

**Pin 9-10 must be jumpered by a potential contact**

## Leds:

**Yellow** = Controller is connected (Power present)

**Red** = Controller is in "Stop" (car is not moving)

**Green** = Controller is in "Go" (car drives at set speed)

## Operation push buttons:

**Grey** = Light on/off and or switch activate

**Blue** = DRS function

**Green** = Activate Go

**Red** = Activate stop

## Rotary button:

This is available in 6 colours: (specify 2 colours when ordering!)

- Red

- Yellow

- Blue

- Green

- White

- grey

## Dipswitch:

Sets different preference settings.

**S1** = Start of controller left is passed on to the other connected controllers.

**S2** = Stop of controller left is transferred to the other connected controllers (jumper between pins 2 and 3 required).

**S3** = Start of controller right is transferred to the other connected controllers.

**S4** = Stop of controller right is transmitted to the other connected controllers (interconnection between pin 2 and 3 necessary).

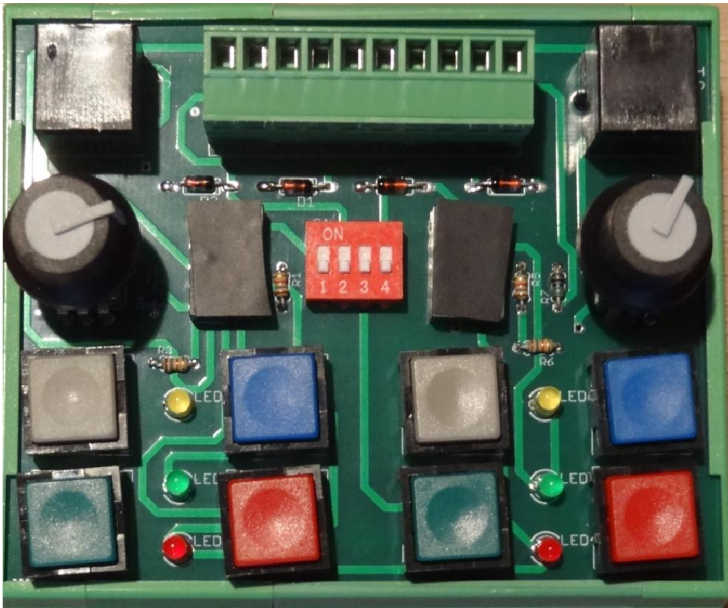
## Implementation:

The controller is in a housing, which can be mounted on a DIN rail.

The top side is completely open.

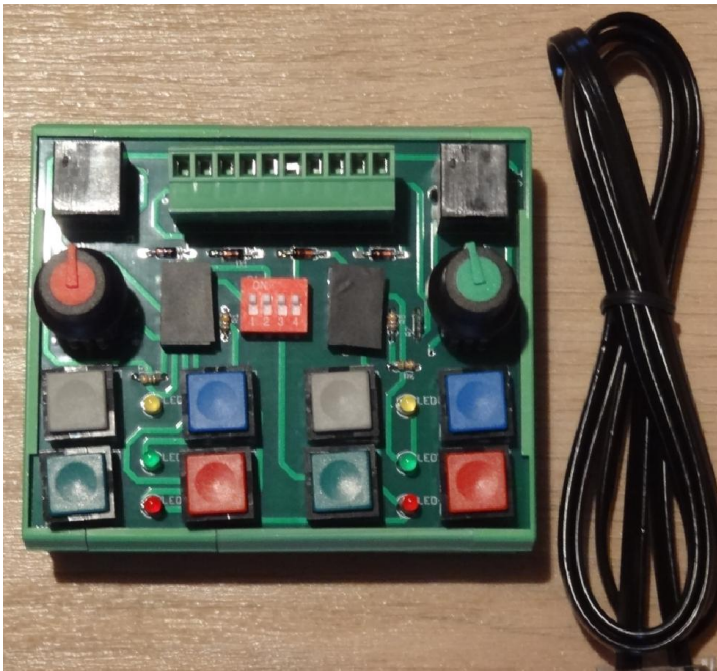


**Dimensions:**



W x H X D (mm).  
90 X 78 X 45

**Scope of delivery:**



1x Dual Speed Control  
2x RJ11 cable 1 mtr.

**Connection to CU 30352 and/or 30348 adapter**

This connector is actually intended for an Asymmetrical locking RJ11 plug, however the cable supplied does not have this. Nevertheless, it fits and is still sufficiently clamped.

**Important note:**

Use of this controller is entirely at your own risk, damage to Carrera products or consequential damage to other used products are not covered by any warranty. The controller has a standard 2-year warranty for the operation of the product under normal use. The controller has only been tested on different CU 30352 and adapter 30348 from Carrera, use in combinations is entirely at your own risk.

If you make your own modifications/modifications, all warranty is voided.