Features and operating guide

Brake control:
(Turn Clockwise to increase Braking)

- This sets the braking strength from full brakes down to a gentle braking action.
- Cars with high magnet traction, or with high natural braking effect, can still stop too fast even with this Brake set to minimum. To give brake control the Coast/HO mode can be selected so that brakes are controlled by the Coast/HO BRAKE on the middle control. (explained below)

Acceleration and Coast/HO Brake control:
(Turn Clockwise to increase acceleration in NORMAL MODE and to increase simulated Brakes in Coast/HO MODE)

- In NORMAL mode this control sets the rate of acceleration. The idea is that even though the trigger may have been snatched quickly to full throttle, the controller will only feed the power to the car at the rate set by the ACC control. This way you can prevent wasted time during snaking of the rear of car due to loss of traction as you exit a corner, or the guide lifting out of the slot with powerful motors when you have good tyre grip.
- In Coast/HO mode this control becomes a Brake Simulation adjustment for those cars that stop almost immediately even with no brakes applied. Some motors, even without high magnet attraction to the rails, also stop too quickly. The idea is that though the trigger has been released, the power only comes off at a rate set by this control. Once the controller is no longer feeding power, the normal brakes will be applied at the rate you have set under BRAKE CONTROL as above. (For these fast stopping cars this brake setting will usually be set to minimum)

Sensitivity control:
(Turn Clockwise to increase Sensitivity)

This adjusts the trigger wiper sensitivity to enable you to set the controller feel for any car or track condition. For those used to resistor controllers, it will feel as if the Ohms are adjustable from about 15 up to 70. There is a built-in CURVE control circuit which works automatically together with the sensitivity adjustment to give quick and easy settings. As the Sensitivity is turned up, so the initial start speed also rises slightly to match.

Contact Board.

The little pre-set adjustment on the right hand side of the wiper element provides an adjustment for the range of the mode selected for the Contact Board.

LAUNCH Switch :

- While pressed IN, this switch cuts the feed to the car and motor, even if the trigger is pulled. Once released the power feeds in at whatever point the trigger has been pulled to, but at the rate set by the ACCELERATION control. The idea is that your trigger is already pulled in on the start line so that all you need to do is release the switch to give you a quicker start from the line.

Trigger Return Spring Tension and Optional Throw Adjustments:

- Spring Tension: Fitted as standard. Under the Trigger is the adjustment Screw. It operates against a cam arm that pulls the return spring. Turn clockwise to increase tension and anti-clockwise to reduce it.(you can see it work through the clear handle)
- Throw Adjust: Optional Extra.Through the access hole in the rear fascia is the throw adjustment screw. This sets the position that the trigger returns to when released for braking. Turn clockwise to move the stop point further in. (you will see the trigger move as you screw it in and out) The adjustment sets the amount of travel for the trigger by moving the position of the Brake contact. The further in you set it, the higher the car start-up speed, because, as the brake releases, the trigger is already some way across the Contact board.

Power LED:

- BLUE for POSITIVE WIRED Track
  RED for NEGATIVE WIRED Track
- The LED will extinguish as the relay energises at full throttle. This provides a visual indication that full power is being delivered from the throttle to the track.

Full Power Relay:

- The relay energises as the trigger reaches maximum power. (LED extinguishes)
- A calibration adjustment on the main board is factory set to energise the relay at full throttle. This should not be adjusted unless full power reduction is required. To set it back to full power, simply set the track voltage, squeeze the trigger to maximum and then turn the preset adjustment until the relay just energises and the Power LED extinguishes.

Technical and Specifications

Wiring Colours:

- WHITE (BROWN) Power in. (Positive or Negative from the Power Supply)
- BLACK (BLUE) Output. (Power from the controller to the track)
- RED (GREEN) Brake. (Negative or Positive from the Power Supply)

Power and Current Ratings:

High Current Option: (Optional Positive or Negative Track Wiring) (Specify your preference in the notes when ordering)

- Drive stage will handle 12A stall current and around 6A running current.
- In models from 2017 the auto rest fuse is replaced with a slow blow 12A axial fuse in to reduce losses across it.

Plug-in Replacement Power Board:

1. Undo the handle casing screws and remove the casings. On the back of the main Board is the Power Drive Board.
2. Undo the 3 M2 nuts using an M4 Nut wrench and unplug the Power Board. (it will slide over the threaded sections as the 4 pins unplug from the socket.)
3. Plug in the replacement board (or the high power option) and secure it again with the 3 M2 Nuts.

Additional images on the web site for this product show the power board both in place and removed, showing the nuts and driver.

Maintenance:

- Once you feel a scratchy operation or can hear squeaking then it is advisable to apply a small amount of switch Cleaner/Lubricant (such as Servisol Super 10) to the Contact Board. This will keep it smooth, light and maintain the contact integrity
- Be sure not to bend the cable at the exit of the handle. The wiring will break from metal fatigue after a while and cause intermittent operation. Wind the cable into a gentle coil and it will last.