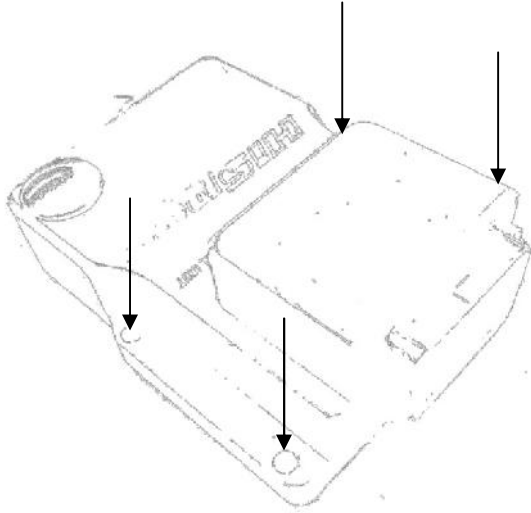




## Electronic Handbrake user guide.

### Wiring in your unit

- Find a 12 volt power source within your vehicle. It is recommended you take this from a constant fused supply in the fuse box. Usually an accessory fuse rated at 10 or 15 Amps should be available, do not use any fuses rated at over 15 Amps. This fuse MUST be live even when the vehicle is switched off. You can also draw this power directly from the battery, with an inline 15 Amp fuse.
- Use an appropriate size wire to run power to the location of your ECU's planned location. Remember to disconnect your battery before doing this, make sure the wire is well secured and will not fray or deteriorate. Use rubber grommets if the wire has to pass through body panels.
- Make a second, shorter earth wire to ground the system to the vehicle. This should be fastened to the vehicle chassis via an M6 or larger bolt, be sure it has a good connection to the vehicles chassis.
- Apply the female spade connectors supplied to the live and grounding wires securely.
- Find the two pinned power connector on your HiSpec wiring loom. Match the live supply to the red and yellow wire, and the ground supply to the black wire. Press the wires firmly into the female connector supplied. Do NOT yet plug the power supply into the wiring loom.
- You can now safely reconnect your battery if required, check there is a steady 12 volts power supply across the connector plug.
- Run the two long branches of your wiring loom through the vehicle, and through rubber grommets into the rear wheel wells of the vehicle. Secure in place.



- Bolt the HiSpec control unit into its desired location, this should be fastened down using four M4 bolts, do NOT leave the control unit floating or in a place where it will be subject to excess shocks, such as a footwell.

- Locate the application button in a location that is easily visible and comfortable to reach from the drivers seat. The switch can be passed through a 12mm hole and secured with the nut provided.
- Plug the switch, ECU and calipers into the wiring loom. You may now plug the power connectors together, the install is complete.
- It is not necessary to wire in the Optional three pin connector plug. Please see below for the functions of the connector, which can be wired if the user wishes:

Pin 1; White/green wire; Ignition control input.

Pin 2; Blue/red; Wheel speed sensor input.

Pin 3; Black/white; signal output for dashboard handbrake warning light.

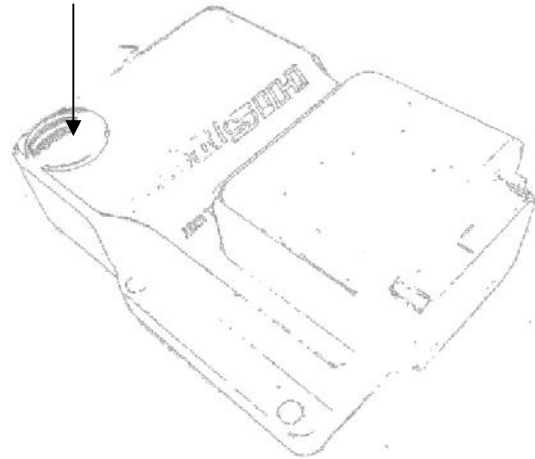
### **First use**

- When first fitting your HiSpec electronic calipers, they will be in the home position. Hold the applicator button for two seconds, the calipers should start to apply. You can determine if the unit is correctly functioning with a light whirring noise from each caliper. Once the noise disappears, the handbrake is firmly engaged.
- Release any other holding mechanisms from the car, to allow it to hold on the electronic handbrake alone. Someone should be in the vehicle ready to use the brake pedal if the calipers are not set at a high enough power to hold the vehicle.
- Try to move the vehicle, if it is unmoveable with a reasonable amount of force, the handbrake is adequately working. If the handbrake seems weak, read the Pressure adjustments section below.
- Hold the applicator button for two seconds to release the handbrake. The vehicle should now move freely.

## **Servicing discs and pads**

When it comes to replacing the vehicles discs or the electronic handbrake pads, the control unit has a specific mode which allows the pads to return to their home position, allowing disc and pad changes with ease.

- Remove the rubber bung located on the front of the control unit.
- Hold the micro-switch located under the bung until the applicator button starts to flash intermittently.
- Hold the applicator button for two seconds, the calipers should start to return back to their home position.
- Once the calipers have reached their home position, you may remove the caliper from the rotor. Read the section below, based on what calipers you have ordered from HiSpec motorsport.



## **Electronic spot calipers**

- Undo the two M10 bolts located in the rear of the caliper, this will allow the caliper to release from the vehicle.
- Un-clip the Bosch connector plug from the secured wiring loom in the vehicle.
- It is recommended that you return your calipers to HiSpec motorsport for a pad change, however it is possible to do at home.
- Remove the two M4 bolts from the centre of the brake pads, these use tamper proof torque head bolts.
- Remove the pads from the caliper, and replace with the new items. Be careful to place the pads in the correct way, one pad will have an extra locator hole machined into it, this fits in the rear, or drive side of the caliper.
- Re-tighten the caliper retaining bolts until the bolts are tight and there is no movement in the pads.
- Re-fit the calipers to the vehicle securely.
- plug the Bosch connector back into the wiring loom and secure in place.

### **Electronic sliding calipers**

- Remove the two R-clips located behind the inboard brake pad.
- Remove the two pad retaining pins. This will allow the pads to slide out of the calipers.
- Replace the brake pads, retaining pins and R-clips into the caliper.
- To remove the caliper for disc changes, unbolt the two M10 bolts, located in the rear of the caliper. For the radial caliper you will need to remove the caliper fromn the chassis, see below.
  
- To release the caliper from the chassis, remove the two M8 grub screws located in the upper rear of the caliper.
- Un-clip the Bosch connector plug from the secured wiring loom in the vehicle.
- Using a small screwdriver, press the slide pins from the caliper via the access holes located in the upper front face of the caliper.
- Slide the caliper from the chassis. This will allow access to the chassis bolts on the radial fitment caliper.
  
- Once the replacement discs are fitted, bolt the caliper back in place securely and reconnect the Bosch connector plug.
- Apply grease to the slide pins before re-inserting into the caliper when necessary.
- Re-tighten the M8 grub screws until they stop spinning freely, then tighten by 1/2 turn.