Normal operation:

Operate button: Push and hold to apply or release the EPB. The last state of the EPB is remembered if power is removed from the controller e.g. the vehicle battery is disconnected.

Warning lamp: Illuminated when EPB applied, extinguished when EPB released. If during normal operation the unit detects a fault, then the warning lamp will 'double-blink' every few seconds until either a new EPB operation is performed, or the diagnostic code is read via the Service button.

The 'double-blink' is opposite to the warning lamp state i.e. if the lamp is on (because the EPB is applied) then it will blink off. If the lamp is off (EPB not applied) then the lamp will blink on.

Setup mode:

From December 2019 (Unit 120 onward) there is a setup mode that allows configuration of the Brake and Ignition release interlocks. The Brake & Ignition release interlocks prevent handbrake release if the Brake pedal is not pressed, or Ignition not switched on, respectively. They can be used independently or together. The default is for neither interlock to be active.

To enter Setup mode, apply power to the unit with the Service button pressed while observing the LED lamps adjacent to the Service button.

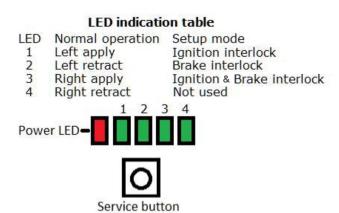
The red Power LED illuminates as soon as power is applied.

The green Setup LED will illuminate after about two seconds (while keeping the Service button pressed).

The Ignition and Brake LEDs will display the release interlock state. If the LED is illuminated then the relevant interlock is active.

Each successive push of the Service button will cycle through the possible interlock states: Neither active, Brake only active, Ignition only active or both active.

Once the desired setting is reached, press and hold the Service button for about 2 seconds until the Setup LED turns off – the unit returns to normal operation mode.



Service operation:

Service button: Single short press - generates extended diagnostic flash codes as per table on page 3.

Long press (until warning lamp illuminates) - enter Service mode (if no diagnostic fault present).

Service mode allows you to adjust the applied clamping force from level 1 (weak) to level 9 (strong), the default being level 5.

The warning lamp blinks a number of times every few seconds to indicate the selected clamping force e.g. by default there will be 5 blinks, then a pause before repeating the sequence.

A single short press of the Service button increases the clamping force to the next level.

Once at level 9, the next press selects level 1. Therefore to reduce the clamping force by 1 level, press the Service button 9 times.

Press and hold the Service button for about 1 second to store the clamp force and exit Service mode.

Service mode also allows you to use the Operate button to retract the pads back to the service position as determined by the caliper limit switches.

Ideally, you should also apply the EPB in Service mode if the pads have been fully retracted as this allows a longer 'drive-time' for the pads to reach the disc.

Test mode:

Apply power to the unit with both the Operate and Service buttons pressed. The warning lamp will illuminate for 1 second – release both buttons while the lamp is still lit (in practice, let go as soon as you see the lamp come on).

The warning lamp will now double-blink every few seconds.

Use the Operate button as normal (press and hold for about 1 second) to start or stop the test sequence which alternately applies and removes the EPB every 10 seconds or so.

Remove power to the unit to guit Test mode.

Extended Diagnostic Flash Codes:

1	Overcurrent apply left
2	Overcurrent apply right
3	Overcurrent retract left
4	Overcurrent retract right
5	Load fault apply left
6	Load fault apply right
7	Load fault retract left
8	Load fault retract right
9	Limit switch left
10	Limit switch right
11	Timeout apply left
12	Timeout apply right
13	Timeout retract left
14	Timeout retract right
15	Timeout apply both
16	Timeout retract both
17	Load fault apply both
18	Load fault retract both
19	Short apply left
20	Short apply right
21	Limit switch not released during apply left
22	Limit switch not released during apply right