

Wiring Instructions for Lasermet Switched Distribution Boxes

Part No.ICS-1-DBS-LSShutter Control BoxXLR SocketICS-1-DBS-ICInterlock Control BoxXLR Plug



Each box comprises a 3-way control enclosure fitted with two illuminated pushbuttons and an XLR connector.

Both boxes are supplied with 12V DC from an Interlock Control System (ICS). Usually, the 12V supply is present when the various interlock conditions are met and the ICS has been enabled/armed. When this happens, the green pushbutton on the control box is illuminated.

When the green button is pressed, an internal relay is energised, the green light is extinguished and the red button illuminates (Warning condition).

On the shutter box, this connects the incoming 12V to the XLR socket pins 1(+) and 2(-) to provide power and thus open the shutter.

On the interlock control box this closes a volt-free contact which may be used for example to enable the interlock on a laser.

When the red button is pressed, the internal relay is de-energised, the red light is extinguished and the green button is illuminated (Safe condition).

If the ICS is tripped e.g. by someone opening a door, supply is removed from the distribution box, the relay is de-energised and the lights are extinguished.

If both buttons are pressed simultaneously the internal relay is not energised.

The Shutter Control box also has a continuous 12V input which may be used for shutters which require a continuous as well as a switched 12V supply. This applies to the Lasermet LS-100 which has a cooling fan which operates when the shutter is closed. The continuous +12V is on XLR socket pin 3.



Wiring Details

When removing the lid of the control box, the wires to the XLR connector can be unplugged from the internal circuit board, which allows the cover to be completely removed.

A 6-way terminal block is provided inside the control box to which the connections can be made.

ICS-1- DBS-LS Shutter Control Box XLR Socket

- 1 12V Continuous supply from ICS
- 2 12V Switched Supply from ICS
- 3 Fit Link to pin 2
- 4 Provides a 12V output when the box is switched on.
- 5 Fit Link to pin 6
- 6 OV supply from ICS

ICS-1-DBS-IC Interlock Control Box XLR Plug

- 1 Not used
- 2 12V Switched Supply from ICS
- 3 Connected to XLR pin 1 when relay energised
- 4 Provides a 12V output when the box is switched on.
- 5 Connected to XLR pin 2
- 6 OV supply from ICS

On the ICS-1-DBS-IC, if terminals 2 and 4 are linked, the box provides a volt-free contact across XLR pins 1 and 2. The contact is closed when the relay is energised.

NOTE: Ensure the wire to the XLR connector is plugged into the circuit board before refitting the cover.

On both units, a remote monitor indicator may be connected across pins 4(+) and 6(-). 12VDC is present across these terminals when the relay is energised.

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