

## General Description

The REDBACK Stage Lighting Patch Bay shall be a wall-mounted termination panel with 180 patch leads, each patch lead fitted with a moulded Australian piggy-back plug and be a minimum of 1.3m long, measured from the cable exit point on the front panel to the tip of the moulded plug. The patch leads shall be 3 core 10Amp black sheath flexible cable with all three conductors fastened to one side of pressure pad screw terminals, the other side being for connection of load circuits.

The termination frame must facilitate the future expansion of the patch bay up to a maximum of 240 patch circuits, plus inclusion of the optional load Test Module. The termination frame shall have dimensions not more than 515mm wide by 1040mm high by 120mm deep.

## Construction

The Stage Lighting Patch Bay shall be multiple part construction with a mounting frame and separate patch, blanking and load Test Modules that mount within the frame. The frame shall be constructed from extruded aluminium and powder-coated zinc steel. The frame shall allow rear cable entry into its internal cavity and provide cable knock-out panels for cable entry via the top and bottom panels of the unit.

Patch modules shall be constructed of 1.6mm zinc steel and finished in a durable powder-coat finish, with a folded return lip to allow the module to be supported from the module below. When the patch module is clipped in position to the lower module, the module shall present at an angle to allow easy and unhindered termination of load circuits by the installer. Each module shall have 12 patch leads fastened to the front panel by means of a cable gland or similar device and terminated to screw terminals mounted on the rear of the front face. All terminals must be clearly marked with active, neutral and earth and provide a writeable space for circuit numbering by the installer.

The patch module shall have dimensions not more than 483mm wide by 44mm high. Blanking panels shall be provided to cover any module gaps that are necessary for future expansion. Self-adhesive white mylar strips with large black printed numbers shall be provided that number the patch circuits from 1 to 180. These strips must be adhered to the patch module front panel above the cable glands.



An optional load Test Module shall be able to be installed in the mounting frame without compromising the possibility of a future 60 patch circuits that can be added at a late stage. The load Test Module shall be constructed of 1.6mm zinc steel and finished in a durable powder-coat finish and have dimensions not more than 483mm wide by 44mm high. The load Test Module shall provide a 10Amp 3-pin Australian GPO for the connection of patch leads to test lamp loads. The lamp load must be indicated by a visual display on the front panel from 0Amps to 10Amps. An overload indicator must also be located next to the visual display to indicate that connected lamp load(s) exceed the maximum 10Amps allowable. The outlet socket must be protected by a suitably rated "C" curve Miniature Circuit Breaker with integral Residual Current Device (RCBO) with a minimum of 6000Amps breaking capacity. RCBOs that are not approved for use by the relevant electrical authorities shall not be accepted. A dimmer test lead must be provided to allow a maximum of a 25W load to be connected. The test lead shall be a 3 core 10Amp black sheath flexible cable fastened to the front panel by means of a cable gland or similar device and have a moulded 3-pin Australian plug for connection to the dimmer outlets. The test load circuit must be protected by a suitably rated resettable device.

The total weight of the fully assembled Stage Lighting Patch Bay must not exceed 49kg.

The **Stage Lighting Patch Bay** shall be a **REDBACK Patch Bay** from **LSC Control Systems**; model number **RBP/180** (without Test Module) or **RBP/180/T** (with Test Module fitted).