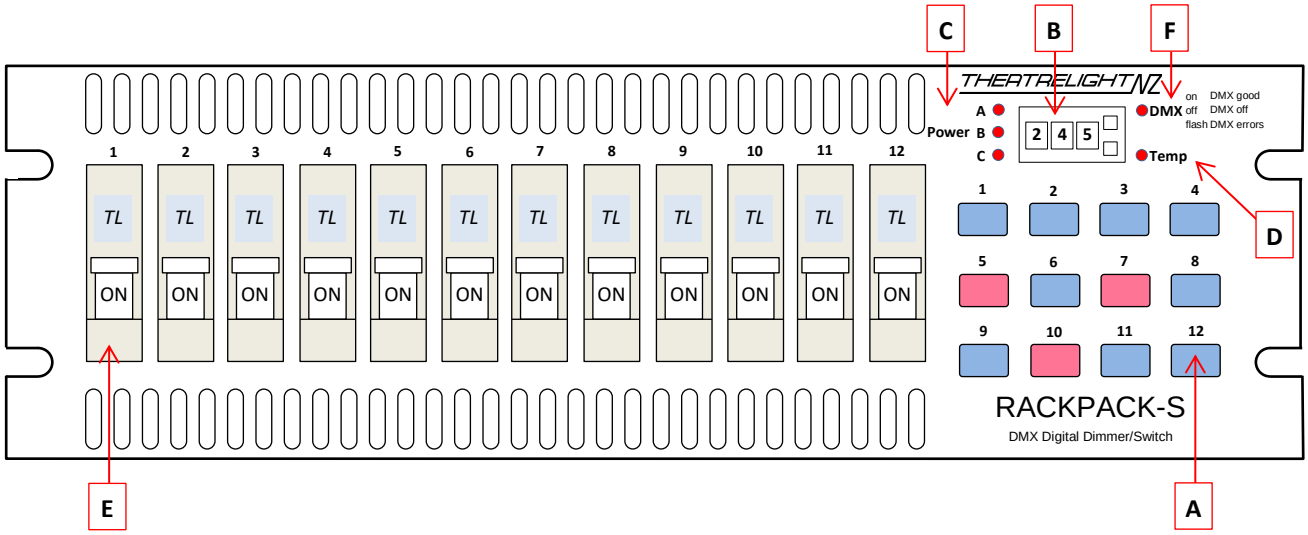
Rackpack-S Manual

Simple to set up and use, the Rackpack-S adds permanent over–ride power switches to every dimmer. The switches allow mains power to be distributed to non-dimmable loads such as DMX controlled LED luminaires, moving lights, smoke machines and motors. With the switches disengaged, the RackPack-S operates as a normal incandescent dimmer.



Mains Over-ride Switches:
Pressing in the corresponding switch [A] engages the over-ride to that dimmer channel providing permanent no-loss mains power to the load:

- Switches are illuminated blue when the dimmer on the corresponding channel is engaged.

- Pressing the switch in will change the colour to red indicating that channel is now providing mains power only. (DMX input to that channel is then ignored)

  Note:
  These switches should not be considered ON/Off isolating switches. When set to dim with the dimmer at zero mains voltage will still be present on the output and can damage non-dimmable fittings. Any item plugged into the Rackpack-S should always be considered live. To isolate the power the load should be unplugged or the Rackpack-S powered off using an external isolator or unplugged from the supply.

DMX Control Settings:
Rackpack-S dimmers are controlled via USITT DMX512 protocol.
Plug a suitable lighting control console into the DMX512 in, 5-pin XLR male socket located on the rear of the pack. There is also a female XLR connector located next to it for passing the signal on to another device. Note the DMX out is not isolated from the DMX in and it is simply a through connection*.

On the front of the pack is the DMX start address selector [B]. Press the thumbwheel switches on the selector to dial up the correct start address.
The DMX indicator [F], will light green when there is a valid DMX512 signal present. If there is a fault on the DMX line the indicator will flash and the unit may not operate correctly.

Power Indicators:
On the front of the Rackpack-S there are three phase performance indicators [C]: These three indicators labelled A,B,C will light when the three mains power phases supplied to the unit are present. The loss of a phase will be communicated by the corresponding power indicator being extinguished. The Pack will continue to operate with a phase missing, however, the four dimmers supplied from that phase will no longer operate.
Phase allocation is:
Phase A: Dimmers 1-4, B: Dimmers 5-8 and C: Dimmers 9-12

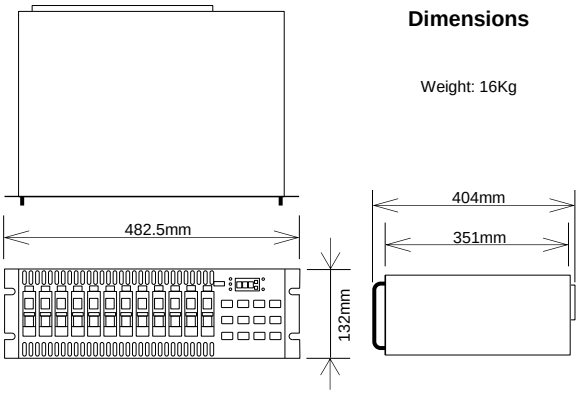
Temperature:
The Rackpack-S has an internal fan that exhausts out the front of the unit above and below the 12 circuit breakers [E]. The intake for the fan is located on the left side of the unit when viewed from the front. **The air intake should not be obstructed**. Should the air intake be blocked or the unit internal operating temperature becomes higher than its designed limit the over Temp indicator will light Red. The pack should be powered off and the air intake checked for obstructions. Also check the operating loads are within the maximum limit of 10 amps per channel and the fan is running. Should the Temp light remain on discontinue use and the Rackpack-S should be taken to your Theatrelight agent for service.

Circuit Breakers:
Each dimmer channel is protected by its own MCB or RCBO circuit breaker. These will trip in the event of a short circuit or, if fitted with RCBO breakers, will also trip if there is an earth leakage fault. The load on each channel should not exceed 10amps.

Operation
The Rackpack-S should be set on a stable surface in a well ventilated, dry area with a minimum 20cm clearance from walls, obstructions or flammable materials. Units may be stacked on top of each other up to three high. They should not be covered or the air intake obstructed. Alternatively they can be mounted in a 19inch rack with positive internal air flow. Rackpack-S should not be used outdoors or in a damp environment. The unit is not intended for domestic use or by unsupervised children.

Specifications:

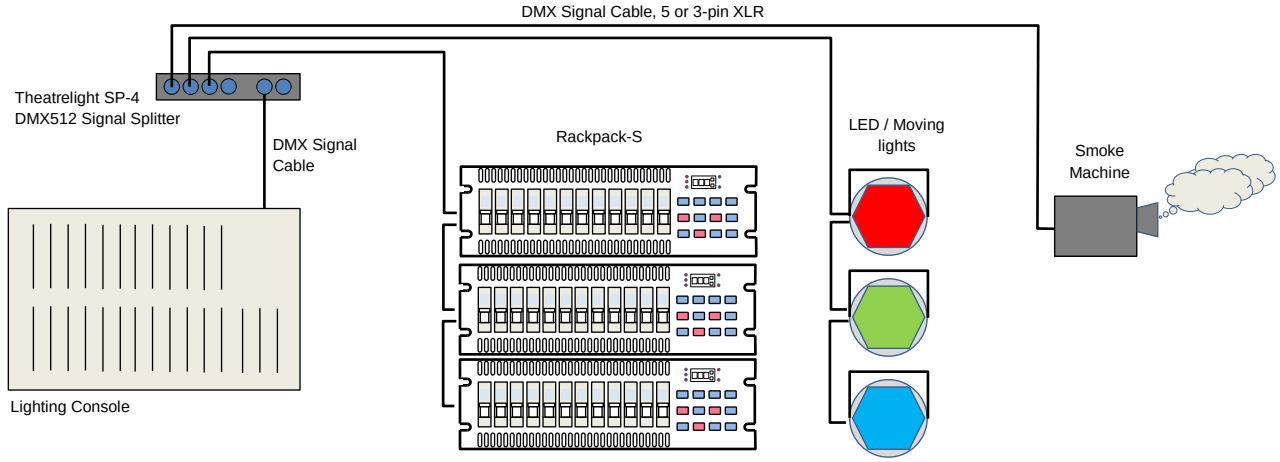
Form: 3u high, 19 inch wide, powder coat zinc-plated steel case
Electronics: Flash MCU, fast pulse driven heavy duty SCRs
Input: 90 to 265 volts AC, 1, 2 or 3 phase and Neutral, 45 to 65 Hz
Power In: One – three phase 90-260VAC, 32 amp/phase, 50-60Hz
Output: 12 channels of dual SCRs (ST BTW69-600, Itsm 580 amps), max load 10amps per channel



Fuse Protection: 10/13 amp MCB or 10 amp RCBO per channel.
Filtering: Iron powder toroidal filter chokes
Terminations: 3 Pin AusNZ, Socapex, or custom sockets with 5 wire cable input with plug, or moving cage terminals for input and output
Control Input: DMX-512 via Neutrix 5 Pin XLR connectors with a DMX Thru output for linking other dimmer packs

* Should the DMX512 signal also be required for control of auxiliary devices it is recommended the signal to the dimmers be supplied via an optically isolated DMX splitter. This may avoid total loss of control of the lighting rig in the event of a DMX signal issue in a cable or auxiliary DMX fitting. Recommended DMX splitters are: TLSP-4 or TLSP-8 by Theatrelight NZ Ltd.

Example of DMX512 Control Setup



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