## **EURORACK 60 DIMSWITCH**

# Digital Dimmer Rack for Wall Mounting with DimSwitch function



Very compact, intelligent, all-digital dimmer rack for **wall mounting**, designed for professional applications in stage, TV studio and architectural lighting, whenever high performance, space and cost are the prime considerations.

Any circuit can be either in graduated mode or in switched (true Solid State Relay) mode.

#### **Standard Configurations:**

- 24 x 3 kW
- 12 x 5 kW

#### **Set-up Functions**

- 5-key keypad, 12-character LED display and user friendly scrolling menu for easy access to all dimmer functions.
- Menu with different levels of access for different levels of users, protected against tampering.
- 10 user-selectable dimmer laws: linear r.m.s voltage,linear r.m.s to 120 V, TV laws (BBC, TV1, TV2), DimSwitch, fluorescent, linear r.m.s voltage with preheating, square law.
- Voltage reduction factor for extended lamp life or variable load cable length compensation.
- Professional grade filtering (200 µs rise time).
- 4000-step fade resolution, for noticeably smoother fades.
- Global or individual programming of dimmer law, patching, voltage reduction factor and smoothing.
- Creation and storage of 20 lighting cues (19 + Priority) each with fade and wait times, for back-up cues, architectural lighting, or stand-alone operation.
- Memories set by recording DMX levels or via the menu.
- After loss of DMX data: maintain last levels, or wait and fade to a memory or wait and fade to black.
- All programmed data saved for unlimited time.
- New DimSwitch technology, allowing control of circuit function: either dimming or real Solid State Relay, with all the advantages of electronic switching.

#### References

#### The **DimSwitch feature**, a lot of benefits:

- Each dimmer circuit shall be capable to be set as a "dimmer" for generic lighting or to be set as a "Solid State Relay".
- Solid State Relay mode allows to connect any other load such as HMI ballast or DMX instrument such as LED fixtures, Fluorescent lights, moving heads.
- No minimum load required in switched mode.

DimSwitch function allows saving in the electrical wiring and to have only ONE identified electrical distribution network for all Dimmed and Switched circuits. Whom are ALL controlled with the DMX512.



#### **Options and Accessories**

RCD - 30 mA (1P+N)
Supply protection per group of 30 kW (12 x 3 kW or 6 x 5 kW)
Quantity: 2 per Eurorack 60

• RCD+MCB/1P+N per dimmer

- for 24 x 3 kW dimmers

- for 12 x 5 kW dimmers

• Stand-off brackets for 10 cm trunking space behind the rack

 Cable entry panel with 27 universal entry seals and a steel PG31 cable gland

Main isolator switch 4P - 100 A

Dual DMX input retrofit kit

 Analogue input interface for architectural applications

• Star/Delta power supply upon request

RCD30/ERACK

RCD+MCB/243 RCD+MCB/125

ARC/ERACK

PANN.PG/ERACK INP.SWITCH/ERACK KIT/2DMX/ERACK

KIT/ANA/24

Dimensions (W x D x H): 1022 x 555 x 132 mm

Net Weight: 43 kg

Packing: 1150 x 685 x 265 mm

Gross Weight: 48 kg

### **EURORACK 60 DIMSWITCH**

## Specifications

#### Presentation

Compact rack enclosure made of a very rigid assembly of steel plates and anodised aluminium extrusions, primarily intended for wall mounting. The front panel is divided into 3 removable parts providing easy access for maintenance.

#### Standard Diagnostics Functions

Presence of mains and DMX signal, processor check, 400 V wiring error, overtemperature, fan failure, DMX control levels, local test of a dimmer (steady, flash or chaser) and automatic self-test of control electronics, all information reported in real time on front panel indicators.

#### Installation

EURORACK 60 DimSwitch is shipped as a complete unit, factory tested and ready for installation. No further assembling is required on site. EURORACK 60 DimSwitch can be mounted directly onto a wall, or with optional stand-off brackets to create 10 cm of trunking space behind the unit. The mains terminals, DIN rail mounted load terminals, connections for DMX, analogue inputs and memory control connector are conveniently grouped in the cabling compartment. The load terminals are "N-disconnect" so periodical isolation testing of each outgoing N-wire can be performed without removal of the load wiring. The blank cable entry panel at the bottom is removable. Accessory: extra installation hardware and bottom panel fitted with 27 universal seals for output and data cables, and a steel PG31 supply cable gland.

#### **Power Supply**

- 230 V / 400 V +/- 15 % Star 3NPE (TN-S), 50/60 Hz with max. 90 A per phase.
- Star/Delta and single-phase supply upon request.

#### **Power Rating**

- Individual dimmers are suitable for continuous duty at their rated power of 3 kW or 5 kW.
- Max. load per cabinet is 60 kW at + 35° C ambiant temperature (air intake)

This equipment complies with all applicable European directives and carries a CE mark.

#### **Protections and Safety**

- Individual dimmer protection by MCB/1P+N (standard).
- Optional RCD+MCB (1P+N) 30 mA 6 kA individual dimmer protection
- Optional RCD 30 mA, 10 kA (1P+N) supply protection per group of 30 kW (12 x 3 kW or 6 x 5 kW).
- Optional main isolator switch 4P 100 A.
- Protection circuitry against accidental 400 V wiring.
- Opto-isolated DMX input.
- Overtemperature protection through gradual dimmer fade-out.
- Cables, PCB's and insulating materials with self-extinguishing properties according to UL 94v.0 standard.

#### **Control Signals**

- DMX512/1990 inputs.
- DMX512/1990 and/or Local Memories: local memories are either played back simultaneously with the DMX signal on a HTP basis, or override the DMX signal.
- Optional dual DMX input, each with patch.

#### Types of Loads

- Hard-fired thyristors for control of 220/240 V tungsten halogen lamps, resistive and inductive loads, transformer-fed low voltage lamps, fluorescent lighting with suitable ballasts.
- Cold tungsten lamp allowed without damage to the thyristors.
- No minimum load required in switched mode.
- Special loads, such as HMI ballasts or electronic equipment, can be DMX-controlled by the DimSwitch function, which is a true Solid State Relay.

#### Cooling

 Convection cooling via the lateral aluminium extrusions (heat sinks) and forced air cooling through two low noise, 12 V brushless DC fans with automatic ON-OFF switching.