



EC90 SUPERVISOR DIGITAL DIMMER

EC90 Supervisor is a high-specification dimming system that incorporates advanced electronic and mechanical design concepts to meet the most demanding requirements. All dimmer modules are available with Reporter functions, enabling load characteristics to be measured and reported to a remote PC. EC90 Supervisor dimmer racks are available configured to an exact specification from components described below, or with a standard complement of dimming modules as listed.

EC90 Supervisor Racks

Two sizes available - large for 6 crates; small for 3 crates. The maximum capacity of a small rack is 36 x 3kW, or 18 x 6kW. Large racks can accommodate a maximum of 72 x 3kW, or 36 x 6kW. Crate types can be mixed in any rack, and there is top and bottom cable access.

EC90 Supervisor Crates

Crates are available for six dual 3kW modules or six single 6kW modules. Each crate version is available with Single Pole, Single Pole (Neutral Disconnect) or Double Pole protection.

EC90 Supervisor Modules

Dimmer modules are available in five module categories: dual 3kW Economy dimmers; dual 3kW Hi-Spec dimmers; single 6kW Hi-Spec dimmers and 3kW Hi-Spec dimmer/contactor modules. All dimmer and contactor modules are available in standard or Reporter versions.

3kW Dimmer Module

Economy module with two 3kW firm-fired thyristor dimmers and standard filtering.

3kW High Specification Dimmer Module

High specification module with two 3kW hard-fired thyristor dimmers and Broadcast-standard filtering.

6kW High Specification Dimmer Module

High specification module with a single 6kW hard-fired thyristor dimmer and Broadcast-standard filtering.

10kW High Specification Dimmer Module

High specification module with a single 10kW hard-fired thyristor dimmer and Broadcast-standard filtering.

Hybrid Contactor Modules

Three modules which offer dual contactor, dimmer/contactor or contactor/dimmer (left/right positions) versions. Both dimmers and contactors are rated at 3kW, and the dimmers are hard-fired thyristors with Broadcast-standard filtering.

EC90 Supervisor and Reporter Functions

All versions of EC90 Supervisor module can be supplied as standard or with Reporter features which operate with a remote PC. Standard Supervisor functionality from a remote PC includes:

- Dimmer setup functions (library and user programmable curves, max/min outputs, dimmer response times, etc.)
 - Patch setup for Mux A, Mux B and analogue inputs
 - Direct dimmer and preset control
- Additional Reporter features include:
- Load per dimmer (Watts)
 - Load change
 - Loss of load
 - Dimmer fault
 - Excess DC
 - Overheat
 - Overload

By virtue of its modular design, EC90 Supervisor can be configured to suit the particular requirement. Installations may include a mixture of large and small racks, and dimmer ratings and specifications. For further advice, a full specification or installation notes, please contact your local Strand representative.

EC90 SUPERVISOR™

DIGITAL DIMMERS
WITH REPORTER™ OPTION

- Plug-in modular digital dimming system for mid to high specification applications
- Two rack sizes: Large - with up to 72 x 3kW, 36 x 6kW or 18 x 10kW dimmers per rack; Small - with 36 x 3kW, 18 x 6kW, 9 x 10kW dimmers per rack
- Dual electronics option for full redundant tracking backup with selectable auto-switchover
- 4 levels of dimmer performance are available: Standard, Standard with Status Reporting, High-specification, and High-specification with Status Reporting
- Status Reporting modules (including contactors) detect: No load, Overload, Overtemperature, Excess DC, Internal fault, MCB trip, Thyristor short circuit, Load profile errors, live status reporting of RMS output voltage and current, module temperature and DC output voltage, per dimmer
- Reporting modules, including non-dims, can detect a load change, down to 10% of the dimmer's power rating, detecting failure of an individual element of a paralleled load
- Reporting modules may perform Load Cable Compensation, using the programmed cable resistance (per circuit) and load characteristic to continuously compensate for voltage drop
- Racks may contain a mixture of dimmer types including reporting and non-reporting
- 3kW contactor module options to switch motors, HMI ballasts and other non-dimmable equipment
- Load status reporting to PC using the Reporter™ PC software
- "Panic" function, to bring selected dimmers to full, operational without processor and can be actuated manually or automatically (e.g. by a fire alarm system)
- Precision line voltage regulation to minimise output changes when the supply voltage fluctuates
- Two opto-isolated Mux inputs with individual patches provided as standard
- Up to 32 analogue +/-10V inputs per rack, patchable to any dimmer
- 99 System Wide Control, SWC™ memories for additional preset and backup use, using simple "snapshot" recording
- Direct Circuit and preset control by hand-held System Wide Control (SWC™) programmer with specialised riggers functions
- 16 room (zone) by 8 preset Outlook™ architectural lighting control for auditorium, front of house and other "zoned" uses
- Library of 6 fixed and 5 downloadable dimmer curves, programmable per dimmer
- Smooth 16 bit digital fade processing
- LED Outputs for remote Overtemp/Fanfail, Panic and Active processor (dual systems)
- 12 independent fully programmable +10V analogue output signals (large processor only)
- Complies with all mandatory European safety and EMC regulations