

EURODIM Twin Tech

Introducing the new standard

EURODIM Twin Tech ADB, a new generation of professional dimming systems using economic thyristor technology whose reliability has been proven now present in the DimSwitch module.

in the DimSwitch module.

The innovative EURODIM Twin Tech concept allows for plug-in modules of any type or rating to be freely mixed and moved in any configuration within a universal cabinet.

Modules are instantly recognised by the automatic module identification function in the cabinet's central electronics. This represents the ultimate in flexibility.

For example, it allows empty cabinets to be installed on site, while the modules can be specified and plugged in later.

Best of all, EURODIM Twin Tech offers the exciting benefits of ADB's pioneering DimSwitch technology.



in dimming

The DimSwitch Module: Advanced solid state dimming and switching

This unique dual capability thyristor module can act either as a switch for normally non-dimmable loads (e.g. HMI ballasts, LED luminaires and other resistive, inductive and capacitive loads) or as a normal dimmer for halogen lamps with no minimum load required.

Dual cabling is no longer necessary, since only one load cable from the control room to the stage is required, replacing the need for special relay control cabinets with a single cabinet.

The solid-state relay has no mechanical components which can wear out, maximising reliability. When Dim Switch is used in dimming mode, it functions like a regular high quality 3 kW or 5 kW dimmer.

DimSwitch can be configured as either Switch or Dimmer mode locally on the Human Interface, and remotely via ADB's Dimmer Management



- DimSwitch, Fluo and Feed Through modules, with 1, 3 or 4 channels
- Stepped control and hot pluggable power connection
- On-board module identification chip
- Protection: MCB/1P+N per channel Optional RCD per module or RCBO per channel
- Large openings designed for maximum airflow density and optimum cooling of internal components

The ultimate in power dimming



The Universal Cabinet:
Mix and match different modules in a single cabinet

- Cabinets installable against a wall, or side-byside, to suit your space requirements
- Top or bottom entry for supply, load and control cables
- Dedicated input compartment for power supply cabling with up to 600 A per phase
- Dedicated output compartment for output load cables up to 10 mm2, or up to 35 mm2 with special adaptors (for 10 kW dimmers)
- Dedicated data connectors:2 x DMX IN/OUT and RJ45 for Ethernet
- All connections and maintenance can be made from the front. Module support cage can be removed for extra ease of access. Load and supply terminals can be checked without removing dimmer modules
- Dedicated ventilation duct with 3 axial fans with dual redundant power supplies for guaranteed, efficient cooling and unimpeded airflow – optimised airflow system is separated from all internal cabling, eliminating interference
- Individual module protection: 63 A HRC supply fuses with 50 kA fault current rating
- 32 module capacity for up to 128 channels
- Two module bays for double control electronics and / or backup power supply

Complete open cabinet showing backplane and connection bays for supply (left) and load (right)

technology



Three levels of monitoring: State-of-the-art diagnostics and reporting functions

EURODIM Twin Tech offers a three-level approach to diagnostics and reporting, to meet your specific requirements.

Standard diagnostics

Included in every cabinet, detects and reports in real time vital information such as CPU activity, DMX and Ethernet status, individual fan status, ambient over-temperature, missing supply phase, module type change...

Sequential diagnostics

An additional hardware kit per cabinet allows a pre-show test routine for channel status reporting, including value of dimmer load, deviation from a reference load, no load/overload and short circuit, in addition to standard diagnostics functions.

Full diagnostics

Specific full diagnostics modules report, in addition to the standard diagnostics, RCD and MCB tripping, no-load/overload warning and load changes per dimmer channel.

Total control - local and remote

Local and remote selection of control processor in cabinets, with full back-upremote control of all parameters and setup configuration, using a PC withTT Management Software installed or via RDM over ArtNet and any compatible software.

Card cage with left and right cable bay doors fitted

The ultimate in power dimming



RDM dimmer manager software:
A new approach to dimmer management

The optional free RDM dimmer manager software package is a fully-featured tool for configuration and error reporting.

It also allows remote control of dimmers via a PC or laptop from any location on a venue's lighting network.

The four key functions are: cue control, status reporting, remote programming, and commissioning and service.

The software provides a system-wide overview of the status of dimmer and back-up controller, error and alarm messages(loss of DMX, fan failure, over-temperature, missing phase...) plus diagnostics information for individual dimmers and the condition of connected loads.

The display provides an instant overview of current operations, allowing problems to be assessed very quickly.

Functions include editing, downloading and uploading of dimmer parameters, graphical editing and library of custom dimmer laws, and creating back-ups of system configurations – per show or per stage.

Complete cabinet equipped with 32 modules.

technology



The Human Interface: Instant, user-friendly local access to dimmer settings

In addition to remote control of cabinets by the RDM Dimmer manager software, local control is available through a user-friendly Human Interface.

The screen displays the status of the system and any occurrence of a problem requiring an operator's action.

Multi-level numerical password protection prevents unauthorised users accessing specific cabinet settings.

- 5.6" backlit touch screen
- Self-explanatory graphical touch screen display
- Easily readable menus
- 10 numerical keys for fast data entry
- Push button control wheel for quickly running through menu items and editing cabinet configuration
- SD card reader for configuration storage and software updates

The EURODIM Twin Tech's user-friendly Human Interface offers comprehensive local control of the cabinet's systems

EURODIM Twin Tech

Technical Specifications

Major User Benefits

- A single, standard, universal cabinet designed to host 32 power modules, in addition to 2 modules for dual control electronics.
- Two separate compartments for power supply and output cabling, for easy installation and maintenance without removal of dimmer modules.
- A choice of 2.5 kW Sine Wave and 3 /5 /10 kW thyristor modules.
- DimSwitch, a unique 4 x 3 kW, 3 x 5 kW or 1 x 10 kW Thyristor Module which can be set as a dimmer, or as a switch for nondimmable loads, thus making dual cabling unnecessary.
- Highest power density with up to 128 channels of 3 kW.
- Free mixing and full interchangeability of any power module, irrespective of type, rating or functionality, for unequalled flexibility in system configuration and subsequent modifications. Any module plugged in is automatically identified.
- A new approach to dimmer management with a choice of three levels of diagnostics and reporting functions, plus the RDM dimmer manager Software or any RDM over ArtNet compatible software.
- Dimmer configuration can be stored on memory card.
- Large, user friendly, graphical touch screen interface with 10 hard keys for direct numerical entry, and a push button control wheel for function and value selection.
- Maximum safety through individual MCB/1P+N dimmer protection with optional RCD per channel or per module, and individual module protection by a 63A HRC supplyfuse (50 kA).
- Dedicated, supply and load cable free, ventilation duct for unimpeded airflow and optimum thermo regulation.

Main Technical Data

- Power supply: star 3 NPE 400 (TN-S),198 V to 264 V, 50/60 Hz.
- Rated current: up to 600 A per phase.
- Rated load of dimmer modules is for continuous duty at +35°C ambient temperature.
- Dimming range from 20W up to the full rated load (No minimum load for switching).
- 10 standard and 6 user definable dimmer laws.
- 3 axial fans with automatic speed control and individual performance monitoring.
- Choice of broadcast and professional quality dimmer filtering available measured according to BBC & TDF specifications.

Contro

- Protocols: DMX512-A, ArtNet, sACN, remote programming and cue management via Ethernet and RDM over ArtNet.
- 2 DMX inputs and 3 universes over Ethernet.
- Storage of 80 lighting cues + 1 emergency cue.
- Software updates via memory card.
- Continuity of control and ventilation in case of loss of asupply phase.

Dimmer modules and ratings

- 4 x 3 kW DimSwitch: up to 128 x 3 kW per cabinet.
- 3 x 5 kW DimSwitch: up to 96 x 5 kW per cabinet.
- 1 x 10 kW DimSwitch: up to 32 x 10 kW per cabinet.
- 2 x 3 kW Fluo with switched 230 V output for preheat.
- 4 x 3 kW and 3 x 5 kW feed-through
- Full diagnostics is optional in DimSwitch modules.