

Lighting Management & Control Systems



ELECTRON SA

LIGHTING MANAGEMENT & CONTROL SYSTEMS

ELECTRON SA was established in 1978 and since then has been a leading manufacturing and distributive company of professional lighting systems in Greece where the company is located. At the same time, ELECTRON has also turned into a key international pioneer of professional lighting systems with exports in more than 60 countries worldwide. Today, the company celebrates 39 years of operation with a dynamic presence in the lighting industry.

ELECTRON SA designs, manufactures and distributes technologically advanced Dimmers (Actor, Apollo, Apollo Plus, Jazz Series etc.), Architectural Lighting Management Systems (Micon Series), Control Desks (Tempo Series), Splitters, Relay Packs, and other lighting equipment. The company has also launched the PREMIUM Series of wall-mounted multi-functional controllers, available in different versions to meet your individual requirements and specifications, such as: Leading Edge Dimmers, Trailing Edge Dimmers, Relay Switches, HF Fluorescent Controllers, Sine Wave Dimmers, LED Drivers, DALI Drivers.





Request our catalogue on LED & Architectural Lightng







Request our catalogue on Entertainment & PA

Thus, ELECTRON SA also offers complete solutions of Lighting Control, LED illumination and Architectural Lighting as well. Indeed, the ELECTRON team is willing to continue offering you in the future technologically advanced dimmers and controllers, modern designs of LEDs and a variety of architectural fittings for impressive lighting designs and installations.

ELECTRON SA is certified under the ISO 9001:2008 quality standards in the design, development, production and sales of professional lightling systems. The ELECTRON team is eager to serve you with optimum quality and technologically advanced products, and to offer you prompt delivery and the most competitive prices in the market. We are also very pleased to offer you technical information, designing advice based on our experience, and efficient after-sales, back-up service. Please request the relevant catalogues or visit www.electron.gr for additional informations.





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PREMIUM SERIES





CUSTOM-MADE

Wall-Mounted Multi-Functional Power Controllers

- Power Control for different kinds of loads in the same enclosure.
- Stage Power Controller with architectural capabilities.Architectural Power Controller with emergency capabilities.
- Compatibility with a large range of architectural control panels.
- Leading edge dimmers in power range from 1380W up to 5750W per channel.
- Three basic models with 3 to 48 channel capacity.

The PREMIUM Wall-Mounted Multi-Functional Power Controllers are developed, designed, and manufactured by ELECTRON SA.

The PREMIUM Controllers are designed not as simple dimmers, but as power control systems of multiple channels. Thus, they have features that make them ideal to use as stage power controllers, as architectural controllers, or both.

To be more precise, ELECTRON SA has developed independent Power Units with 1-4 channels, 6A-25A per channel, for different loads. More specifically, the Power Units are provided as Leading Edge Dimmers, Trailing Edge Dimmers, Relay Switches, Fluorescent Controllers, Sine Wave Dimmers, LED Drivers and DALI Drivers. ELECTRON SA offers a variety of types of Power Units with different channels, output loads etc.

Given the above, the PREMIUM are custom-made Wall-Mounted Multi-Functional Power Controllers. Every PREMIUM Controller is manufactured with Power Units according to the specific requirements of an application and its exact installation needs. Therefore, a PREMIUM Controller may incorporate, for instance, leading edge dimmers, relay switches and fluorescent controllers to meet particular lighting specifications.

This means that the PREMIUM Controllers are designed and developed in order to have control of an installation from one only PREMIUM enclosure, eliminating the need of having many different devices for controlling different loads.

The PREMIUM Series consists of three different models depending on the configuration (number and capacity) of Power Units in the same enclosure.

- Premium 79 is supplied with 12 Power Units,
- Premium 68 is supplied with 6 Power Units,
- Premium 37 is supplied with 3 Power Units.

Thus, the PREMIUM Controllers are manufactured to provide great flexibility to meet your own control needs.



PREMIUM SERIES



NEW POWER UNITS WITH HYBRID RELAY SWITCHES FOR PREMIUM 79-68-37 DIMMERS

The new HYBRID RELAY SWITCH technology protects the relays contacts from sparks created upon their activation and deactivation. Activating and pausing states are been handled by a Triac, which means that they occur on every zero cross of the AC power supply. In this way, both the high surge currents and the high voltage spikes are been reduced at the maximum possible level, while in the active state (ON state) the thermal losses are been reduced since the whole current is running through the relay.

Features - Technical specifications.

- Maximum contact protection on relay's activation and deactivation.
- Capable of withstanding high inrush currents up to 250A
- Output activation always at zero cross of AC power supply.
- Output deactivation always at zero output current.
- Load protection against high surge currents.
- Connection capability of resistive, capacitive and inductive loads.
- No high voltage spikes when switching off inductive loads.
- Multiple choices in power and channels per unit.
- Negligible heat losses.
- Can be placed in all models, (37,68 and 79), of PREMIUM family.

The new Power Units with HYBRID RELAY SWITCHES are available in the following versions:

- 1. 4 x 6A. 1 pole relay.
- 4 x 6A. 2 pole relay.
- 3. 3 x 10A. 1 pole relay.
 4. 3 x 10A. 2 pole relay.
- 5. 2x16A. 1 pole relay.
- 6. 2 x 16A. 2 pole relay.
- 7. 4x16A. 1 pole relay. (Only for Premium 37)



PREMIUM 79-68-37 SERIES Of Multifunctional Custom Made Power Controllers **NEW POWER UNITS WITH TRAILINIG EDGE DIMMERS for:**

- LED lamps dimmable with Trailing Edge dimmers
- CFLs and electronic transformers for Trailing Edge dimming
- Designed and manufactured by ELECTRON SA



Available versions:

- Premium 79 with 24 channels x 6A per channel
- Premium 79 with 36 channels x 4A per channel
- Premium 79 with 48 channels x 3A per channel



Available versions:

Premium 68 with 12 channels x 6A per channel

- √ Trailing edge dimmers
- √ Leading edge dimmers √ HF fluorescent controllers
- √ Relay switches

Available versions:



- Premium 37 with 12 channels x 3A per channel
- Premium 37 with 9 channels x 4A per channel
- Premium 37 with 6 channels x 6A per channel

NOTE: You can have different power units that control different types of loads in the same Premium!

Thus, one Premium can have Trailing edge dimmers, Leading edge dimmers, HF fluorescent controllers (1/10V) and relay switches, in the same enclosure!





PREMIUM 79

Designed & Manufactured by ELECTRON SA

- Innovative
- Advanced
- Flexible
- High-Tech
- Reliable
- User Friendly are the words that characterize the NEW Multifunctional Power Controller

PREMIUM 79



Multifunctional Power Controller PREMIUM 79

PREMIUM 79: the ideal single device when capabilities, such as the ones described below, are required:

- up to 288 channels as stage dimmer system
- up to 512 channels as architectural controller system
- up to 512 scenes
- up to 128 chasers
- up to 2 DMX-512 inputs one of which can be assigned as output
- 48 analogue inputs with six operating modes
- USB downstream & upstream ports*
- Ethernet port*
- RS232 port*
- EIB/KNX port with built-in power supply 640mA*
- 3 DALI circuits with built-in power supply*

PREMIUM 79 is classified on the top of the range of the PREMIUM Series due to its immense capabilities.

Innovative

When PREMIUM~79~functions~as~a~stage~dimmer~system~the~user~can~have~up~to~288~independent~channels:~48~for traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~48~for~traditional~dimmer~s,~the corresponding outputs 1/10V, and 192 channels shared in three DALI circuits. For each DALI circuit, Premium has an independent built-in

When it functions as an architectural control system the channels can reach up to 512. In this case, one of the two DMX inputs functions as output and it can drive any DMX device.

Premium 79 has RS232, USB, and Ethernet ports and it can receive data from a PC, while the user can monitor the status of Premium when it functions as architectural control system. At the same time the user can program the memories, the chasers, etc in a PC and can transfer the data to Premium with a USB flash memory.

It has 48 analogue inputs that can be divided into groups. This means that the user can activate with any simple push button (available in the market), memories, chasers, or channels. By pressing a button of a group the user activates the assign function and deactivates all the other functions (of the buttons) of the same group. This operation is called 'one active'. Thus, the user can successively change the lighting scheme and in parallel can adjust the intensity. There is also the possibility of assigning a button as 'OFF' in each group.

Premium has a EIB/KNX port with built-in power supply of 640 mA, thus it can be connected to an already existing Instabus system. Also, it can be connected to an already existing Instabus system. Also, it can be connected to an already existing Instabus system. Also, it can be connected to an already existing Instabus system. Also, it can be connected to an already existing Instabus system. Also, it can be connected to an already existing Instabus system. Also, it can be connected to an already existing Instabus system. Also, it can be connected to an already existing Instabus system. Also, it can be connected to an already existing Instabus system. Also, it can be connected to an already existing Instabus system. Also, it can be connected to an already existing Instabus system. Also, it can be connected to an already existing Instabus system. Also, it can be connected to an already existing Instabus system. Also, it can be connected to an already existing Instabus systems are already existenced by the connected to an already existing Instabus systems are already existenced by the connected to an already existenced by the connected to all the connected to all the connected to an already existenced by the connected to all the connected to an already existenced by the connected to all the c $be connected \textit{ directly and without any other device} to \textit{ any control panel that supports EIB/KNX}. \textit{ Moreover, Premium can function as a control panel that supports experience to the control panel th$ panel to give data to any connected EIB/KNX actuator.

In DALI circuits there is the possibility to connect, besides DALI control panels, and all the DALI accessories like motion detectors, light sensors, presence sensors, infrared controls etc.

All the features above, together with the built-in Real Time Counter (RTC) and the 'event creator' (with which the user can program the events in the counter (RTC) and the 'event creator' (with which the user can program the events in the counter (RTC) and the 'event creator' (with which the user can program the events in the counter (RTC) and the 'event creator' (with which the user can program the events in the counter (RTC) and the 'event creator' (with which the user can program the events in thdaily, weekly, or yearly base) constitute Premium 79 the most innovative power controller of the market.



Expansion ports



^{*} To be available in the near future.

PREMIUM 79



Interior connections
Upper front part (door) opening

Advanced

PREMIUM 79 is very innovative, yet advanced management of it is also required. For that, Premium 79 has two DMX inputs with patching capabilities, HTP merge, LTP merge, Priority merge, Sequence merge, and Last merge.

It can operate with two lighting desks. Several channels can be programmed from each desk, or all channels can operate in parallel function from the two desks (ale retour). In addition, a DMX packet can be recorded and stored into Premium 79 as a scene.

One of the DMX inputs can also function as output with the possibility of connecting any DMX device. In this case, Premium 79 functions as controller of these devices by getting commands from external control panels connected to DALI, EIB/KNX ports, to analogue inputs or commands from a PC through USB, Ethernet, or RS232 ports. Also, one of the two DMX inputs can be programmed as architectural port for the new RS485 architectural control panels of ELECTRON.

Premium 79 (full configuration) has in total 48 analogue inputs and 9 I/O ports (DMX1, DMX2, RS232, USB, EIB/KNX, DALI1, DALI2, DALI3, Ethernet). For all these ports if functions as a large merger router.

With the correct programming, the command from one of the above inputs can be merged with a command from any other of these inputs with HTP merge or LTP merge or Last merge, and can control any channel, memory, or chaser of Premium 79. Also, a channel from one input can be routed exclusively to one channel of another output. With this way, it is possible to transfer commands or control from anywhere to everwhere without limits.

Management of the memory allows the user to have a scene that can include commands or control for any I/O port of Premium 79 at the same time.

Because the channels are many and the power units may be different a 'chaser creator' makes, together with the user's contribution, a custom made chaser with the minimum possible allocation of memory.

Special functions are included for chasers regarding RGB LEDs



Up to 4 RCDs can be fitted

or



Heavy duty mains switch

Flexible

Premium 79 is the most flexible model of the Premium Series. It can have up to 12 power units and each can have 1-4 channels with an output of 25A, 16A, 10A, and 6A. The power units can have leading and trailing edge dimmers, relay switches, fluorescent controllers, sine wave dimmers, LED drivers. The outputs can have one pole MCB, MCB P+N, and RCBO. For the supply input the user can choose up to 4 RCDs by sharing the loads in each RCD or heavy duty mains switch.

The basic version of Premium 79 includes the above options and one DMX input. The price of this basic version is very economic and competitive, making the controller ideal for a user that does not need more features.

The second DMX input, the 48 analogue inputs, the ports RS232, USB, EIB/KNX, DALI1, DALI2, DALI3, and Ethernet are available optionally as extra features.

With all these options you can develop your own custom-made Premium to fit your exact requirements and specific needs.

High-Tech

Premium 79 is developed to be by its own a complete power control system for the total control and management of all the needs of a space.



This means that any command that comes into Premium 79 from any input is executed almost instantly. Also, due to this speed there is the possibility to manage up to 512 memories and 128 chasers.

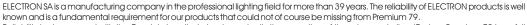
It can easily be connected to a computer and have a Software Update, or the user can download the new Software from ELECTRON site to a USB flash memory and then transfer it to Premium 79.

By connecting a PC to Premium 79 and through the Ethernet port the user can easily follow up the status of the outputs, make some changes, block things, and have full control of the lighting scheme.

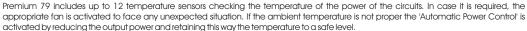


Interior connections

Reliable



Reliability is also secured with the 7 watchdogs that check constantly the operation of the microcontrollers (7 when Premium 79 is on full configuration). Moreover, the main microcontroller observes the operation of the peripheral ones and if there is a malfunction detected it drives it back to the correct operation.



In case the main microcontroller faces a fatal error then automatically memories are activated so that the space has lighting. These memories are programmed by the user.

The outputs of Premium 79 are managed by two microcontrollers for extra safety . For any malfunction the user is informed through the display.



Heavy duty lifting eye bolts



PREMIUM 79

User Friendly

When having a device such as Premium 79 with so many functions and capabilities, the user may ask what and how needs to be programmed. If Premium 79 is going to function as a simple dimmer, then the user only needs to set the start address of the DMX.

If programming is required, this can easily be done with the use of the two encoders and the large graphic display. The first encoder enablesthe user to move through the menu with a great speed and find what needs to be changed (selector). The second encoder enables the user to directly make changes (value).

Moreover, the user manual of Premium 79 is carefully developed and written in such a way so that the user can easily and quickly find answers to questions such as 'How do I...'

Also, for the specific model the user can get the necessary software, and by connecting it to a PC the programming is made on the screen

Finally, by loading the software to a computer away from Premium 79, the user can make all the programming and then transfer the data with a USB flash memory to the Premium 79.



User interface using Keyboard, 128x64 dot matrix display, and two encoders for easy programming



Accessory for easy wall mounting (available with Premium 79)

SPECIFICATIONS OF THE BASIC VERSION OF PREMIUM 79

- Stage and/or architectural operation.
- Up to 96 channels as stage dimmer system (48 ch. for traditional dimmers or relay switches, 48 ch. for 1/10V analogue outputs.
- 1 optical isolated DMX-512 input.
- Individual DMX address / channel is possible.
- Programmable DMX assigns. Each DMX channel can be programmed to activate a channel or a scene or a chaser.
- DMX merge capability (HTP merge, LTP merge, Last merge).
- Programmable DMX termination.
- 48 fully programmable analogue inputs (optional).
- Programmable analogue input assigns. Each analogue input can be programmed to activate a channel or a scene or a chaser.
- Six programmable operating modes for each analogue input (0/+10V, 0/+5V, Contact normal open, Contact normal closed, Easy Net, Push Button)
- Programmable Blocking function for each analogue input. Each analogue input can be blocked by a programmable DMX channel, or by DMX signal present.
- Control capability from all E Series architectural control panels of Electron.
- Control capability from simple faders, dry contacts, motion detectors, cinema projectors (using the cinema adaptor of Electron), push button switches (like legrand).
- Analogue input grouping capability. When an input in a group receives a signal, this cancels all other input assigns of that group offering the "one active" capability.
- Up to 512 programmable scenes with programmable fade in/out (0 - 59min 59,9sec.)
- Up to 128 programmable chasers with programmable fade in/out (0 - 59,9sec.), speed rate (0,05 - 59,99sec.).
- Chaser creator. For easy chaser creation.
- DMX packet capture for easy scene or step creation.
- Programmable preheat level per channel.
- Programmable soft start per channel.

- Programmable fade in/out (0 59,9sec.) per channel.
- Law selection per channel (9 factory set laws +5 user laws).
- Programmable maximum output level per channel.
- Programmable behaviour on DMX signal loss (Blackout, hold of last DMX data packet, scene).
- Three programmable function keys.
- Panic Key (External heavy duty push button connection is possible).
- Emergency input.
- Standby Key.
- Two encoders for easy selection and value setting.
- 128x64 graphic display (8 lines x 21 characters can be displayed).
- Password protected.
- Seven microcontrollers offering processing power of more than 50MIPS (Millions Instructions per Second).
- Seven watchdogs.
- Up to 12 temperature sensors checking all the time the output power units.
- Automatic power control to prevent over-heating.
- Individual configuration of power units in the same enclosure.
- MCB protection for each channel.
- P+N MCBs or RCBOs on each channel is possible.
- Heavy duty mains switch can be fitted.
- Up to 4 RCDs in power supply input can be fitted.
- Easy wall mounting with provided metal plate.
- Heavy duty lifting eye bolts.
- No need of removing the front cover of the metal enclosure. The upper front part (door) opens by unscrewing 2 screws allowing access to all screw terminals.
- Screw terminals with live, neutral, and earth per output.
- Power supply screw terminals, 70mm².
- Three phase power supply (400/230V~ 3/N/PE/50Hz)
- Delta models available on request.

Dimensions in mm (WxHxD)

PREMIUM 79: 750x1115x155





PREMIUM 68 PREMIUM 37







The PREMIUM Controllers can accept data from analogue inputs, from the build-in control panel, and from the digital DMX-512 signal. Each of the analogue inputs can operate in one of the following six modes: 0/+10V, 0/+5V Contact normal open, Contact normal closed, Easy Net, Push Button Switches. Thus, you can connect to the PREMIUM Controllers the MICON E and BS Control Panels of ELECTRON SA, simple faders, dry contacts, motion detectors, push buttons, cinema projectors (using the cinema adaptor of ELECTRON SA) and other. Each analogue input can be programmed to activate a scene, user chaser, factory chaser or channel.

When connecting the PREMIUM Controllers to a DMX-512 Control Desk, the user may disable all or some of the analogue inputs and, thus, deactivate the architectural control panels. The DMX-512 input is totally controlled allowing the user to select the start address or the DMX address for each channel independently, and to program the DMX address in many channels simultaneously so as to increase the power of a control channel.

The PREMIUM Series can be connected to the Emergency power supply and can be activated through a dry contact, in which case the PREMIUM allows the operation of a pre-programmed single scene, thus avoiding the overloading of uninterrupted power supply.

The PREMIUM Controllers are available with MCBs, MCBs P+N, RCBOs, main switch, RCCB, three phase and single phase power supply, and Delta $(230V \sim 3/PE)$.

ELECTRON S.A. produces 17 models of the PREMIUM 68 & 37 Series with different specifications.

PREMIUM 68 SERIES



PREMIUM 37 SERIES



PREMIUM 68 PREMIUM 37

FEATURES OF PREMIUM 37 & 68 SERIES

AVAILABLE VERSIONS:

- Trailing Edge dimmers
- Leading Edge dimmers
- Relay switches
- HF Fluorescent controllers
- Power rating from 6A to 25A per channel

FEATURES

- Stage and / or architectural operation.
- DMX-512 input.
- Independent DMX address for each channel.
- Soft Patch for DMX channels.
- Programmable DMX assigns. Each DMX channel can be programmed to activate a channel or a scene or a user chaser or a factory chaser.
- 12 fully programmable analogue inputs.
- Soft Patch for analogue inputs.
- Programmable analogue input assigns. Each analogue input can be programmed to activate a channel or a scene or a user chaser or a factory chaser.
- Six programmable operating modes for each analogue input (0/+10V, 0/+5V, Contact normal open, Contact normal closed, Easy Net, Push Button).
- Programmable Blocking function for each analogue input. Each analogue input can be blocked by a programmable DMX channel, if present.
- Control capability from all E and BS Series of architectural control panels by Electron S.A. (page 24 25).
- Control capability from simple faders, dry contacts, motion defectors, cinema projectors (using the cinema adaptor of page 24), push button switches (like legrand).
- Individual configuration of power units in the same enclosure.
- 24 programmable scenes with fade in/out (Osec-59min and 59,9sec.)
- 12 user chasers with programmable fade in/out (Osec-59,9sec.), speed rate (0,05sec-59,99sec.) and dimmer level.
- 12 factory chasers with programmable fade in/out (0sec-59,9sec.), speed rate (0,05sec-59,99sec.) and dimmer level.
- Programmable preheat level per channel.
- Programmable soft start per channel.
- Programmable channel fade in/out (0sec-59,9sec.) per channel.
- Law selection per channel: linear, incandescent, switch (with selectable switch over point from 5-95% of the fader scale).
- Programmable behaviour on DMX signal loss (Blackout or hold of last DMX data packet or go to scene 24).
- Programmable maximum output level per channel.
- Two programmable function keys that can be assigned as Panic and Fire alarm buttons.
- LCD display and keyboard on the front panel for easy programming.
- Password protected.
- Automatic power control to prevent over-heating.
- MCB protection for each channel (MCBs P+N are available as extra).
- Main Switch 3P+N or RCCB are available as extra.
- Three phase power supply (Single phase power supply upon request).
- Delta models available upon request.

Dimensions in mm (WxHxD):
PREMIUM 37: 346x550x110
PREMIUM 68: 380x900x120

Coming Soon: Sine Wave Controllers LED Drivers DALI Drivers







ORDERING INFORMATION FOR PREMIUM 68 & 37 SERIES OF WALL MOUTED MULTIFUNCTIONAL POWER CONTROLLERS

ORDERING INFORMATION FOR PREMIUM SERIES

| MODEL | Channel Confi- guration Code | | Device Option Code | Power Unit 1 Code | Power Unit 2 Code | Power Unit 3 Code | Power Unit 4 Code | Power Unit 5 Code | Power Unit 6 Code |
|-------|---------------------------------|---|-----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| P37 | Х | - | Х | Х | Х | Х | | | |
| P68 | Х | - | X | x | X | X | X | X | X |

PREMIUM 68 PREMIUM 37

PREMIUM 68 CHANNEL CONFIGURATION CODES

| | CHANNEL | | | POWER UNITS CHAI | NNELS X CAPACITY | | |
|------|-----------------------------|----------|----------|------------------|------------------|----------|----------|
| CODE | CONFIGURATION | 1 | 2 | 3 | 4 | 5 | 6 |
| 1 | 6x25A | 1x25A | 1x25A | 1x25A | 1x25A | 1x25A | 1x25A |
| 2 | 4x25A + 2x16A/6A + 3x10A/4A | 1x25A | 1x25A | 1x25A | 1x25A | 2x16A/6A | 3x10A/4A |
| 3 | 3x25A + 6x16A/6A | 1x25A | 1x25A | 1x25A | 2x16A/6A | 2x16A/6A | 2x16A/6A |
| 4 | 12x16A/6A | 2x16A/6A | 2x16A/6A | 2x16A/6A | 2x16A/6A | 2x16A/6A | 2x16A/6A |
| 5 | 3x25A + 9X10A/4A | 1x25A | 1x25A | 1x25A | 3x10A/4A | 3x10A/4A | 3x10A/4A |
| 6 | 12x10A | 2x10A | 2x10A | 2x10A | 2x10A | 2x10A | 2x10A |

PREMIUM 37 CHANNEL CONFIGURATION CODES

| CODI | CHANNEL CONFIGURATION | POWER UNIT | S CHANNELS X 2 | CAPACITY 3 |
|------|-----------------------------------|------------|-------------------|---------------|
| 1 | 3x25A | 1x25A | 1x25A | 1x25A |
| 2 | 6x16A/6A | 2x16A/6A | 2x16A/6A | 2x16A/6A |
| 3 | 1x25A + 2x16A/6A + 3x10A/4A | 1x25A | 2x16A/6A | 3x10A/4A |
| 4 | 2x25A + 4x6A/3A | 1x25A | 1x25A | 4x6A/3A |
| 5 | 9x10A/4A | 3x10A/4A | 3x10A/4A | 3x10A/4A |
| 6 | 1x25A + 8x6A/3A | 1x25A | 4x6A/3A | 4x6A/3A |
| 7 | 2x16A/6A + 3x10A/4A + 4x6A/3A | 2x16A/6A | 3x10A/4A | 4x6A/3A |
| 8 | 12x6A/3A | 4x6A/3A | 4x6A/3A | 4x6A/3A |
| 9 | 12x16A only relay 1P & HF 1P | 4x16A | 4x16A | 4x16A |
| Α | 6x25A or 32A only relay 1P, HF 1P | 2x25A/32A | 2x25A/32A | 2x25A/32A |
| В | 6x10A | 2x10A | 2x10A | 2x10A |
| С | 12x10A only relay 1P & HF 1P | 4x10A | 4x10A | 4x10A |

Ordering code example 1: P372-1555.

Premium 37 with three phase star power supply, one pole MCBs, 6x16A leading edge triac dimmers with rise time $50\mu s$.

Ordering code example 2: P685-4444CGN.

Premium 68 with three phase star power supply, P+N MCBs, four pole main switch, 3x25A leading edge thyristor dimmers with rise time 200µs, 3x10A leading edge triac dimmers with rise time 100µs, 3x10A Fluorescent controller with one pole relay and 3x10A one pole relay switch.

Channel configurations and capacities of Premium models cannot be changed. You must find the appropriate power unit for the load type you need, with the same channel X capacity, indicated in channel configuration tables. For example, the codes corresponding to 2x16A are 5, 6, 7, 8, 9, A, E, F, E and E.

Note 2: The HF Fluorescent and Relay switch Power Units should always be installed last in the

DEVICE OPTIONS CODES

| CODE | DESCRIPTION | CODE | DESCRIPTION |
|------|----------------------------------------------------------|------|------------------------------------------------------------|
| 1 | One pole MCBs (Three Phase Star) | D | Two pole MCBs (Three Phase Delta) |
| 2 | P+N MCBs (Three Phase Star) | Е | Two pole MCBs / 3P main switch (Three Ph. Delta) |
| 3 | One pole MCBs / Four pole main switch (Three Phase Star) | F | P+N RCBOs (Three Phase Star) |
| 4 | P+N MCBs / Four pole main switch (Three Phase Star) | G | P+N RCBOs / Four pole main switch (Three Phase Star) |
| 5 | One pole MCBs / RCD (30mA) (Three Phase Star) | Н | P+N RCBOs / Four pole main MCB (Three Phase Star) |
| 6 | P+N MCBs / RCD (30mA) (Three Phase Star) | 1 | Two pole MCBs (10kA) / RCD (30mA) (Three Ph. Delta) |
| 7 | One pole MCBs (Single Phase) | J | One pole MCBs / RCD (30mA) / By-pass (Three Phase Star) |
| 8 | P+N MCBs (Single Phase) | K | One pole MCBs / 4P Main Sw. / By-pass (Three Phase Star) |
| 9 | One pole MCBs / Four pole main switch (Single Phase) | L | One pole MCBs / By-pass (Three Phase Star) |
| Α | P+N MCBs / Four pole main switch (Single Phase) | M | One pole MCBs / 4P Main MCB. (Three Phase Star) |
| В | One pole MCBs / RCD (30mA) (Single Phase) | N | One pole MCBs / 4P Main Sw / RCD (30mA) (Three Phase Star) |
| С | P+N MCBs / RCD (30mA) (Single Phase) | | |

POWER UNITS CODES

| CODE | DESCRIPTION | CODE | DESCRIPTION |
|------|-------------------------------------------------|------|---------------------------------------------------------|
| 1 | 1x25A leading edge Triac Dimmer. R.t=100µs | R | 4x16A One pole Relay switch |
| 2 | 1x25A leading edge Triac Dimmer. R.t=200µs | S | 2x25A One pole Relay switch |
| 3 | 1x25A leading edge Thyristor Dimmer. R.t=100µs | T | 2x32A One pole Relay switch |
| 4 | 1x25A leading edge Thyristor Dimmer. R.t=200µs | U | 2x10A leading edge Triac Dimmer. R.t=50µs (PLE310) |
| 5 | 2x16A leading edge Triac Dimmer. R.t=50µs | V | 2x10A leading edge Triac Dimmer. R.t=100µs (PLE310) |
| 6 | 2x16A leading edge Triac Dimmer. R.t=100µs | W | 2x10A leading edge Triac Dimmer. R.t=200µs (PLE216) |
| 7 | 2x16A leading edge Triac Dimmer. R.t=200µs | X | 2x10A leading edge Thyristor Dimmer. R.t=50µs (PLE216) |
| 8 | 2x16A leading edge Thyristor Dimmer. R.t=50µs | Υ | 2x10A leading edge Thyristor Dimmer. R.t=100µs (PLE216) |
| 9 | 2x16A leading edge Thyristor Dimmer. R.t=100µs | Z | 2x10A leading edge Thyristor Dimmer. R.t=200µs (PLE216) |
| Α | 2x16A leading edge Thyristor Dimmer. R.t=200µs | 01 | 2x10A HF Fluorescent Controller. One pole relay |
| В | 3x10A leading edge Triac Dimmer. R.t=50µs | 02 | 2x10A HF Fluorescent Controller. Two pole relay |
| С | 3x10A leading edge Triac Dimmer. R.t=100µs | 03 | 2x10A One pole Relay switch |
| D | 4x6A leading edge Triac Dimmer. R.t=100µs | 04 | 2x10A Two pole Relay switch |
| E | 2x16A HF Fluorescent controller. One pole relay | 05 | 4x10A leading edge Triac Dimmer. R.t=50µs (PLE410) |
| F | 2x16A HF Fluorescent controller. Two pole relay | 06 | 4x10A HF Fluorescent controller. One pole relay |
| G | 3x10A HF Fluorescent controller. One pole relay | 07 | 4x10A One pole Relay switch |
| Н | 3x10A HF Fluorescent controller. Two pole relay | 80 | 4x3A Trailing Edge dimmer |
| 1 | 4x6A HF Fluorescent controller. One pole relay | 09 | 3x4A Trailing Edge dimmer |
| J | 4x6A HF Fluorescent controller. Two pole relay | OB | 2x6A Trailing Edge dimmer |
| K | 4x16A HF Fluorescent controller. One pole relay | 0C | 2x16A One pole Hybrid Relay switch |
| L | 2x16A One pole Relay switch | 0D | 2x16A Two pole Hybrid Relay switch |
| М | 2x16A Two pole Relay switch | OE | 3x10A One pole Hybrid Relay switch |
| Ν | 3x10A One pole Relay switch | OF | 3x10A Two pole Hybrid Relay switch |
| 0 | 3x10A Two pole Relay switch | 0G | 4x6A One pole Hybrid Relay switch |
| Р | 4x6A One pole Relay switch | OH | 4x6A Two pole Hybrid Relay switch |
| Q | 4x6A Two pole Relay switch | OI | 4x16A One pole Hybrid Relay switch |
| | | | |



ACTOR 616-325-625





ACTOR is an advanced series of dimmers of compact and robust construction using DMX-512 and analogue 0/+10V control technology. They combine high quality and reliability. On the front panel of each ACTOR there are six channel sliders (three sliders for ACTOR 325) and a Master control. The units are designed for 19 ' rack mounting 3U high (4U for Actor 625) in fixed installations or touring racks. The DMX address can be selected through the 4 push buttons mounted on the front panel. There is a display indicating the correct or incorrect condition of the digital serial input, one monitor LED per output status and three LEDs for the power supply.

Features

- Soft start adjustable per channel.
- Preheat level adjustable per channel.
- 3 Selectable Laws (curves) per channel: Linear, Incandescent, Switch.
- 12 Pre-programmed chases with capability of adjusting the speed and the intensity.
- Possibility of selecting Dimmer with standard chokes or $100\mu s$ rise time (at additional cost) which is recommended for high professional applications. ACTOR 325 and ACTOR 625 are supplied standard with 100µs fise time. Programmable behaviour on DMX signal interruption (blackout or hold of last DMX address).
- Soft power up for inrush current limiting when the power is switched on.
- Suitable for controlling resistive or inductive loads, incandescent lamps and iron-core transformers to supply low voltage lamps.
- RCD can be supplied in all ACTOR models at additional cost.
- MCBs P+N can be supplied in all ACTOR models at additional cost.
- ACTOR 616, ACTOR 325 & ACTOR 625 are normally supplied with triac outputs. Thyristor outputs which are recommended for high professional applications, are available at additional cost.

ACTOR series is normally supplied with XLR 5-pin DMX IN/OUT, alternatively XLR 3-pin DMX IN/OUT can be supplied at no additional cost.

ACTOR 616



ACTOR 616



ACTOR 616 with RCD



ACTOR 616 with MCBs P+N



ACTOR 616 with RCD & MCBs P+N



ACTOR 616 DELTA



ACTOR 616 with BYPASS SWITCHES & MCBs Also available with 6 RCBO

REAR SIDES





















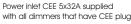


GRS



(or SWISS or DANISH) outlets

Also available with WIELAND, DANISH and SWISS outlets.



ACTOR 325

- With 3 channels
- 5750W channel capacity (Watts at 230V)



ACTOR 616-325-625





ACTOR 325 with RCD





ACTOR 325

REAR SIDES





Rear side of ACTOR 325

Rear side of ACTOR 625



ACTOR 625

- With 6 channels
- 5750W channel capacity (Watts at 230V)









ACTOR 625 with MCBs P+N



Power inlet CEE 5x63A supplied with all dimmers that have CEE plug

ACTOR 625 ACTOR 625 with RCD

| TECHNICAL SPE | ECIFICATIONS | ACTOR 616 | ACTOR 325 | ACTOR 625 |
|----------------------------------------|---------------------------------------------------------------|-----------|-------------|-----------|
| NUMBER OF CHAN | INELS | 6 | 3 | 6 |
| CHANNEL CAPACI | TY (WATTS at 230V) | 3680W | 5750W | 5750W |
| MAXIMUM CURREN | NT PER CHANNEL | 16A | 25A | 25A |
| DMX-512 SIGNAL E | BUFFER | YES | YES | YES |
| THREE LAWS (LINEA SWITCH) SELECTABI | R-INCANDESCENT- LE PER CHANNEL | YES | YES | YES |
| SUPPLY VOLTAGE 4 | 00/230V~3/N/PE/50HZ | YES | YES | YES |
| DIMENSIONS | ACTOR 325 & ACTOR 616 (EXCEPT ACTOR 616 WITH SCREW TERMINALS) | | 482x132x340 | |
| IN MM | ACTOR 625 | | 482x177x340 | |
| (WxHxD): | ACTOR 616ST (WITH SCREW TERMINALS) | | 482x132x375 | |





ACTOR 716-710





The ACTOR 716 is another member of the Actor family. The Dimmer Pack is of compact and robust construction. It combines high quality and reliability. The unit is designed for 19" rack mounting (3U high) in fixed installations or touring racks. The dimmer pack is controlled by DMX-512 (1990). The DMX address can be selected through the four push buttons mounted on the front panel. The display indicates the DMX address or the DMX failure. The power supply is connected on a 5-pin CEE 5X63A heavy duty inlet. The 5-pin CEE 5X63A female connector is supplied free of charge with the dimmer. ACTOR 716 is offered with the following outlet sockets: Schuko, French, Danish, Swiss, Harting and Socapex.

Features

- Soft start adjustable per channel.
- Preheat level adjustable per channel.
- Three selectable laws (curves) per channel: linear, incandescent, switch. Twelve preprogrammed chasers with capability of adjusting the speed and the intensity.
- On board channel control with the use of the keyboard.
 - Possibility of ordering the dimmer pack with standard chokes or with 100µs rise time (at additional cost) which is recommended for high professional application.
- Programmable behaviour on DMX signal interruption (blackout or hold of last DMX address).
- Soff power up for inrush current limiting when the power is switched on.
 Suitable for controlling resistive or inductive loads, incandescent lamps and iron-core transformers to supply low voltage lamps.
- The dimmer pack is supplied with 3x63A mains switch (3x40A for ACTOR 710). RCCB can be supplied at additional cost.
- MCB's P+N can be supplied at additional cost.
- Twelve output led monitors.
- Three mains led monitors.
- Cooling fan controlled by an electronic temperature sensor.
- Automatic Power Control (APC) which controls the output power in case of fan failure to keep the temperature at safe levels.









ACTOR 716 with RCD

ACTOR 710 with RCD

REAR SIDES











SCHUKO & FRENCH

HARTING

SOCAPEX

ACTOR 716 with POWER CABLE

Power inlet CEE 5x63A supplied with all dimmers that have CEE plug

| TECHNICAL SPECIFICATIONS | ACTOR 716 | ACTOR 710 | |
|-------------------------------------------|-----------------|-----------------|--|
| NUMBER OF CHANNELS | 12 | 12 | |
| CHANNEL CAPACITY (WATTS AT 230V) | 3680W | 2300W | |
| MAXIMUM CURRENT / CHANNEL | 16A | 10A | |
| DMX-512 SIGNAL BUFFER | YES | YES | |
| THREE LAWS (LINEAR, INCANDESCENT, SWITCH) | YES | YES | |
| SUPPLY VOLTAGE 400/230V-3/N/PE/50Hz | YES | YES | |
| DIMENSIONS IN MM (WxHxD) | 482 x 132 x 365 | 482 x 132 x 365 | |



ACTOR BASE LEADING EDGE & ACTOR BASE TRAILING EDGE

The ACTOR B series is an economically priced professional series of dimmers manufactured with high quality components. The DMX address can be selected through the four push buttons mounted on the front panel. There is a display indicating the correct or incorrect condition of the DMX input, three monitor LEDs for the power supply and one LED for each output. ACTOR B series is only DMX controlled.



Features

- Soft start adjustable per channel.
- Preheat level adjustable per channel.

- 3 Selectable Laws (curves) per channel: Linear, Incandescent, Switch.

 12 Pre-programmed chases with capability of adjusting the speed and the intensity.

 Programmable behaviour on DMX signal interruption (blackout or hold of last DMX address).
- Soft power up for inrush current limiting when the power is switched on.
- MCBs P+N can be supplied in all ACTOR B series at additional cost.
- Suitable for controlling resistive or inductive loads, incandescent lamps and iron-core transformers to supply low voltage lamps.
- DMX signal buffer.

ACTOR B series is normally supplied with XLR 5-pin DMX IN/OUT, alternatively XLR 3-pin DMX IN/OUT can be supplied at no additional cost.





ACTOR B 610

ACTOR B 610 with MCBs P+N

GBS

REAR SIDES













NEW ACTOR BASE Trailing Edge dimmer

Actor Base 610 is made with 6 channels 10A per channel and it can now dim:

- LED lamps dimmable with Trailing Edge dimmers
- CFLs and electronic transformers for Trailing Edge dimming

| TECHNICAL SPECIFICATIONS | ACTOR B610 Leading Edge | ACTOR B610 Trailing Edge |
|----------------------------------|----------------------------|-----------------------------|
| NUMBER OF CHANNELS | 6 | 6 |
| CHANNEL CAPACITY (WATTS at 230V) | 2300 | 2300 |
| MAXIMUM CURRENT PER CHANNEL | 10A | 10A |
| SUPPLY VOLTAGE | 400/230V~3/N/PE/ 50Hz | 400/230V~3/N/PE/ 50Hz |
| DIMENSIONS IN MM (WxHxD): | 482 x 88 x 340 | 482 x 88 x 340 |



JAZZ SERIES





The Dimmer Pack JAZZ 310 and JAZZ 311 have various applications and therefore they are useful tools for many different installations. They can be permanently wall mounted or tripod / truss mounted. On the front panel there are three sliders used to control each channel and a Master. There are also twelve chasers preset by the factory (Factory Chasers) with the capability of controlling the Dimmer Level, the speed (Rate) and the Fade Time. Each pack has two 9-pin D-sub connectors.

On the first connector it can be connected a six channel signal from an analogue control desk and the second connector (THROUGH) is connected to a second Jazz Dimmer. On the front panel there is also a selector switch used to select whether the unit will be controlled by channels 1-2-3 or 4-5-6. The dimmers incorporate a digital DMX 512 input and the start address can be selected from the corresponding buttons located on the front panel.

Features

- The total load should not exceed 3000W (13A) for JAZZ 310 and 6900W (30A) for JAZZ 311.
- Each dimmer channel should not exceed 2300W (10A) at 230V.
- 3 sliders used to control each channel and a Master.
- Two 9-pin D-SUB connectors. The first connector (IN) is connected to an analogue control desk and the second one (Through) is connected to a second Jazz Dimmer.
- 8-pin DIN connector is also available.
- Selector switch used to select whether the unit will be controlled by the channels 1-2-3 of the external control desk or by the channels 4-5-6.
- Digital DMX-512 input.
- The start address can be selected from the corresponding buttons located on the front panel.
- For protection against overloading, the dimmer JAZZ 310 is equipped with an electronic current limiter at 13,5A.
- 12 Factory Set Chasers with capability of setting the Dimmer Rate and Fade.
- Dimensions in mm (WxHxD): 242 x 96 x 293.

JAZZ 310 & JAZZ 311 are also available with WIELAND outlets











JAZZ 310 SCH & FRENCH JAZZ 311 SCH & FRENCH









JAZZ 311 CEE



JAZZ 311 GBS

JAZZ 310 SWS

JAZZ 311 SWS



Accessory for

truss / tripod mounting





ELECTRON

APOLLO PLUS & APOLLO SERISES

TECHNICAL SPECIFICATIONS

APOLLO and APOLLO PLUS are heavy duty, durable, portable, compact dimmer packs that can satisfy even the highest user requirements! APOLLO and APOLLO PLUS are the most intelligent and technologically advanced digital dimmers that can be used in all cases, such as in stages, touring, theaters, studios etc. The complete range of APOLLO and APOLLO PLUS series consists of over 500 versions. Both series of dimmer packs are of modern design and high performance.

The housing of APOLLO and APOLLO PLUS is made of aluminium with 3mm thickness, resistible to every strain and crash that could occur during transportation or installation. All control sliders and dimmer outputs are located at the front side of APOLLO and APOLLO PLUS to allow easy access and operation. These do not extend from the aluminium cover, for further protection. The robust handle on the right side of APOLLO and APOLLO PLUS allows easy carrying and truss mounting. APOLLO and APOLLO PLUS can also be mounted on wall or rack and can be operated horizontally or vertically.

APOLLO PLUS

Designed & Manufactured by ELECTRON SA

APOLLO PLUS 615-616

615S **PORTABLE DIMMER PACKS** 615C 616C 616S CHANNELS 6 6 6 CHANNEL CAPACITY 3450W 3680W 3680W MAXIMUM CURRENT / CHANNEL 15A 16A 16A LOAD TYPES HARD FIRED TRIACS YES YES YES nal 100µs or OUTPUT FILTER 50µs (optio 200µs) **OUTPUT LED MONITORS** YES YES YES HEAVY DUTY FUSE HOLDERS YES YES CIRCUIT BREAKERS YES ANALOGUE INPUTS 0/+10VDC 20VDC OUTPUT FOR EXTERNAL CONTROL DESK YES YES YES BUILD-IN SLIDERS+MASTER YES DMX 512 INPUT YES YES YES INDICATION OF DMX "FAULT" STATUS YES YES YES PROGRAMMABLE START ADDRESS YES YES YES DMX-512 SIGNAL BUFFER YES YES YES TERMINATION SWITCH YES YES YES HOLDING OF LAST DMX VALUE YES YES YES PROGRAMMABLE BEHAVIOR ON DMX SIGNAL YES YES YES INTERRUPTION 5- DIGIT NUMERIC DISPLAY YES YES YES 4-BUTTON KEYPAD, 2 OF WHICH CAN BE YES YES YES PROGRAMMED BY THE USER AS FUNCTION KEYS MENU DRIVEN SOFTWARE YES YES YES PASSWORD FOR SETTINGS PROTECTION YES YES YES LINEAR, HALOGEN, AND FLUORESCENT LAWS SELECTABLE SWITCHED OUTPUT YES YES YES PROGRAMMABLE PREHEAT LEVEL PER CHANNEL YES YES YES PROGRAMMABLE PERCENTAGE OF OUTPUT YES YES YES VOLTAGE PER CHANNEL PROGRAMMABLE SOFT TURN-ON YES YES YES PER CHANNEL CHANNEL LEVEL CONTROL SLIDERS DIGITAL SLIDERS 24 PROGRAMMABLE MEMORIES YES YES YES 12 PROGRAMMABLE CHASERS YES YES YES 12 FACTORY- SET CHASERS YES YES YES 60- STEP LOOP FUNCTION YES YES YES MEMORY OR CHASE ASSIGNMENT OF SLIDERS YES DIAGNOSTIC TESTS VES VES YES WATCHDOG TIMER YES YES YES DC SPEED CONTROLLED, FAN ASSISTED YES YES YES CONVECTION COOLING HIGH TEMPERATURE DETECTION YES YES YES AUTO POWER HANDLING AT HIGH YES YES YES TEMPERATURE CONDITION POWER FAILURE AND POWER OFF MODES AT YES YES YES LOW POWER SUPPLY VOLTAGE



230/400V-3/N/PE/50Hz,3 PHASE STAR CON/TION

230V 3/PE/50Hz,3 PHASE DELTA CONNECTION

DISABLED OUTPUT ON POWER SUPPLY

OVER-VOLTAGE

RACK MOUNTING

WALL MOUNTING

TRUSS MOUNTING

HEAVY DUTY HANDLE

DIMENSIONS (WxHxD) IN MM





APOLLO PLUS 616S CEE 05230



APOLLO PLUS 616C SCH 05130 (Also available with DNS, SWS & CEE outlets)



APOLLO PLUS 616S FRS 05230
(Also available with SCH outlet)



APOLLO PLUS 616C WLD 05230



APOLLO PLUS 616C SCP 05230 (Also available with HARTING outlet)



APOLLO PLUS 615C GBS 05130



APOLLO PLUS 616C FRS 05130



APOLLO PLUS 616C HRT 05230



YES

YES

YES

YES

YES

YES

Optional

YES

YES

YES

YES

YES

YES

Optional

432 x 177 x 350

YES

YES

YES

YES

YES

YES

Optional

APOLLO PLUS 625C-350C-363C



Designed & Manufactured by ELECTRON SA

FEATURES OF APOLLO PLUS SERIES

- Suitable to control incandescent lamps, iron core transformers for low voltage incandescent lamps, resistive and inductive loads.
- Hard firing to ensure proper triggering.
- High quality output filters with rise time up to 200 µs.
- Output led monitors.
- Heavy duty fuse holders for **S** models and circuit breakers for **C** models.
- DMX 512 in/out (XLR 5pin connectors).
- Indication of DMX "Fault" status.
- Programmable start address.
- DMX sianal buffer.
- Termination switch
- Holding of last DMX value.
- Programmable behaviour on DMX signal interruption.
- Five- digit numeric display.
- Four- button keypad, two of which can be programmed by the user as function keys.
- Menu driven software.
- Password for settings protection.
- Three laws selected by the user (Linear, Halogen and Fluorescent).
- Selectable switched output (non dim).
- Programmable preheat level per channel.

- Programmable percentage of output voltage per channel. Programmable soft turn-on per channel. Analogue control inputs 0/+10V (9 pin D-sub male connector).
- 20VDC output for supplying external analogue control desk.
- Models ${\bf C}$ are supplied with channel sliders + master.
- Twenty four programmable memories.
- Twelve programmable chasers.
- Twelve factory-set chasers.
- Memory or Chaser assignment of sliders (Models **C** only).
- Watchdog timer.
- Silent operation DC speed controlled, fan assisted convection cooling.
- Overheating detection.
- Auto power handling at high temperature condition.
- Power Failure and Power Off modes on low power supply voltage.
- Disabled output on power supply overvoltage.
- Heavy duty handle.
- Truss mounting.
- Rack mounting.
- Wall mounting for Apollo Plus models 610-616 only.
 Start up diagnostic tests: Microcontrollers selftest, Memories test, Fan test.
- Diagnostic tests of sliders and pushbuttons.
- 60-step Loop Function.

*Delta version dimmers available upon request.



REAR SIDE OF APOLLO PLUS





TECHNICAL SPECIFICATIONS

| APOL | $\mathbf{I} \cap$ | DI | IIC |
|------|-------------------|----|-----|
| APUL | LU | ГL | บอ |

| DODTABLE DIMAMED DACKS | AP | OLLO PLU | 3 |
|----------------------------------------------------------|-----------------------|-----------------------------------------------|---------------------|
| PORTABLE DIMMER PACKS | 625C | 350C | 363C |
| CHANNELS | 6 | 3 | 3 |
| CHANNEL CAPACITY | 5750W | 11500W | 14490W |
| MAXIMUM CURRENT / CHANNEL | 25A | 50A | 63A |
| | ·Incandescent lamps · | Iron core transform | mer for low-voltage |
| LOAD TYPES | | Resistive & induction | ctive loads |
| HARD-FIRED TRIACS | YES | - | - |
| | otional 200µs) | 200µs | 200µs |
| OUTPUT LED MONITORS | YES | YES | YES |
| HARD-FIRED THYRISTORS | - | YES | YES |
| CIRCUIT BREAKERS | YES | YES | YES |
| ANALOGUE INPUTS | | 0/ + 10VD | C |
| 20VDC OUTPUT FOR EXTERNAL CONTROL DESK | YES | YES | YES |
| BUILD-IN SLIDERS+ MASTER | YES | YES | YES |
| DMX 512 INPUT | YES | YES | YES |
| INDICATION OF DMX " FAULT" STATUS | YES | YES | YES |
| PROGRAMMABLE START ADDRESS | YES | YES | YES |
| DMX-512 SIGNAL BUFFER | YES | YES | YES |
| TERMINATION SWITCH | YES | YES | YES |
| HOLDING OF LAST DMX VALUE | YES | YES | YES |
| PROGRAMMABLE BEHAVIOR ON DMX SIGNAL | | | |
| INTERRUPTION | YES | YES | YES |
| 5-DIGIT NUMERIC DISPLAY | YES | YES | YES |
| 4-BUTTON KEYPAD, 2 OF WHICH CAN BE | .20 | .20 | .20 |
| PROGRAMMED BY THE USER AS FUNCTION KEYS | YES | YES | YES |
| MENU DRIVEN SOFTWARE | YES | YES | YES |
| PASSWORD FOR SETTINGS PROTECTION | YES | YES | YES |
| | LINEAR, HALOG | | |
| | | | YES |
| SELECTABLE SWITCHED OUTPUT | YES | YES | |
| PROGRAMMABLE PREHEAT LEVEL PER CHANNEL | YES | YES | YES |
| PROGRAMMABLE PERCENTAGE OF OUTPUT VOLTAGE PER CHANNEL | YES | YES | YES |
| | | | |
| PROGRAMMABLE SOFT TURN-ON | YES | YES | YES |
| PER CHANNEL | OLIDEDO | OLIDEDO | OLIDEDO |
| CHANNEL LEVEL CONTROL | SLIDERS | SLIDERS | SLIDERS |
| 24 PROGRAMMABLE MEMORIES | YES | YES | YES |
| 12 PROGRAMMABLE CHASERS | YES | YES | YES |
| 12 FACTORY- SET CHASERS | YES | YES | YES |
| 60- STEP LOOP FUNCTION | YES | YES | YES |
| MEMORY OR CHASE ASSIGNMENT OF SLIDERS | YES | YES | YES |
| DIAGNOSTIC TESTS | YES | YES | YES |
| WATCHDOG TIMER | YES | YES | YES |
| DC SPEED CONTROLLED, FAN ASSISTED | YES | YES | YES |
| CONVECTION COOLING | 120 | 120 | 120 |
| HIGH TEMPERATURE DETECTION | YES | YES | YES |
| AUTO POWER HANDLING AT HIGH | YES | YES | YES |
| TEMPERATURE CONDITION | ILS | ILO | ILO |
| POWER FAILURE AND POWER OFF MODES ON | YES | YES | YES |
| LOW POWER SUPPLY VOLTAGE | 150 | 150 | 150 |
| DISABLED OUTPUT ON POWER SUPPLY | YES | YES | YES |
| OVERVOLTAGE | 1E9 | IES | IES |
| RACK MOUNTING | YES | YES | YES |
| WALL MOUNTING | - | - | - |
| TRUSS MOUNTING | YES | YES | YES |
| HEAVY DUTY HANDLE | YES | YES | YES |
| 230V 400V-3/N/PE/50Hz,3 PHASE STAR CON/TION. | | YES | YES |
| 230V 3/PE/50Hz,3 PHASE DELTA CONNECTION | Optional | Optional | Optional |
| DIMENSIONS (WxHxD) IN MM | | x 222 x 400 | |
| | 702 | | |



APOLLO PLUS



| TECHNICAL SPECIFICATIONS | | |
|-------------------------------------------------------------------------------|----------------------------------------------------------------|----------------------------------------------------|
| DODTADLE DIMANED DA OVO | APOLL | O PLUS |
| PORTABLE DIMMER PACKS | 716S | 716C |
| CHANNELS | 12 | 12 |
| CHANNEL CAPACITY | 3680W | 3680W |
| MAXIMUM CURRENT / CHANNEL | 16A | 16A |
| LOAD TYPES | •Incandescent lamps •Iron core incandescent lamps •Resistive 8 | e transformer for low-voltage k inductive loads |
| HARD FIRED TRIACS | YES | YES |
| OUTPUT FILTER | 50µs (option | nal 100µs) |
| OUTPUT LED MONITORS | YES | YES |
| HEAVY DUTY FUSE HOLDERS | YES | - |
| CIRCUIT BREAKERS | - | YES |
| ANALOGUE INPUTS | 0/ +10VDC | |
| 20VDC OUTPUT FOR EXTERNAL CONTROL DESK | YES | YES |
| BUILD-IN SLIDERS+ MASTER | - | YES |
| DMX 512 INPUT | YES | YES |
| INDICATION OF DMX" FAULT" STATUS | YES | YES |
| PROGRAMMABLE START ADDRESS | YES | YES |
| DMX-512 SIGNAL BUFFER | YES | YES |
| TERMINATION SWITCH | YES | YES |
| HOLDING OF LAST DMX VALUE | YES | YES |
| PROGRAMMABLE BEHAVIOR ON DMX SIGNAL INTERRUPTION | YES | YES |
| 5 -DIGIT NUMERIC DISPLAY | YES | YES |
| 4-BUTTON KEYPAD, 2 OF WHICH CAN BE PROGRAMMED BY THE USER AS FUNCTION KEYS | YES | YES |
| MENU DRIVEN SOFTWARE | YES | YES |
| PASSWORD FOR SETTINGS PROTECTION | YES | YES |
| LAWS | LINEAR, HALC AND FLUORES | |
| SELECTABLE SWITCHED OUTPUT | YES | YES |
| PROGRAMMABLE PREHEAT LEVEL PER CHANNEL | YES | YES |
| PROGRAMMABLE PERCENTAGE OF OUTPUT VOLTAGE PER CHANNEL | YES | YES |
| PROGRAMMABLE SOFT TURN-ON PER CHANNEL | YES | YES |
| CHANNEL LEVEL CONTROL | DIGITAL | SLIDERS |
| 24 PROGRAMMABLE MEMORIES | YES | YES |
| 12 PROGRAMMABLE CHASERS | YES | YES |
| 12 FACTORY- SET CHASERS | YES | YES |
| 60- STEP LOOP FUNCTION | YES | YES |
| MEMORY OR CHASE ASSIGNMENT OF SLIDERS | - | YES |
| DIAGNOSTIC TESTS | YES | YES |
| WATCHDOG TIMER | YES | YES |
| DC SPEED CONTROLLED, FAN ASSISTED CONVECTION COOLING | YES | YES |
| HIGH TEMPERATURE DETECTION | YES | YES |
| AUTO POWER HANDLING AT HIGH TEMPERATURE CONDITION | YES | YES |
| POWER FAILURE AND POWER OFF MODES AT LOW POWER SUPPLY VOLTAGE | YES | YES |
| DISABLED OUTPUT ON POWER SUPPLY OVERVOLTAGE | YES | YES |
| RACK MOUNTING | YES | YES |
| WALL MOUNTING | - | - |
| TRUSS MOUNTING | YES | YES |
| HEAVY DUTY HANDLE | YES | YES |
| 230/400V-3/N/PE/50Hz,3 PHASE STAR CON/TION | YES | YES |
| 230V 3/PE/50Hz,3 PHASE DELTA CONNECTION | Optional | Optional |
| DIMENSIONS (WxHxD) IN MM | 432 x 22 | 22 x 400 |
| | | |

FEATURES OF APOLLO PLUS SERIES

- Suitable to control incandescent lamps, iron core transformers for low voltage incandescent lamps, resistive and inductive loads.
- Hard firing to ensure proper triggering.
- High quality output filters with rise time up to 100µs.
- Output led monitors.
- Heavy duty fuse holders for **S** models and circuit breakers for **C** models.
- DMX 512 in/out (XLR 5pin connectors).
- Indication of DMX "Fault" status.
- Programmable start address. DMX signal buffer.
- Termination switch.
- Holding of last DMX value.
- Programmable behaviour on DMX
- signal interruption.
- Five- digit numeric display.
- Four-button keypad, two of which can be programmed by the user as function keys.
- Menu driven software.
- Password for settings protection.
- Three laws selected by the user (Linear, Halogen and Fluorescent).
- Selectable switched output (non dim).
- Programmable preheat level per channel.

- Programmable percentage of output voltage per channel. Programmable soft turn-on per channel. Analogue control inputs 0/+10V (9 pin D-sub male connector).
- 20VDC output for supplying external analogue control desk.
- Models **C** are supplied with channel sliders + master. Twenty four programmable memories. Twelve programmable chasers.
- Twelve factory-set chasers.
- Memory or Chaser assignment of sliders (Models ${\bf C}$ only).
- Watchdog timer.
- Silent operation DC speed controlled, fan assisted convection cooling.
- Overheating detection.
- Auto power handling at high temperature condition.
- Power Failure and Power Off modes on low power supply voltage. Disabled output on power supply overvoltage.
- Heavy duty handle.
- Truss mounting.
- Rack mounting.
- Wall mounting for Apollo Plus models 610-616 only.
- Start up diagnostic tests: Microcontrollers selftest, Memories test, Fan test.
- Diagnostic tests of sliders and pushbuttons.
- 60-step Loop Function.

*Delta version dimmers available upon request.



REAR SIDE OF APOLLO PLUS





APOLLO 615-616





FEATURES OF APOLLO PLUS SERIES

- Suitable to control incandescent lamps, iron core transformers for low voltage incandescent lamps, resistive and inductive loads.
- Hard firing to ensure proper triggering.
- High quality output filters with rise time up to $100\mu s$.
- Output led monitors.
- Heavy duty fuse holders for **S** models and circuit breakers for **C** models.
- DMX 512 in/out (XLR 5pin connectors).
- DMX "OK" and "Fault" led indicators.

- DMX signal buffer. Holding of last DMX value. Three rotary switches for selecting start address.
- Analogue control inputs 0/+10V (9 pin D-sub male connector).

- 20VDC output for supplying external analogue control desk.

 Models C are supplied with sliders + master.

 Four factory- set chasers with capability of selecting the speed and the master intensity level.
- Watchdog timer.
- Fan assisted convection cooling (activated by thermostat).

 Truss mounting.
- Heavy duty handle.
- Rack mounting accessories (supplied as extra at additional cost).
- Wall mounting accessories (supplied as extra at additional cost).



TECHNICAL SPECIFICATIONS

| | | APOLLO | 616C |
|--------------------------------------------------|-----------------------------------------------------------|-------------------------------------------------------|----------------------------------|
| PORTABLE DIMMER PACKS | 6158 | 616S | 615C |
| CHANNELS | 6 | 6 | 6 |
| CHANNEL CAPACITY | 3450W | 3680W | 3680W |
| MAXIMUM CURRENT / CHANNEL | 15A | 16A | 16A |
| LOAD TYPES | Incandescent lamp Incandesce | s • Iron core transformer nt lamps •Resistive & in | for low-voltage ductive loads |
| HARD FIRED TRIACS | YES | YES | YES |
| OUTPUT FILTER | 50µs | (optional 100µs |) |
| OUTPUT LED MONITORS | YES | YES | YES |
| HEAVY DUTY FUSE HOLDERS | YES | YES | - |
| CIRCUIT BREAKERS | - | - | YES |
| ANALOGUE INPUTS | | 0/+10VDC | |
| 20VDC OUTPUT FOR EXTERNAL CONTROL DESK | YES | YES | YES |
| BUILD-IN SLIDERS+MASTER | - | - | YES |
| DMX 512 INPUT | YES | YES | YES |
| DMX "OK" & "FAULT" LED INDICATORS | YES | YES | YES |
| DMX-512 SIGNAL BUFFER | YES | YES | YES |
| HOLDING OF LAST DMX VALUE | YES | YES | YES |
| 3 ROTARY SWITCHES FOR SELECTING START ADDRESS | YES | YES | YES |
| LAWS | | LINEAR | |
| 4 FACTORY- SET CHASERS | YES | YES | YES |
| CHANNEL LEVEL CONTROL | - | - | SLIDERS |
| FAN ASSISTED CONVECTION COOLING | YES | YES | YES |
| WATCHDOG TIMER | YES | YES | YES |
| RACK MOUNTING | Optional | Optional | Optional |
| WALL MOUNTING | Optional | Optional | Optional |
| TRUSS MOUNTING | YES | YES | YES |
| HEAVY DUTY HANDLE | YES | YES | YES |
| 230/ 400V-3/N/PE/50Hz,3 PHASE STAR CON/TION | YES | YES | YES |
| 230V 3/PE/50Hz,3 PHASE DELTA CONNECTION | Optional | Optional | Optional |
| DIMENSIONS (WxHxD) IN MM | 4 | 32 x 177 x 300 | |

^{*}Delta version dimmers available upon request.







APOLLO 616C CEE 05130



APOLLO 616C SCH 05130



APOLLO 615S GBS 05230



APOLLO 616S SCH 05230 APOLLO 616S FRS 05230

REAR SIDE OF APOLLO 616







Designed & Manufactured by ELECTRON SA

ORDERING INFORMATION FOR APOLLO & APOLLO PLUS SERIES PORTABLE DIMMER PACKS

| | | | | | APO | LLO | | | | | | | | APC | DLLO | PLUS | 5 | | |
|------------------|------------------|-------|-------|-------|-------------|-------|-------|-------|-------|-------|-----------|-------|-------|-------|-------|-------|-------|-------|-----------------|
| | | | | | | | | | | | | | | | | | | | 363C |
| OUTPUT | POWER | | 61 | 5C | 616\$/615\$ | | 616C | | 6168 | | 616C/615C | | 716S | | 716C | | 625C | | 350C |
| SOCKETS/CH. | SUPPLY | | 50µs | 100µs | 50µs | 100µs | 50µs | 100µs | 50µs | 100µs | 50µs | 100µs | 50µs | 100µs | 50µs | 100µs | 100µs | 200µs | 200µs |
| | SCREW TERMINAL | SCH | | | | | 05120 | 10120 | | | 05120 | 10120 | | | | | | | |
| ONE SCHUKO | CEE - 17 | | | | | | 05130 | | | | 05130 | | 05130 | 10130 | | | | | |
| 71/0 001111/0 | SCREW TERMINAL | SCH | | | 05220 | 10220 | | | 05220 | 10220 | | | | | | | | | |
| тwo schuko | CEE - 17 (5X32A) | 3CH | | | 05230 | 10230 | | | 05230 | 10230 | | | | | | | | | |
| ONE CEE - 17 | SCREW TERMINAL | CEE | | | | | 05120 | 10120 | | | 05120 | 10120 | | | | | | | |
| (3x16A) | CEE - 17 | CEE | | | | | 05130 | 10130 | | | 05130 | 10130 | 05130 | 10130 | | | | | |
| TWO CEE - 17 | SCREW TERMINAL | CEE | | | 05220 | 10220 | | | 05220 | 10220 | | | | | | | | | |
| (3x16A) | CEE - 17 | CEE | | | 05230 | 10230 | | | 05230 | 10230 | | | | | | | | | |
| ONE CEE-17 | SCREW TERMINAL | CEE | | | | | | | | | | | | | | | | | |
| (3x32A) | CEE - 17 | CLL | | | | | | | | | | | | | | | 10130 | 20130 | |
| ONE CEE-17 | SCREW TERMINAL | CEE | | | | | | | | | | | | | | | | | |
| (3X63A) | CEE - 17 | CLL | | | | | | | | | | | | | | | | | 20130 |
| ONE GB15A | SCREW TERMINAL | GBS | 05120 | 10120 | | | | | 05120 | 10120 | | | | | | | | | |
| ONE ODIOA | CEE - 17 | ОВО | 05130 | 10130 | | | | | 05130 | 10130 | | | | | | | | | |
| TWO GB15A | SCREW TERMINAL | GBS | | | 05220 | 10220 | | | | | 05220 | 10220 | | | | | | | |
| TWO OBTOA | CEE - 17 | CDC | | | 05230 | 10230 | | | | | 05230 | 10230 | | | | | | | |
| ONE FRENCH | SCREW TERMINAL | FRS | | | | | 05120 | 10120 | | | 05120 | 10120 | | | | | | | |
| ONETREION | CEE - 17 | | | | | | 05130 | 10130 | | | 05130 | 10130 | 05130 | 10130 | | | | | |
| TWO FRENCH | SCREW TERMINAL | FRS | | | 05220 | 10220 | | | 05220 | 10220 | | | | | | | | | |
| TWO TREITON | CEE - 17 | | | | 05230 | 10230 | | | 05230 | 10230 | | | | | | | | | |
| ONE POWER CON | SCREW TERMINAL | POC | | | | | | | | | | | | | | | | | |
| ONE TOWER OOK | CEE - 17 | . • • | | | | | | | | | | | | | 05130 | 10130 | | | |
| TWO POWER CON | SCREW TERMINAL | POC | | | | | | | | | | | | | | | | | |
| | CEE - 17 | | | | | | | | | | | | | | | | | | |
| ONE SOCAPEX | SCREW TERMINAL | SCP | | | | | | | | | | | | | | | | | \sqcup |
| | CEE - 17 | | | | | | | | | | | | | | 05130 | 10130 | | | \sqcup |
| TWO SOCAPEX | SCREW TERMINAL | SCP | | | 05220 | | 05220 | 10220 | 05220 | 10220 | 05220 | 10220 | | | | | | | igsquare |
| | CEE - 17 | | | | 05230 | 05230 | 05230 | 10230 | 05230 | 10230 | 05230 | 10230 | 05230 | 10230 | | | | | \sqcup |
| ONE 16POLE x 16A | SCREW TERMINAL | HRT | | | | | | | | | | | | | | | | | igsquare |
| (HARTING) | CEE - 17 | | | | | | | | | | | | | | 05130 | 10130 | | | $\sqcup \sqcup$ |
| TWO 16POLE x16A | SCREW TERMINAL | HRT | | | 05220 | | 05220 | - | 05220 | | | 10220 | | | | | | | $\sqcup \sqcup$ |
| (HARTING) | CEE - 17 | | | | 05230 | 05230 | 05230 | 10230 | 05230 | 10230 | 05230 | 10230 | | | | | | | |

APOLLO PLUS 6 16 S SCH 05 2 3 0 APOLLO or APOLLO PLUS SERIES Number of channels 3 for 3 channels, 6 for 6 channels and 7 for 12 channels. Maximum channel current (15 for 15A, 16 for 16A, 25 for 25A, 50 for 50A and 63 for 63A). Control sliders (S models without sliders, C models with sliders) S models are supplied with heavy duty fuse holders and C models are supplied with circuit breakers). Output sockets (SCH for Schuko, CEE for CEE17, GBS for British GB15A, FRS for French, SCP for Socapex, HRT for Harting and POC for Power Con). Rise time of output filters (05 for 50µs, 10 for 100µs, 20 for 200µs). Number of output sockets per channel (1 for 1 per channel, 2 for 2 per channel) Mains power connection (2 for screw terminals, 3 for CEE17 and 6 for Delta screw terminals). Reserved code for customer specs (0 for standard version).

Please make sure that the combination of your choice is available in the above standard ordering table.

GUIDING ORDERING INFORMATION





DMR.730 TRAILING EDGE DIMMER







DMR.730 FLICKER FREE TRAILING EDGE DIMMER Unaffected from mains fluctuations

Specially designed for dimmable 230VAC LED lamps.

The only dimmer which achieves stable output voltage, unaffected from mains fluctuations.

Output remains stable even at 230VAC, in power supply voltage range from 173VAC to 265VAC.

Mains fluctuation immunity

The light intensity adjustment in a common flicker free dimmer is usually based on IGBTs (Insulated Gate Bipolar Transistor).

These dimmers have the ability to vary the conduction angle of the power supply sinusoidal voltage so that regulation of brightness variation of the lamp(s) is achieved. When IGBT is in conduction state it acts as a switch, and consequently the supply voltage is conducted at the dimmer's output. This means that any fluctuation in the mains voltage is conducted to the lamps and the result is the variation of the lamps' luminosity. Thus, these dimmers are flicker-free concerning their electronic circuit, but the lamps are flickering because of the dimmer's weakness to control the fluctuations of the mains system.

The new SMRD (Switch Mode Regulated Dimmer) technology monitors the mains voltage and stabilizes the output voltage so that this remains stable and unaffected from the network's fluctuations, thus results in the stability of the lamp(s) brightness.



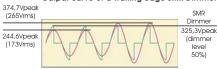


Output curve of a common Trailing edge flicker free dimmer



When the IGBT is in conduction, the dimmer's peak voltage (green curve) is about the same with the mains peak voltage (red curve). Consequently, the voltage that is conducted to the lamp(s) is proportional to the mains' fluctuations.

Output curve of a Trailing edge SMR Dimmer



The peak voltage of the SMR Dimmer (green curve), is stable irrespectively of the mains peak voltage (red curve). The amplitude of the mains' fluctuation could be from 173V to 265V.

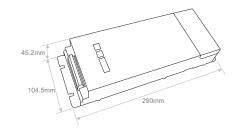
True output regulation

Some dimmers available in the market achieve voltage stabilization by regulating the conduction angle. With this method the RMS voltage can remain stable, however there are three disadvantages:

- 1) Mains voltage must be always higher than the output voltage
- 2) By changing the conduction angle, brightness is affected because the LED Lamp(s) luminosity regulation is depended on the conduction angle of the
- 3) When the dimmer is on at full (conduction angle 100%), there is no possibility to further increase the conduction angle in case of a voltage drop from the

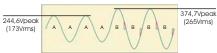
SMR technology maintains the output voltage stable with no need of higher mains voltage and without changing the conduction angle. This means that even if the dimmer is at 100%, the output remains at full (230V) in power supply voltage range from 173V to 265V.





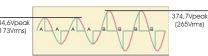
DMR.730 TRAILING EDGE **DIMMER**

Failure of RMS output vo dimmer is at full (100%). utput voltage stabilization, by changing the conduction angle, when the

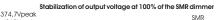


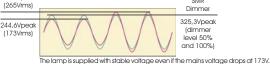
A: Conduction angle 100%. RMS voltage is less than 173Vrms, not 230Vrms. B: Smaller conduction angle for output 230Vrms. The supply voltage must be higher than 230Vrms

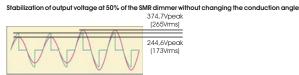
Stabilization of RMS output voltage by changing the conduction angle



Changing angle A to angle B to maintain the same RMS output voltage, results in changing the brightness of the lamp.







The lamp is supplied with stable voltage and stable conduction angle

More features of the SMR Dimmer:

Power Factor

 ${\tt LED\, lamps\, but\, also\, CFLs\, (Compact\, Fluorescent\, Lamps)}\ are\ usually\ loads\ with$ low power factor ($\cos\theta = 0.55 - 0.75$).

Independently from the lamps' power factor, the new SMR dimmer consumes energy with power factor >0.98 (for output level 100%), without affecting the network.

Lamp protection

Due to the special electronic circuits and stabilization the output voltage is always steady and free from spikes and over-voltages protecting the lamps even from complete failure.

Dimming law correction

With the use of two trimmers the dead fields, that usually LED and fluorescent lamps have, are eliminated. The first trimmer is used for the minimum and the other one for the maximum brightness of the lamp. In this way the controller works correctly when adjusting the lamps' brightness.

Master Slave operation

The new SMR dimmer can work as master, controlling multiple SMR dimmers connected at its DMX output. With this feature, as many SMR dimmers as the user likes can be controlled from one controller.

CFL ignition

CFLs (Compact Fluorescent Lamps) in order to ignite need operating voltage of more than approximately 50%. Thus, in order to turn on a CFL at 30% for example, the user should first adjust the dimmer over 50% and afterwards dim it at 30%.

The new SMR dimmer is capable of providing a pulse of 100%, of the output voltage, for 1 sec automatically, in case we need to turn on the lamps at percentages less than 50%.

Control inputs

The new SMR dimmer incorporates both DMX-512 and analogue inputs. At the analogue input the user can connect 0/10V, or 1/10V, or rheostat $100\mbox{Klog},$ or button for ON - OFF and dimming, or UP/DOWN button for ON -OFF and dimming.

PWM signal output

The new SMR dimmer incorporates PWM signal output, providing the capability of driving constant voltage and constant current converters of ELECTRON SA. Thus, with one controller the user can control multiple types of lighting fixtures.





DMR.731 TRAILING EDGE **DIMMER**





DMR.731 FLICKER FREE TRAILING EDGE DIMMER

Economic solution for controlling:

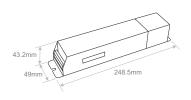
- Dimmable LEDs 230V.
- Dimmable CFLs .
- Trailing edge dimmable Electronic Transformers.
- Handles great inrush currents.
- Lamps connected up to 350W.
- Diming Low Correction eliminating dead fields of the lamps.

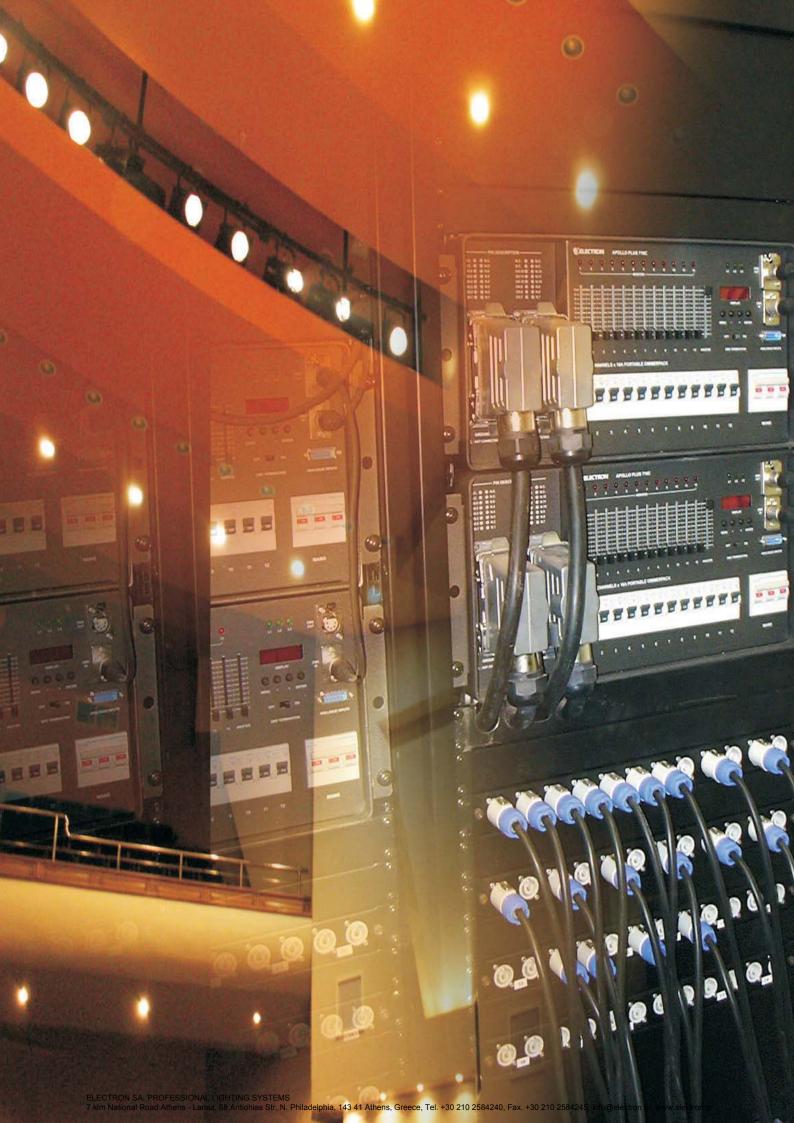
 Master Slave operation for controlling multiple Dimmers with one controller.
- CFL ignition.DMX-512 input.
- Analogue Input (0/10V, 1/10V, rheostat 100Klog, button, UP/DOWN button).

 PWM signal output can drive ELECTRON SA constant voltage and constant current converters.

Output power 350W Controlled by IGBT







SCO PURS

BECKETTER STATE OF THE PARTY OF



MICON SERIES





ARCHITECTURAL WALL-MOUNTED DIMMERS AND FLUORESCENT CONTROLLERS

MICON is an extremely reliable and economic lighting controller that offers energy saving solutions. It is suitable for medium and small lighting control applications in hotels, restaurants, multi-use buildings, board rooms, cinemas, retail stores, foyers, offices, pubs, public areas, churches, museums and other architectural applications. Each controller has two on-board push buttons per channel for simple up/down stand alone operation. Each controller can be remote controlled by MICON B series of control panels or by any simple slider / potentiometer or conventional up / down push buttons available in the market. On top of these, the controllers can be connected to the ELECTRON Easynet for more sophisticated remote control solutions. This feature is offered by the MICON E series of control panels. The MICON series will provide reliable performance over many years.

MICON F SERIES

MICON FLUORESCENT CONTROLLERS

The MICON F series of controllers is designed to control High Frequency Fluorescent Ballasts. Each channel provides a relay power circuit and a control output of 1/+10V for dimming fluorescent lamps. The HF Ballasts are very efficient and are offered by a significant number of manufacturers in the market. When calculating the load power it is recommended to multiply the number of lamps x lamp wattage x1,1. In order to prevent mains instant overloading, the MICON F series has a factory set soft start of 1 sec.

The power relays of the MICON F series can be used to switch on/ off non dimmable loads

| Code | Supply voltage | Switched outputs | Control outputs | Output protection | Fade times | Control input | On-board Control | Power Monitor | Output Monitor | Dimensions in mm (WxHxD) |
|-------------|-------------------------------------|----------------------------------|------------------------------|-------------------|------------------|-------------------|------------------------------------------------|------------------|-----------------------------|--------------------------|
| MICON F106 | 230V 50HZ single phase | One rated at 6A (1380W) | One 1/+10V sink current | 6A MCB | 0.1 to 60sec. | Easynet 0/+10V | With two push buttons (UP-DOWN) | With one LED | With one LED | 152x190x63 |
| MICON F110 | 230V 50HZ single phase | One rated at 10A (2300W) | One 1/+10V sink current | 10A MCB | 0.1 to 60sec. | Easynet 0/+10V | With two push buttons (UP-DOWN) | With one LED | With one LED | 152x190x63 |
| MICON F116 | 230V 50HZ single phase | One rated at 16A (3680W) | One 1/+10V sink current | 16A MCB | 0.1 to 60sec. | Easynet 0/+10V | With two push buttons (UP-DOWN) | With one LED | With one LED | 152x190x63 |
| MICON F206 | 230V 50HZ single phase | Two rated at 6A (1380W) each | Two 1/+10V sink current | 6A MCB | 0.1 to 60sec. | Easynet 0/+10V | With two push buttons (UP-DOWN) per channel | With one LED | With one LED per channel | 267x245x85 |
| MICON F210 | 230V 50HZ single phase | Two rated at 10A (2300W) each | Two 1/+10V sink current | 10A MCB | 0.1 to 60sec. | Easynet 0/+10V | With two push buttons (UP-DOWN) per channel | With one LED | With one LED per channel | 267x245x85 |
| MICON F306 | 230V 50HZ single phase | Three rated at 6A (1380W) each | Three 1/+10V sink current | 6A MCB | 0.1 to 60sec. | Easynet 0/+10V | With two push buttons (UP-DOWN) per channel | With one LED | With one LED per channel | 267x245x85 |
| MICON F310 | 230V 50HZ single phase | Three rated at 10A (2300W) each | Three 1/+10V sink current | 10A MCB | 0.1 to 60sec. | Easynet 0/+10V | With two push buttons (UP-DOWN) per channel | With one LED | With one LED per channel | 267x245x85 |
| MICON F306T | 230V 50HZ three phases & neutral | Three rated at 6A (1380W) each | Three 1/+10V sink current | 6A MCB | 0.1 to 60sec. | Easynet 0/+10V | With two push buttons (UP-DOWN) per channel | With one LED | With one LED per channel | 267x245x85 |
| MICON F310T | 230V 50HZ three phases & neutral | Three rated at 10A (2300W) each | Three 1/+10V sink current | 10A MCB | 0.1 to 60sec. | Easynet 0/+10V | With two push buttons (UP-DOWN) per channel | With one LED | With one LED per channel | 267x245x85 |
| MICON F606T | 230V 50HZ three phases & neutral | Six rated at 6A (1380W) each | Six 1/+10V sink current | 6A MCB | 0.1 to 60sec. | Easynet 0/+10V | With two push buttons (UP-DOWN) per channel | With one LED | With one LED per channel | 267x355x85 |
| MICON F610T | 230V 50HZ three phases & neutral | Six rated at 10A (2300W) each | Six 1/+10V sink current | 10A MCB | 0.1 to 60sec. | Easynet 0/+10V | With two push buttons (UP-DOWN) per channel | With one LED | With one LED per channel | 267x355x85 |



MICON SERIES

ORDERING INFORMATION EXAMPLE FOR MICON CONTROLLER AND CONTROLLERS

F: FLUORESCENT CONTROLLER D: CONVENTIONAL DIMMER

MICON F 306 T

THREE PHASE DIMMERS AND CONTROLLERS (when available)

Designed & Manufactured by ELECTRON SA

NUMBER OF CHANNELS1 for one channel

- 2 for two channels
- 3 for three channels
- 6 for six channels

MAXIMUM OUTPUT CURRENT PER CHANNEL

06 for 6A 20 for 20A 10 for 10A 25 for 25A 16 for 16A 32 for 32A



MICON D SERIES

MICON CONVENTIONAL DIMMERS

The MICON D series of Dimmers is designed to control incandescent lamps, tungsten, tungsten halogen, iron core wire wound transformers, electronic dimmable leading edge transformers and cold cathode light sources. In order to prevent mains instant overloading and to minimize the filament shock and lamp failure due to high inrush current when the lamp filament is cold, the MICON D series has a factory soft start of 1 sec. This feature reduces maintenance cost and provides longer lamp life as the soft start allows the filament to reach a safe temperature before full brightness.

| Code | Supply voltage | Dimmers outputs | Output protection | Fade times | Control input | On-board Control | Power Monitor | Output Monitor | Dimensions in mm (WxHxD) |
|-------------|-------------------------------------|-------------------------------------------|-------------------|------------------|-------------------|------------------------------------------------|------------------|-----------------------------|--------------------------|
| MICON D106 | 230V 50HZ single phase | One channel at 6A (1380W) | 6A MCB | 0.1 to 60sec. | Easynet 0/+10V | With two push buttons (UP-DOWN) | With one LED | With one LED | 152x190x63 |
| MICON D110 | 230V 50HZ single phase | One channel at 10A (2300W) | 10A MCB | 0.1 to 60sec. | Easynet 0/+10V | With two push buttons (UP-DOWN) | With one LED | With one LED | 152x190x63 |
| MICON D116 | 230V 50HZ single phase | One channel at 16A (3680W) | 16A MCB | 0.1 to 60sec. | Easynet 0/+10V | With two push buttons (UP-DOWN) | With one LED | With one LED | 267x245x85 |
| MICON D120 | 230V 50HZ single phase | One channel at 20A (4600W) each | 20A MCB | 0.1 to 60sec. | Easynet 0/+10V | With two push buttons (UP-DOWN) | With one LED | With one LED | 267x245x85 |
| MICON D125 | 230V 50HZ single phase | One channel at 25A (5750W) each | 25A MCB | 0.1 to 60sec. | Easynet 0/+10V | With two push buttons (UP-DOWN) | With one LED | With one LED | 267x245x85 |
| MICON D132 | 230V 50HZ single phase | One channel at 32A (7360W) each | 32A MCB | 0.1 to 60sec. | Easynet 0/+10V | With two push buttons (UP-DOWN) | With one LED | With one LED | 267x245x85 |
| MICON D206 | 230V 50HZ single phase | Two channels rated at 6A (1380W) each | 2x6A MCBs | 0.1 to 60sec. | Easynet 0/+10V | With two push buttons (UP-DOWN) per channel | With one LED | With one LED per channel | 267x245x85 |
| MICON D210 | 230V 50HZ single phase | Two channels rated at 10A (2300W) each | 2x10A MCBs | 0.1 to 60sec. | Easynet 0/+10V | With two push buttons (UP-DOWN) per channel | With one LED | With one LED per channel | 267x245x85 |
| MICON D306 | 230V 50HZ single phase | Three channels rated at 6A (1380W) each | 3x6A MCBs | 0.1 to 60sec. | Easynet 0/+10V | With two push buttons (UP-DOWN) per channel | With one LED | With one LED per channel | 267x245x85 |
| MICON D310 | 230V 50HZ single phase | Three channels rated at 10A (2300W) each | 3x10A MCBs | 0.1 to 60sec. | Easynet 0/+10V | With two push buttons (UP-DOWN) per channel | With one LED | With one LED per channel | 267x245x85 |
| MICON D306T | 230V 50HZ three phases & neutral | Three channels rated at 6A (1380W) each | 3x6A MCBs | 0.1 to 60sec. | Easynet 0/+10V | With two push buttons (UP-DOWN) per channel | With one LED | With one LED per channel | 267x245x85 |
| MICON D310T | 230V 50HZ three phases & neutral | Three channels rated at 10A (2300W) each | 3x10A MCBs | 0.1 to 60sec. | Easynet 0/+10V | With two push buttons (UP-DOWN) per channel | With one LED | With one LED per channel | 267x245x85 |
| MICON D606T | 230V 50HZ three phases & neutral | Six channels rated at 6A (1380W) each | 6x6A MCBs | 0.1 to 60sec. | Easynet 0/+10V | With two push buttons (UP-DOWN) per channel | With one LED | With one LED per channel | 267x355x85 |
| MICON D610T | 230V 50HZ three phases & neutral | Six channels rated at 10A (2300W) each | 6x10A MCBs | 0.1 to 60sec. | Easynet 0/+10V | With two push buttons (UP-DOWN) per channel | With one LED | With one LED per channel | 267x355x85 |





























MICON CONTROL PANELS B & E SERIES

The MICON B and E series of control panels are used to control the MICON Dimmers and Fluorescent Controllers. The MICON B series of Base control panels is offered with sliders or push buttons and is used in cases of simple control requirements. Parallel connection of MICON BB series of push buttons is possible. The MICON E series of Electronic control panels is the most popular choice for commercial applications as it provides more sophisticated control, such as level control and combination between level control, electronic sliders and electronic push buttons. Parallel connection between the same or different types of MICON E series is possible. The panels are $available \ in \ stainless \ steel\ and\ are\ designed\ \ to\ \ fit\ \ in\ \ a \ single\ gang\ or\ double\ gang\ back\ box.\ The\ power\ supply\ is\ provided\ from\ the$ Dimmers and/or Fluorescent Controllers.

MICON CONTROL PANELS

ORDERING INFORMATION EXAMPLE FOR MICON CONTROL PANELS



MICON BS 3 M

S: CONTROL WITH SLIDERS L: LEVEL CONTROL PANEL

(OFF-LEVEL A-LEVEL B-FULL) B: UP/DOWN CONTROL (PUSH BUTTONS)

MASTER CONTROL (when available)

NUMBER OF OUTPUTS

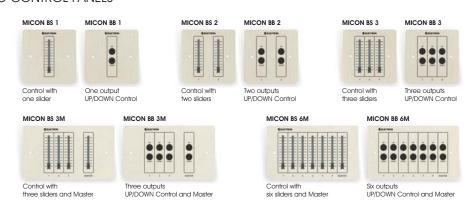
- 1: ONE OUTPUT
- 2: TWO OUTPUTS
- 3: THREE OUTPUTS
- 6: SIX OUTPUTS

.00 Designed & Manufactured by ELECTRON SA

MICON B SERIES

BASE ECO CONTROL PANELS





MICON E SERIES

ELECTRONIC EASYNET CONTROL PANELS

MICON EB 1

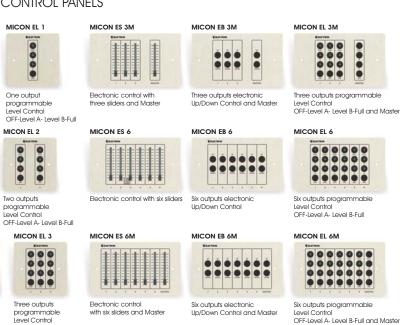


The Cinema Adaptor is an interface which converts the commands given by the cinema projector into commands which can be read from MICON and PREMIUM dimmer series.





electronic Up/Down Control



Electronic control with three sliders

OFF-Level A- Level B-Full



TEMPO 12 CONTROL DESKS





DMX LIGHTING CONTROL DESK

Tempo 12 is the most powerful 12 channel control desk that combines low cost and high performance. It is suitable for permanent installations or touring requirements for either small stages, studios or theaters.

Features

- 12 Presets which can be assigned to control 12 channels or 12 programmable memories.
- 12 Flash buttons.
- 12 Monitor LEDs.
- Chaser with three operating modes and three functions per mode.
- Rate indicator with LED flashing at rate speed.
- \blacksquare Capability of assigning the chase to two six-channel groups: (group 1=1-6 chan., group 2=7-12 chan.).
- Chase master with chase off button.
- Grand master with blackout button.
- Analogue output.
- Digital output.



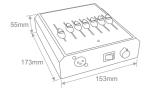
CDS.219 CONTROL DESKS

DMX LIGHTING CONTROL DESK

- 6 channel faders plus master.
- Can operate with battery or AC/DC adaptor.
- Simple to use.
- Desk top or wall mounted.
 Can also operate as a DMX tester.

Code

CDS.219



TECHNICAL SPECIFICATIONS

 $\textbf{POWER INPUT}: 9 \ \text{VDC} \ , \ 1 \text{W}$

DMX OUTPUT: 3-pin female DMX connector

BATTERY (not included): PP3, 9V DIMENSIONS : 173x153x55mm WEIGHT (battery excluded: 0,6Kg





AC/DC adaptor. Input 230 VAC / Output 9 VDC. Supplied with the control desk.





SCENE SETTER 24 & 48

SCENE SETTER 24 24 DMX CHANNELS LIGHT CONTROLLER

| Model | Code | No. of channels | Input Voltage | Dimensions | Weight |
|-----------------|---------|--------------------|------------------|--------------|--------|
| SCENE SETTER 24 | CDS.005 | 24 | 12-18VDC (500mA) | 482x264x85mm | 4.8kg |



SCENE SETTER 48 48 DMX CHANNELS LIGHT CONTROLLER

| Model | Code | No. of channels | Input Voltage | Dimensions | Weight |
|-----------------|---------|-----------------|------------------|--------------|--------|
| SCENE SETTER 48 | CDS.004 | 48 | 12-20VDC (500mA) | 710x270x75mm | 7.5kg |



TECHNICAL SPECIFICATIONS

- DMX OUTPUT (3-pin Female XLR).
 MIDI IN/OUT/THRU (5-pin DIN) Compatible.
 Audio Control through Line IN (100mV-1Vp-p).
- 3 seven segments LED DISPLAY.
- Single Chase/Mix Chase Single Scene/Mix Scene Operation.
 Master FADE / SPEED / AUDIOLEVEL Control.

| SETTER 24 | SETTER 48 | |
|-----------|-----------|------------------------------------------------------------------------------|
| 24 | 48 | : DMX Control Channels. |
| 48 | 96 | : Recordable memories for static scenes chaser programs with 4500 total step |

12-18VDC 12-20VDC : Power input (power pack included 230VAC/50-60Hz).





SWEETLIGHT CONTROLLER

DMX SOFTWARE LIGHTING CONTROLLERS



SWEETLIGHT CONTROLLER

THE SOFTWARE



SweetLight provides the ultimate solution for lighting control. It offers the possibility of direct user control, from simple parcans to the most complex moving light, with a computer, the software and the interface. A computer is loaded with software to build and control the lighting show, connecting to the interface via a USB port.

The software is designed to be very user-friendly and can easily be used by even those whose knowledge of computers is limited. We propose a unique software, which is free for download from our web site. The software is available for Windows and MacOS. Until now, all software upgrades are free.

We propose a range of interfaces, adapted to the various lighting applications. The interface can also run the lighting show by itself. The interface retains the data in a non-volatile memory, so that hard drive failure or loss of data will not interrupt the show.

The software contains several programs: dmx addressing, light scenes creation, live show, timeline show, 3D rendering, ControlBoard is a control panel from where you can run all these different programs. Click the program icon to start it.



Declare your lighting equipment in Setup. The library contains personality files (colors, gobos, etc) for the most common fixtures (mirror lights, moving heads, color changer strobes, power units, etc.)

lights, moving heads, color changer, strobes, power units, etc).

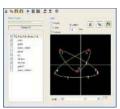
This library is regularly updated on our site in order to stay current with new fixture releases. If the light you are using is not included, it is easy to add and configure new ones.



With Editor, create dynamic scenes. The screen manages:

- . pan/tilt movements
- . colors, gobos, etc
- . trychromie
- . time and fade mode
- . fixtures grouping

The screen looks similar to a "regular lighting desk", with advanced functions like copy, paste, insert, \dots



In Generator, in a few mouse clicks, build complex lighting scenes, with pan&tilt movements and color (gobo) effects, for a group of moving lights, with fanning effect.



With Live, play the show in live. Live is customizable, depending of your needs (pages, buttons, presets). A button can trigger a light scene, a multimedia file, or a timeline.

The screen can be locked by with a password.

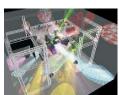
It is also possible to change any channels from Editor, while Live plays the show.



Timeline is a synchronized multimedia show editing software. It is able to play multiple file formats (video, picture, audio and light scenes). Drop the files into the timelines and slide them in the desired time. The possible applications are:

basic "sound and light". The readable audio files are wav, mp3, ogg and wma format.

"video and light" on plasma screen or video projector. The readable picture files are bmp, jpg, png, giff. The readable video files are avi, mpg, mpeg, mov, wmv.



3DView display the stage in 3 dimensions and it shows the lights moving in real time, from any point of view. Set stage size. The program has a bank of basic objects (speakers, truss, music instruments). You can also import your own objects. Set position (orientation, scale, color) of each object (or fixture). It is possible to set these parameters on a group of objects. Set textures, luminosity, smoke level for more realism.



For total security, the interface can operate lights in stand-alone mode. From StandAlone, download dynamic scenes into the interface. Depending on the model, it is possible to store from 1 to 14 dynamic scenes for later recall without the need of a computer. The scenes can be swapped or added together. This system is not only ideal for backup during big shows, but also to run stand alone installations where simple use is important, like exhibitions and architectural lighting.

SWEETLIGHT

CONTROLLER

SWEETLIGHT CONTROLLER

THE HARDWARE

When linked to the computer, the interfaces do the same job. The major differences concern the stand-alone using

- If you want to always play the show with the computer, and you have only a few lights, the interface "Cable" should be the best choice.
- if you want to always play the show with the computer, and you have a lot of lights, the interface "D512" should be the best choice.
- if you want to always play the show with the computer, and you want to use a dmx lighting desk together with our software, the interface "Box" should be the best choice.
- if you want the interface plays the show without computer, and you want to trigger the scenes with a remote controller, the interface "Remote" should be the best choice.
- if you want the interface plays the show without computer, and you want to trigger the scenes with buttons, the interface "Ssa" should be the best choice.



Code CSF.001

- The interface "Cable" allows to discover an "entry level" version of our software, for a very low price.
- USB DMX cable.
- LED for USB link.
- Max 100 dmx channels.
- Max 10 fixtures.
- 3D rendering only while interface is not connected. Max 20 scenes running together.
- Software downloadable from internet.
- This interface does not work on MacOS.



Code CSF.002

- The interface "D512" allows to use our software without any restriction,
- with 512 dmx channels and 512 Artnet channels.
- 2 leds in front panel (power and usb link).
- USB link with computer.
- DMX output for lighting equipment.
- Thermal protection on dmx ground.
- This interface can play a "dynamic" scene for 512 dmx channels, without computer.



Code CSF.003

- The interface "Remote" works with a universal IR remote controller.
- Metal casing.
- 3 leds in front panel (power, IR data and usb).
- IR sensor in front panel.
- USB link with computer.
- DMX output for lighting equipment.
- 2.5 jack socket for external power unit.
- External/internal power switch.
- Cable locking system.
- 3.5 jack for external IR sensor.
- Mini-DIN for external contacts.
- Optical isolation for dmx output.
- Up to 10 scenes can be uploaded into this interface. In stand alone mode, up to 4 scenes can be played simultaneously. These scenes can be triggered from an universal remote controller or from the optional dedicated remote controller, with control of speed of the show. An internal date&time calendar allows date&time triggering for stand-alone scenes.



Code CSF.004

- 19" rack mount one unit height.
- LEDs for power, computer link, dmx input, flash buttons.
- xlr 3 pins for dmx 512 output with optical isolation.
- xlr 3 pins male for dmx input.
- 2.5mm jack socket for external power adaptor (9-12V 300mA).
- Switch to select external / internal power.
- Supplied with usb line and power adaptor.



Code CSF.005

- Metal casing.
- LEDs for power and ethernet link.
- Ethernet socket for computer link.
- xlr 3 pins for dmx 512 output with optical isolation.
- 2.5 jack socket for external power adaptor.
- Supplied with ethernet line and power adaptor.





ARLIC Architectural Lighting Management System





ARLIC architectural lighting system capable of managing the lighting needs of medium and multi purpose venues, but also flexible enough to cover the needs of a smaller space where the cost of installation is crucial, yet providing the features of a large system.

ARLIC system consists of:

- Control panels of 6 or 18 scenarios.
- 8 analogue input interface.
- 4 mains voltage (230VAC) input interface.
- Infrared remote control.
- Lighting programmer.

ARLIC system can control up to 32 scenarios each. Each scenario can be a scene with programmable fade in-out, or a chaser with programmable rate and fade.

By using the 8 analogue input interface it is possible to connect to the system other control panels such as 0-10V, 1-10V rheostats, single push buttons, updown push buttons, presence detectors and relay contacts. By using the 4 mains voltage (230VAC) input interface it is possible to connect to the system common motion detectors, wall mounted switches (230VAC), as well as to have mains voltage monitoring for emergency functions.

The scenario selection buttons of all the system control panels are programmable. Any scenario can be activated from the desired button. Also, the buttons of each control panel can be grouped and function in different ways of scenario selection. The control panels can, optionally, have an IR receiver so as to accept commands from the system's IR remote control. With the remote control there is the possibility of controlling up to 18 scenarios.

The architectural lighting controller manages all the commands that are sent by the control panels and interfaces, it activates the lighting scenarios and scheduled events and it transfers them to the 512 channels of the DMX-512 output. By this way, any DMX device can be connected to the ARLIC system. The architectural lighting controller is also equipped with a DMX-512 input with an incorporated merger. From the DMX-512 input and by using a DMX control desk it is possible to control the illumination of spaces with capability of de-activating (Blocking) selected control panels.

An Emergency Scenario for each zone can be automatically activated when the ARLIC system detects power failure and activation of the electric generator, avoiding this way network overload. Also, a Panic Scenario for each zone can be activated from an external emergency heavy duty push button for lighting all areas in special cases.

The ARLIC system network (ARLICnet) is based on the Controller Area Network (CAN) protocol which is a real-time, serial, broadcast protocol with a very high level of security.

In ARLICnet there can be up to 96 Nodes of control panels and interfaces, while it is divided in 6 Segments which are connected by the repeaters.

The topology of ARLICnet can be Linear, Star, Tree, Ring or a combination of those.

Ideal in small installations or in applications where cost is a crucial factor, control panels of 6 or 18 scenarios with incorporated DMX output can be used.

The ARLIC lighting control system can manage up to 60 DMX channels, while it is also possible that the control panels have an IR receiver for the IR remote control ARS.004.

The ARLIC can control up to 32 senarios and can support up to 48 nodes (16 control panels ARS.009/010/011/012, 16 analogue interfaces ARS.002 and 16 high voltage interfaces ARS.001). Also emergency lighting conditions are supported by the system.

ARLIC Architectural Lighting Management System

ARLIC Controllers







ARS.013 WHITE

ARS.013 BLACK

ARS.023 WHITE

ARS.013

Control panel and controller with 6 scenarios and DMX output.

ARS.014

Control panel and controller with **6** scenarios, infrared receiver and DMX output.

ARS.023

Wall mounted control panel and controller with 6 scenarios and DMX output.

ARS.024

Wall mounted control panel and controller with ${\bf 6}$ scenarios, infrared receiver and DMX output.







ARS.015 WHITE

ARS.015 BLACK

ARS.025 WHITE

ARS.015

Control panel and controller with 18 scenarios and DMX output.

ARS.016

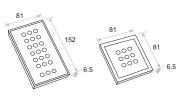
Control panel and controller with 18 scenarios, infrared receiver and DMX output.

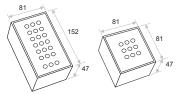
ARS.025

Wall mounted control panel and controller with 18 scenarios and DMX output.

ARS.026

Wall mounted control panel and controller with 18 scenarios, infrared receiver and DMX output.





ARLIC system:

- Advanced lighting control system.
 - Perfect lighting solutions.
 - User friendly.



CONTROL PANELS OF 6 & 18 SCENARIOS



FOR ARLIC



ARS 009 BLACK

- Control panels of 6 and 18 scenarios.
- IR receiver (optional).
- Programmable buttons.
- Button grouping.
- Multiple button operation modes.
- Up and down dimming buttons.
- Monitor LEDs for active scenarios.
- Status backup on power failure.
- DMX-512 output for stand alone operation.
- ARLICnet port.
- Variety of colours.

ARS.009

Control panel with 6 scenarios.

ARS.010

Control panel with 6 scenarios and infrared receiver.

Wall mounted control panel with 6 scenarios.

Wall mounted control panel with 6 scenarios and infrared receiver.



Control panel with 18 scenarios.

ARS.012

Control panel with 18 scenarios and infrared receiver.

ARS.029

Wall mounted control panel with 18 scenarios.

Wall mounted control panel with 18 scenarios and infrared receiver.

- Standard colours for frames and panels are BLACK or WHITE.
- Other colours of frame and panels: GREY, IVORY, STAINLESS STEEL, ANTHRACITE or ALUMINIUM are available at extra cost.



ARLIC Accessories



Analogue interface

ARS.002 for ARLIC



- 8 programmable analogue inputs.
- Input grouping.
- Multiple input operation mode.
- Status backup on power failure.
- ARLICnet port.
- Up to 16 interfaces supported by ARLICnet.

The analogue inputs can be used to connect 0-10V control panels, 1-10V rheostats, single push buttons, up-down push buttons, presence detectors and relay contacts.

High voltage interface

ARS.001 for ARLIC



- 4 programmable H.V. (230VAC) inputs.
- Input grouping.
- Multiple input operation mode.
- Status backup on power failure.
- ARLICnet port.
- Up to 16 interfaces supported by ARLICnet.

The inputs can be used to connect common motion detectors, wall mounted switches or buttons (230VAC), while it is possible to have mains voltage monitoring for emergency functions.

IR remote control

ARS.004 for ARLIC



- Remote control of 18 scenarios.
 - Selection of active zone.*
 - Up and down dimming buttons.
 - Long effective range.
 - No command conflict between zones.*
 - Each zone can have its own remote control.*
 - OFF button

*Not available functions in the MINI ARLIC system.

Programmer

ARS.008 for ARLIC



- ARLIC system configuration.
- System devices setup.
- Scenario programming.
- Events programming.
- Emergency and panic programming.
- USB port for backup on memory stick.
- ARLICnet port.

Accessories for ARLIC



ARS.017 1-10V electronic rheostat



ARS.018 Wall motion detector



ARS.019
Ceiling motion detector



ARS.020 Presence detector



ARS.021 RJ45 ARLIC net socket



ARS.022 Wall mounted RJ45 ARLIC net socket



ARS.003 ARLICnet repeater



ARC.004

Recessed wall box for 1 gang control panels. Supplied for the control panels if needed.



ARC.005
Recessed wall box for 2 gang control panels. Supplied for the control panels if needed.



ARC.006

Plasterboard box for 1 gang control panels. Supplied for the control panels if needed.



ARC.007
Plasterboard box for 2 gang control panels. Supplied for the control panels if needed.



DMX SPLITTER SP142





The Splitter SP142 is the ideal tool for splitting and buffering the DMX512 signal. The Splitter has a termination switch and led indicator, DATA Led, optically isolated outputs and two outputs with reverse polarity buttons. The internal PCB carries spare ICs for quick emergency service. It is designed to be mounted on standard 19" rack (1U) but it can also be used as a desktop unit.

Features

- Termination switch with led indicator
 6 optically isolated and buffered outputs
- 2 outputs with reverse polarity buttons
- 7 independent low voltage power supplies
- 2 spares ICsDMX IN and DMX THROUGH
- Supply voltage 220/240V 50Hz
- 7 fuses 100mA each (5x20mm)
- Data led
- Dimensions in mm (WxHxD): 483 x 44 x 170



DEM.002

- 5-pin XLR IN and THROUGH
- 4 isolated and buffered outputs on 5-pin XLR females
- 2 isolated and buffered outputs on 3-pin XLR females with reverse polarity buttons



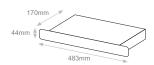
DEM.003

- 3-pin XLR IN and THROUGH
- 6 isolated and buffered outputs on 3-pin females (2 of them with reverse polarity buttons)



DEM.014

- RJ-45 IN and THROUGH
- 6 isolated and buffered outputs on RJ-45 (2 of them with reverse polarity buttons)







Can be used for merging information from two separate DMX signals in one.

Code: **DEM.046**

Features – Technical specifications.

- Two DMX-512 inputs.
- Two optical isolated outputs.
- Optical isolation between two outputs.
- Four operating modes (HTP, LAST, BACKUP, MERGE).
- Dip switches for start address selection.
 Dip switch for DMX signal termination on each input.
 Connection up to 25 devices on each output port.
- Two XLR 5-pin male plugs for DMX input connection.
- Two XLR 5-pin female plugs for DMX output connection.

 Power supply: 230VAC 50/60Hz.

 Power consumption: 2W

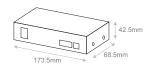
- Ambient temperature: -20 / +50oC.
- Dimensions L x W x H: 173,5mm x 68,5mm x 42,5mm.





DMX MERGER SPLITTER







■ Can be used for expansion or/and branching of DMX network.

Code: **DEM.045**

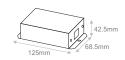
Features - Technical specifications.

- DMX signal amplification.
- Input output optical isolation. Input signal termination capability.
- Connection up to 25 devices in output port. Capable of up to 5 Repeaters in series connection. Power supply: 230VAC 50/60Hz.
- Power consumption: 1,8 W
- Ambient temperature : -20 / +50oC. 0,5-2,5mm² screw terminals, for DMX input and output cable connection. Dimensions: L x W x H: 125mm x 68,5mm x 42,5mm.

DMX REPEATER













ELECTRON SA, PROFESSIONAL LIGHTING SYSTEMS

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