

## Lighting Management & Control Systems





### **PREMIUM SERIES**

#### **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.

YOU SAY IT,

WE MAKE IT!

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 79

- 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
- 48 analogue inputs with six operating modes
- USB downstream & upstream ports\*
- Ethernet port\*
- RS232 port\*
- EIB/KNX port with built-in power supply 640mA\*
- up to 2 DMX-512 inputs one of which can be assigned as output 📱 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 dimmers, 48 for the corresponding outputs 1/10V, and 192 channels shared in three DALI circuits. For each DALI circuit, Premium has an independent built-in power supply.

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 R\$232, 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 640mA, thus it can be connected to an already existing Instabus system. Also, it can be connected directly and without any other device to any control panel that supports EIB/KNX. Moreover, Premium can function as a control 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 daily, weekly, or yearly base) constitute Premium 79 the most innovative power controller of the market.



ELECTRON SA, PROFESSIONAL LIGHTING SYSTEMS

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\* To be available in the near future.





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, R\$232, USB, EIB/KNX, DALI1, DALI2, DALI3, Ethernet). For all these ports it 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 everywhere 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.

### Flexible



Up to 4 RCDs can be fitted



Heavy duty mains switch

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, DAL11, DAL12, DAL13, 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.

To achieve this, ELECTRON has designed and developed high-tech electronics that include six 8 bit microcontrollers of RISC technology and one 16 bit microcontroller that functions as main microcontroller. The total processing power of Premium 79 is more than 50 MIPS (Million Instructions per Second), which makes it one of the fastest Power Controllers.

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.

#### Reliable

ELECTRON SA is a manufacturing company in the professional lighting field for more than 32 years. The reliability of ELECTRON products is well known and is a fundamental requirement for our products that could not of course be missing from Premium 79. 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.

Premium 79 includes up to 12 temperature sensors checking the temperature of the power of the circuits. In case it is required, the appropriate fan is activated to face any unexpected situation. If the ambient temperature is not proper the 'Automatic Power Control' is activated by reducing the output power and retaining this way the temperature to a safe level.

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.

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Interior connections

Heavy duty lifting eye bolts





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



Accessory for easy wall mounting (available with 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.

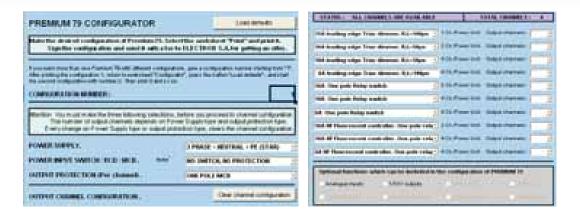
If programming is required, this can easily be done with the use of the two encoders and the large graphic display. The first encoder enables the user to move through the menu with a great speed and find what needs to be changed (selector). The second encoder enables the user to directly make changes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

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.

**Note**: For specifying the exact configuration of Premium 79, please refer to the excel file "PR79 Configurator" developed by ELECTRON SA which is available upon request.



#### 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 parmal classed Easy Nat. Puts Puts Puts
- 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 receives a signal, this cancels all other input assigns of group offering the "one active" capability.
  Up to 512 programmable scenes with programmable
- op 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, 70mm<sup>2</sup>.
- 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 681

6X25A DIMMER



PREMIUM 684

12X16A DIMMER



PREMIUM 683

6X16A DIMMER

3X25A and





PREMIUM 684 12X16A MAIN SWITCH



PREMIUM 684

12X16A RCCB



PREMIUM 684 12X16A DELTA



**PREMIUM 37 SERIES** 



3X25A



PREMIUM 371

PREMIUM 372 6X16A RELAY

9X10A

PREMIUM 375



12X6A RELAY

PREMIUM 372 6X16A DELTA



12X16A HF FLUORESCENT CONTROLLER

PREMIUM 372 6X16A MAIN SWITCH



PREMIUM 372 6X16A RCCB



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#### FEATURES OF PREMIUM 37 & 68 SERIES

#### **AVAILABLE VERSIONS:**

- 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 ш÷. 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 detectors, cinema projectors (using the cinema adaptor of page 24), push button switches (like legrand).
- н. Individual configuration of power units in the same enclosure.
- 24 programmable scenes with fade in/out (0sec-59min and 59,9sec.)
   12 user chasers with programmable fade in/out (0sec-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. н.
  - 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).
- н. Delta models available upon request.

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

#### **COMING SOON**

Trailing edge Dimmers 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	-	Х	Х	х	х	х	х	х

### **PREMIUM 68 CHANNEL CONFIGURATION CODES**

	CHANNEL	POWER UNITS CHANNELS X CAPACITY						
CODE	CONFIGURATION	1	2	3	4	5	6	
1	6x25A	1x25A	1x25A	1x25A	1x25A	1x25A	1x25A	
2	4x25A + 2x16A + 3x10A	1x25A	1x25A	1x25A	1x25A	2x16A	3x10A	
3	3x25A + 6x16A	1x25A	1x25A	1x25A	2x16A	2x16A	2x16A	
4	12x16A	2x16A	2x16A	2x16A	2x16A	2x16A	2x16A	
5	3x25A + 9X10A	1x25A	1x25A	1x25A	3x10A	3x10A	3x10A	
6	12x10A	2x10A	2x10A	2x10A	2x10A	2x10A	2x10A	

### **PREMIUM 37 CHANNEL CONFIGURATION CODES**

COD	E CHANNEL CONFIGURATION	POWER U	POWER UNITS CHANNELS X CA 1 2					
1	3x25A	1x25A	1x25A	1x25A				
2	6x16A	2x16A	2x16A	2x16A				
3	1x25A + 2x16A + 3x10A	1x25A	2x16A	3x10A				
4	2x25A + 4x6A	1x25A	1x25A	4x6A				
5	9x10A	3x10A	3x10A	3x10A				
6	1x25A + 8x6A	1x25A	4x6A	4x6A				
7	2x16A + 3x10A + 4x6A	2x16A	3x10A	4x6A				
8	12x6A	4x6A	4x6A	4x6A				
9	12x16A only relay and HF Contr.	4x16A	4x16A	4x16A				
А	6x25A only relay	2x25A	2x25A	2x25A				
В	6x10A	2x10A	2x10A	2x10A				

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.

#### Note 1:

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, L and M.

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

For example, the ordering code P375-1GBB is wrong. The correct ordering code is P375-1BBG.

#### Note 3: Single phase editions only at Premium 37 models except P379-XXXX.

DEVICE	<b>OPTIONS</b>	CODES

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

#### **POWER UNITS CODES**

CODE	DESCRIPTION	CODE	DESCRIPTION
1	1x25A leading edge Triac Dimmer. R.t=100µs	L	2x16A One pole Relay switch
2	1x25A leading edge Triac Dimmer. R.t=200µs	Μ	2x16A Two pole Relay switch
3	1x25A leading edge Thyristor Dimmer. R.t=100µs	Ν	3x10A One pole Relay switch
4	1x25A leading edge Thyristor Dimmer. R.t=200µs	0	3x10A Two pole Relay switch
5	2x16A leading edge Triac Dimmer. R.t=50µs	Р	4x6A One pole Relay switch
6	2x16A leading edge Triac Dimmer. R.t=100µs	Q	4x6A Two pole Relay switch
7	2x16A leading edge Triac Dimmer. R.t=200µs	R	4x16A One pole Relay switch
8	2x16A leading edge Thyristor Dimmer. R.t=50µs	S	2x25A One pole Relay switch
9	2x16A leading edge Thyristor Dimmer. R.t=100µs	Т	2x32A One pole Relay switch
А	2x16A leading edge Thyristor Dimmer. R.t=200µs	U	2x10A leading edge Triac Dimmer. R.t=50µs (PLE310)
В	3x10A leading edge Triac Dimmer. R.t=50µs	V	2x10A leading edge Triac Dimmer. R.t=100µs (PLE310)
С	3x10A leading edge Triac Dimmer. R.t=100µs	W	2x10A leading edge Triac Dimmer. R.t=200µs (PLE216)
D	4x6A leading edge Triac Dimmer. R.t=100µs	Х	2x10A leading edge Thyristor Dimmer. R.t=50µs (PLE216)
E	2x16A HF Fluorescent controller. One pole relay	Y	2x10A leading edge Thyristor Dimmer. R.t=100µs (PLE216)
F	2x16A HF Fluorescent controller. Two pole relay	Z	2x10A leading edge Thyristor Dimmer. R.t=200µs (PLE216)
G	3x10A HF Fluorescent controller. One pole relay	01	2x10A HF Fluorescent Controller. One pole relay
Н	3x10A HF Fluorescent controller. Two pole relay	02	2x10A HF Fluorescent Controller. Two pole relay
I	4x6A HF Fluorescent controller. One pole relay	03	2x10A One pole Relay switch
J	4x6A HF Fluorescent controller. Two pole relay	04	2x10A Two pole Relay switch
К	4x16A HF Fluorescent controller. One pole relay		

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LIGHTING MANAGEMENT & CONTROL SYSTEMS PREMIUM 68 & 37 9



### **ACTOR SERIES**

ACTOR is the new advanced series of dimmers produced by ELECTRON. ACTOR dimmers are 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 fouring 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.



## ACTOR 616

### ACTOR 616



ACTOR 616





ACTOR 616 with MCBs P+N







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

#### 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 100µs rise time (at additional cost) which is recommended for high professional applications. ACTOR 325 and ACTOR 625 are supplied standard with 100µs rise 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 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.

REAR SIDES



ELECTRON SA, PROFESSIONAL LIGHTING SYSTEMS

7 klm National Road Athens - Lamia, 68 Antiohias Str, N. Philadelphia, 143 41 Athens, Greece Tel. +30 210 2584240, Fax. +30 210 2584245, info@electron.gr, www.electron.gr



### **ACTOR 325**

ACTOR 325

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



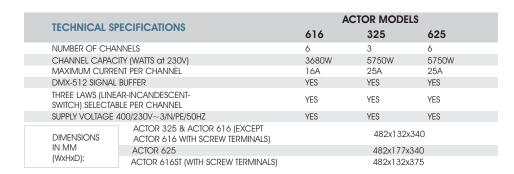
**ACTOR 625** ACTOR 625

With 6 channels

5750W channel capacity (Watts at 230V)



IOR	625	







## **ACTOR 716**

The ACTOR 716 is the new 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.



### ACTOR 716







ACTOR 716 with RCD

#### **REAR SIDES OF ACTOR 716:**



ACTOR 716 with POWER CABLE

#### **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.
- H. Possibility of ordering the dimmer pack with standard chokes or with 100 srise time (at additional cost) which is recommended for high professional application.
- 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.
- The dimmer pack is supplied with 3X63A mains switch. 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.

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





### ACTOR B610 SERIES (Basic Version)

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.



### ACTOR B610 SERIES (BASIC VERSION)

#### **FEATURES**

- Soft start adjustable per channel. 11
- 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.

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



SCHUKO-FRENCH SWISS-DANISH

GRS SOCAPEX

HARTING







ACTOR B 610



ACTOR B 610 with MCBs P+N





### **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.

The first connector (IN) is connected to the E1115 type ELECTRON control 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.



#### JAZZ SERIES



ELECTRON SA, PROFESSIONAL LIGHTING SYSTEMS

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## **REPACK 610 & 616**

The REPACK is a useful tool for switching on and off non-dimmable devices such as flame effects, mirror balls, lighting fixtures with discharge lamps, black-light effects, moon flower effects etc. The Relay Pack is DMX-512 controlled and on the front panel there are six MCBs, mains switch, LED monitors and manual ON/OFF with six push buttons. It is supplied with one CEE 5X32A plug and socket for power supply. The unit features zero crossing switch-on and programmable switch-over level. The 3-digit numeric display shows the start address which can be selected from the corresponding buttons.

### REPACK 610 & 616



REPACK 610



REPACK 616





WALL MOUNTING

ACCESSORIES FOR TRUSS / WALL MOUNTING

AI	UK	E9			

- 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 100µs rise time (at additional cost) which is recommended for high professional applications. ACTOR 325 and ACTOR 625 are supplied standard with 100µs rise 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. in a
- MCBs P+N can be supplied in all ACTOR models at additional cost.
- ACTOR 325 & ACTOR 625 are normally supplied with triac outputs. Thyristor outputs which are recommended for high professional applications, are available at additional cost.

Also available with WIELAND and SOCAPEX outlets

TECHNICAL SPECIFICATIONS	REPACKN 610	IODELS 616	
NUMBER OF CHANNELS	6	6	
CHANNEL CAPACITY (WATTS at 230V)	2300W	3680W	
MAXIMUM CURRENT PER CHANNEL	10A	16A	
Supply voltage 220/240V AC 3 phases + Neutral + Earth $\sim$ 50Hz	YES	YES	
HOLD OF LAST DMX VALUE	YES	YES	
RACK MOUNTING	YES	YES	
TRUSS OR WALL MOUNTING	OPTION	JAL	
DIMENSIONS IN MM (WxHxD)	483 x 88	3 x 255	



### E1115/6M CONTROL DESK

### E1115/6M CONTROL DESK



- 6 channel faders in a single preset configuration.
- Master control fader to adjust the overall output level.
- "Power-on" indicator and an ON/OFF switch.
- Supplied with a 9-pin D-sub connector (E version) or with an 8-pin Din locking connector (U version).
- It can be used to control analogue dimmers.
- The power supply is supplied as extra, if needed, at additional cost.

E1115/6M is a manual lighting control desk of excellent quality and economic price ideal for cases of simple controlling requirements.





### **APOLLO PLUS & APOLLO SERIES**

## APOLLO PLUS 625C - 350C - 363C



### APOLLO PLUS 625C - 350C - 363C

#### FEATURES OF APOLLO PLUS SERIES

#### **TECHNICAL SPECIFICATIONS**

	Suitable to control incandescent lamps, iron core transformers for	PORTABLE DIMMER PACKS	APOLLO	APOLLO PLUS			
	low voltage incandescent lamps, resistive and inductive loads.	PORIABLE DIVIVIER FACING	625C	350C	363C		
11		CHANNELS	6	3	3		
	Hard firing to ensure proper triggering.	CHANNEL CAPACITY	5750W	11500W	14490W		
		MAXIMUM CURRENT / CHANNEL	25A	50A	63A		
	Output led monitors.	LOAD TYPES	<ul> <li>Incandescent lamp</li> </ul>	<ul> <li>Iron core transfor</li> </ul>	mer for low-voltage		
	, ,	HARD-FIRED TRIACS	incandescent lamp	<ul> <li>Resistive &amp; indu</li> </ul>	ctive loads		
	models.		YES	-	-		
	DMX 512 in/out (XLR 5pin connectors).		100µs (optional 200µ		200µs		
	Indication of DMX "Fault" status.	OUTPUT LED MONITORS	YES	YES	YES		
	Programmable start address.	HARD-FIRED THYRISTORS	-	YES	YES		
		CIRCUIT BREAKERS	YES	YES	YES		
	Termination switch.	ANALOGUE INPUTS		0/ +10VE			
	Holding of last DMX value.	20VDC OUTPUT FOR EXTERNAL CONTROL		YES	YES		
	Programmable behaviour on DMX	BUILD-IN SLIDERS+ MASTER	YES	YES	YES		
	signal interruption.	DMX 512 INPUT	YES	YES	YES		
	Five- digit numeric display.	INDICATION OF DMX "FAULT" STATUS	YES	YES	YES		
	Four- button keypad, two of which can be programmed by the	PROGRAMMABLE START ADDRESS	YES	YES	YES		
	user as function keys.	DMX-512 SIGNAL BUFFER	YES	YES	YES		
	Menu driven software.	TERMINATION SWITCH	YES	YES	YES		
	Password for settings protection.	HOLDING OF LAST DMX VALUE	YES	YES	YES		
	Three laws selected by the user (Linear, Halogen and Fluorescent).	PROGRAMMABLE BEHAVIOR ON DMX SIG					
	Selectable switched output (non dim).	INTERRUPTION	YES	YES	YES		
	Programmable preheat level per channel.	5-DIGIT NUMERIC DISPLAY	YES	YES	YES		
1.1	Programmable percentage of output voltage per channel.	4-BUTTON KEYPAD, 2 OF WHICH CAN BE					
1.1	Programmable soft turn-on per channel.	PROGRAMMED BY THE USER AS FUNCTION	N KEYS YES	YES	YES		
	Analogue control inputs 0/+10V (9 pin D-sub male connector).	MENU DRIVEN SOFTWARE	YES	YES	YES		
	20VDC output for supplying external analogue control desk.	PASSWORD FOR SETTINGS PROTECTION	YES	YES	YES		
		LAWS	LINEAR, HALC				
	Twenty four programmable memories.	SELECTABLE SWITCHED OUTPUT	YES	YES	YES		
	Twelve programmable chasers.	PROGRAMMABLE PREHEAT LEVEL PER CHA		YES	YES		
	Twelve factory-set chasers.	PROGRAMMABLE PERCENTAGE OF OUTPU	LIT				
	Memory or Chaser assignment of sliders (Models C only).	VOLTAGE PER CHANNEL	YES	YES	YES		
	Watchdog timer.	PROGRAMMABLE SOFT TURN-ON					
	Silent operation DC speed controlled, fan assisted convection	PER CHANNEL	YES	YES	YES		
	cooling.	CHANNEL LEVEL CONTROL	SLIDERS	SLIDERS	SLIDERS		
	Overheating detection.	24 PROGRAMMABLE MEMORIES	YES	YES	YES		
	Auto power handling at high temperature condition.	12 PROGRAMMABLE CHASERS	YES	YES	YES		
1.1	Power Failure and Power Off modes on low power supply voltage.	12 FACTORY- SET CHASERS	YES	YES	YES		
	Disabled output on power supply overvoltage.		YES	YES	YES		
	Heavy duty handle.	60- STEP LOOP FUNCTION MEMORY OR CHASE ASSIGNMENT OF SLI		YES	YES		
	Truss mounting.		YES YES	YES			
	Rack mounting.	DIAGNOSTIC TESTS			YES		
	Wall mounting for Apollo Plus models 610-616 only.		YES	YES	YES		
	Start up diagnostic tests: Microcontrollers selftest, Memories test,	DC SPEED CONTROLLED, FAN ASSISTED CONVECTION COOLING	YES	YES	YES		
	Fan test.				N/F.0		
1.0	Diagnostic tests of sliders and pushbuttons.	HIGH TEMPERATURE DETECTION	YES	YES	YES		
	0	AUTO POWER HANDLING AT HIGH	YES	YES	YES		
		TEMPERATURE CONDITION	0.011				
		POWER FAILURE AND POWER OFF MODE	ES ON YES	YES	YES		
	*Delta version dimmers available upon request.	LOW POWER SUPPLY VOLTAGE					
		DISABLED OUTPUT ON POWER SUPPLY	YES	YES	YES		
	REAR SIDE OF APOLLO PLUS	OVERVOLTAGE					
		RACK MOUNTING	YES	YES	YES		
	Contraction of the Contract of	WALL MOUNTING	-	-	-		
	and the second s	TRUSS MOUNTING	YES	YES	YES		
		HEAVY DUTY HANDLE	YES	YES	YES		
		230V 400V-3/N/PE/50Hz,3 PHASE STAR CC	ON/TION. YES	YES	YES		

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

DIMENSIONS (WxHxD) IN MM

Optional Optional

432 x 222 x 400

Optional

16 LIGHTING MANAGEMENT & CONTROL SYSTEMS APOLLO PLUS 625C-350C-363C ELECTRON SA, PROFESSIONAL LIGHTING SYSTEMS 7 klm National Road Athens - Lamia, 68 Antiohias Str, N. Philadelphia, 143 41 Athens, Greece Tel. +30 210 2584240, Fax. +30 210 2584245, info@electron.gr, www.electron.gr



## **APOLLO PLUS 615 - 616**

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 615 - 616



APOLLO PLUS 616S CEE 05230



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



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



APOLLO PLUS 616C FRS 05130



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



APOLLO PLUS 616C WLD 05230



APOLLO PLUS 615C GBS 05130



APOLLO PLUS 616C HRT 05230

TECUNICAL	SPECIFICATIONS
IECHINICAL	SPECIFICATIONS

TECHNICAL SPECIFICATIONS			
	A	POLLO PLUS	
PORTABLE DIMMER PACKS	615C	615S 616S	616C
CHANNELS	6	6	6
CHANNEL CAPACITY	3450W	3680W	3680W
MAXIMUM CURRENT / CHANNEL	15A	16A	16A
LOAD TYPES	<ul> <li>Incandescent lamp incandescent lamp</li> </ul>	s •Iron core transformer •Resistive & inductive	for low-voltage loads
HARD FIRED TRIACS	YES	YES	YES
OUTPUT FILTER	50µs (optic	nal 100µs o	r 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
LAWS	120		LUORESCENT
SELECTABLE SWITCHED OUTPUT	YES	YES	YES
PROGRAMMABLE PREHEAT LEVEL PER CHANNEL	YES	YES	YES
PROGRAMMABLE PERCENTAGE OF OUTPUT VOLTAGE PER CHANNEL	YES	YES	YES
PROGRAMMABLE SOFT TURN-ON PER CHANNEL	YES	YES	YES
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	YES	YES	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 TEMPERATURE CONDITION	YES	YES	YES
POWER FAILURE AND POWER OFF MODES AT LOW POWER SUPPLY VOLTAGE	YES	YES	YES
DISABLED OUTPUT ON POWER SUPPLY OVER-VOLTAGE	YES	YES	YES
RACK MOUNTING	YES	YES	YES
WALL MOUNTING	YES	YES	YES
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		432 x 177	x 350

#### \*Delta version dimmers available upon request.



## **APOLLO PLUS 716**



APOLLO PLUS

716S

3680W

50µs (optional

0/ +10VDC

12

16A

YES

Optional

DIGITAL

716C

3680W

12

16A

YES

100µs)

YES

432 x 222 x 400

Optional

SLIDERS

**TECHNICAL SPECIFICATIONS** 

PORTABLE DIMMER PACKS

MAXIMUM CURRENT / CHANNEL

CHANNELS

LOAD TYPES

OUTPUT FILTER

CHANNEL CAPACITY

HARD FIRED TRIACS

CIRCUIT BREAKERS

ANALOGUE INPUTS

DMX 512 INPUT

OUTPUT LED MONITORS

HEAVY DUTY FUSE HOLDERS

BUILD-IN SLIDERS+ MASTER

DMX-512 SIGNAL BUFFER

5 -DIGIT NUMERIC DISPLAY

MENU DRIVEN SOFTWARE

VOLTAGE PER CHANNEL

CHANNEL LEVEL CONTROL

12 FACTORY- SET CHASERS

60- STEP LOOP FUNCTION

DIAGNOSTIC TESTS

WATCHDOG TIMER

RACK MOUNTING

WALL MOUNTING

TRUSS MOUNTING

HEAVY DUTY HANDLE

DIMENSIONS (WxHxD) IN MM

PER CHANNEL

SELECTABLE SWITCHED OUTPUT

PROGRAMMABLE SOFT TURN-ON

24 PROGRAMMABLE MEMORIES

12 PROGRAMMABLE CHASERS

LAWS

TERMINATION SWITCH

INDICATION OF DMX" FAULT" STATUS

PROGRAMMABLE START ADDRESS

HOLDING OF LAST DMX VALUE

20VDC OUTPUT FOR EXTERNAL CONTROL DESK

PROGRAMMABLE BEHAVIOR ON DMX SIGNAL INTERRUPTION

4-BUTTON KEYPAD, 2 OF WHICH CAN BE PROGRAMMED BY THE USER AS FUNCTION KEYS

PROGRAMMABLE PREHEAT LEVEL PER CHANNEL

PROGRAMMABLE PERCENTAGE OF OUTPUT

MEMORY OR CHASE ASSIGNMENT OF SLIDERS

DC SPEED CONTROLLED, FAN ASSISTED CONVECTION COOLING

POWER FAILURE AND POWER OFF MODES AT LOW POWER SUPPLY VOLTAGE

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

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

HIGH TEMPERATURE DETECTION

AUTO POWER HANDLING AT HIGH TEMPERATURE CONDITION

DISABLED OUTPUT ON POWER SUPPLY OVERVOLTAGE

PASSWORD FOR SETTINGS PROTECTION

#### APOLLO PLUS 716

#### 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 200µs.
- 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.
- н. DMX signal buffer.
- ÷. Termination switch.
- Holding of last DMX value. н.
- 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 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. 11
- Rack mounting. 11
- Wall mounting for Apollo Plus models 610-616 only. ×.
- Start up diagnostic tests: Microcontrollers selftest, Memories test, 11
- Fan test.
- Diagnostic tests of sliders and pushbuttons.
- 60-step Loop Function

#### \*Delta version dimmers available upon request.

**REAR SIDE OF APOLLO PLUS 716** 



#### 18 LIGHTING MANAGEMENT & CONTROL SYSTEMS APOLLO PLUS 716

ELECTRON SA, PROFESSIONAL LIGHTING SYSTEMS

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### APOLLO 615 - 616



#### APOLLO 615 - 616

#### FEATURES OF APOLLO 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 ш÷.
- and circuit breakers for **C** models.
- DMX 512 in/out (XLR 5pin connectors). н.
- DMX "OK" and "Fault" led indicators.
- DMX signal buffer. ш÷.
- Holding of last DMX value. н.
- Three rotary switches for selecting start address. .
- Analogue control inputs 0/+10V (9 pin D-sub male connector). н.
- 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. н.
- н. Watchdog timer.
- Fan assisted convection cooling (activated by thermostat). н.
- Truss mounting. н.
- Heavy duty handle. н.
- Rack mounting accessories (supplied as extra at additional cost).
- Wall mounting accessories (supplied as extra at additional cost).

#### **TECHNICAL SPECIFICATIONS**

PORTABLE DIMMER PACKS	615\$	APOLLO 616S	616C 615C
CHANNELS	6	6	6
CHANNEL CAPACITY	3450W	3680W	3680W
MAXIMUM CURRENT / CHANNEL	15A	16A	16A
LOAD TYPES	<ul> <li>Incandescent lam</li> <li>Incandesc</li> </ul>	ps • Iron core transformer ent lamps •Resistive & ind	for low-voltage uctive loads
HARD FIRED TRIACS	YES	YES	YES
OUTPUT FILTER	50µ	s (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	432 x 177 x 300	

\*Delta version dimmers available upon request.





APOLLO 616C CEE 05130

APOLIO 616S CFF



APOLLO 616C SCH 05130



#### APOLLO 6155 GBS 05230



#### APOLLO 6165 SCH 05230 APOLLO 6165 FRS 05230

#### REAR SIDE OF APOLLO 616



LIGHTING MANAGEMENT & CONTROL SYSTEMS APOLLO 615 - 616 19



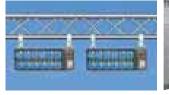
**APOLLO & APOLLO PLUS PANORAMA** 







APOLLO & APOLLO PLUS TRUSS MOUNTING WITH ONE HOOK CLAMP





APOLLO PLUS TRUSS MOUNTING WITH TWO HOOK CLAMPS

WALL MOUNTING

APOLLO PLUS 350C CEE 20130







RACK MOUNTING



APOLLO POWER MODULE

APOLLO PLUS POWER MODULE



THE INTERIOR OF APOLLO PLUS



THE INTERIOR OF APOLLO

APOLLO PLUS 625C CEE 20130

fig 1



20 LIGHTING MANAGEMENT & CONTROL SYSTEMS APOLLO & APOLLO PLUS PANORAMA ELECTRON SA, PROFESSIONAL LIGHTING SYSTEMS 7 klm National Road Athens - Lamia, 68 Antiohias Str, N. Philadelphia, 143 41 Athens, Greece Tel. +30 210 2584240, Fax. +30 210 2584245, info@electron.gr, www.electron.gr

HANDLE OF APOLLO & APOLLO PLUS FOR EASY CARRYING

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# ORDERING INFORMATION FOR APOLLO & APOLLO PLUS SERIES PORTABLE DIMMER PACKS

					APO	LLO			APOLLO PLUS										
										363C									
OUTPUT	POWER		61	5C	616S/	6S/615S 616		6C	5C 616S		616C	/615C	71	6S	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	зсп					05130	10130			05130	10130	05130	10130					
тио снико	SCREW TERMINAL	SCH			05220	10220			05220	10220									
IWO SCHUKO	CEE - 17 (5X32A)	301			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	OFF																	
(3x32A)	CEE - 17	CEE															10130	20130	
ONE CEE-17	SCREW TERMINAL																		
(3X63A)	CEE - 17	CEE																	20130
	SCREW TERMINAL		05120	10120					05120	10120									
ONE GB15A	CEE - 17	GBS	05130	10130					05130										
	SCREW TERMINAL				05220	10220					05220	10220							
TWO GB15A	CEE - 17	GBS			05230	10230					05230	10230							
	SCREW TERMINAL				00100		05120	10120			05120	10120							
ONE FRENCH	CEE - 17	FRS					05130	10130			05130		05130	10130					
	SCREW TERMINAL				05220	10220			05220	10220									
TWO FRENCH	CEE - 17	FRS			05230	10230			05230										
	SCREW TERMINAL																		
ONE POWER CON	CEE - 17	POC													05130	10130			
	SCREW TERMINAL															10100			
TWO POWER CON	CEE - 17	POC																	$\left  \right $
	SCREW TERMINAL	-																	
ONE SOCAPEX	CEE - 17	SCP													05130	10130			
	SCREW TERMINAL				05220	10220	05220	10220	05220	10220	05220	10220			00100	10100			
TWO SOCAPEX	CEE - 17	SCP			05230	05230	05230	10220	05230	10220	05220		05230	10230					$\vdash$
ONE 16POLE x 16A	SCREW TERMINAL				00200	00200	00200	10230	00200	10230	03230	10230	03230	10230					$\vdash$
(HARTING)	CEE - 17	HRT													05130	10130			$\vdash$
	-				05220	05220	05220	10220	05220	10220	05220	10220			00100	10130			$\vdash$
TWO 16POLE x16A (HARTING)	SCREW TERMINAL	HRT									05220								$\vdash$
(124(1110))	CEE - 17				05230	05230	05230	10230	05230	10230	05230	10230							

### **GUIDING ORDERING INFORMATION**

	APOLLO PLUS 6 16 S SCH 05 2 3 0
APOLLO or APOLLO PLUS SERIES	I I I I I I I I I I I I I I I I I
Number of channels $3$ for 3 channels, $6$ for 6 channels and $7$ for	r 12 channels.
Maximum channel current ( <b>15</b> for 15A, <b>16</b> for 16A, <b>25</b> for 25A, <b>63</b> for 63A).	<b>50</b> for 50A and
Control sliders ( $\mathbf{S}$ models without sliders, $\mathbf{C}$ models with sliders) with heavy duty fuse holders and C models are supplied with circu	S models are supplied
Output sockets ( <b>SCH</b> for Schuko, <b>CEE</b> for CEE17 , <b>GBS</b> for I for French, <b>SCP</b> for Socapex, <b>HRT</b> for Harting and <b>POC</b> for F	British GB15A, <b>FRS</b> Power Con).
Rise time of output filters ( $05$ for 50µs, $10$ for 100µs, $20$ for 2	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 ( $m 0$ for standard version).	

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

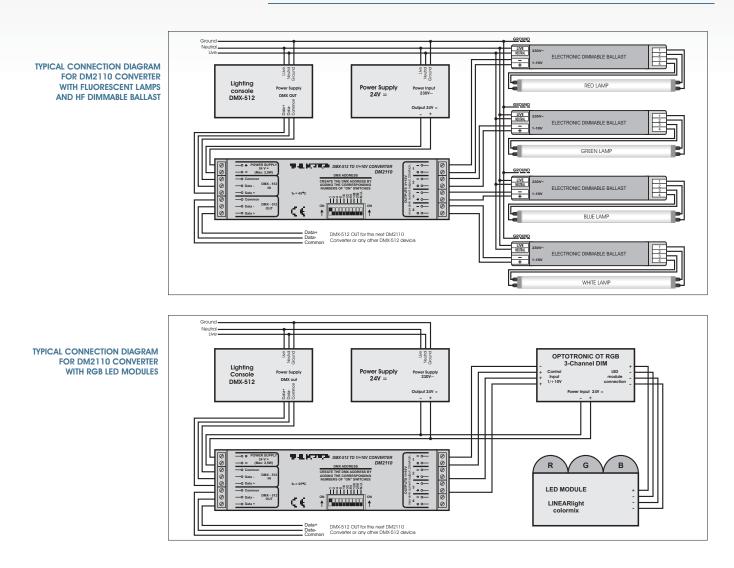


## DM 2110 / DM 2010 CONVERTERS

#### DM2110 DMX CONVERTER



- The DM2110 converts the DMX signal to 4X1...10V. It has DMX signal input and output and four 1/10V outputs for dimming fluorescent lamps together with HF Dimmable Ballast. It can also control LEDs (RGB) together with OPTRONIC OT RGB.
- Supply voltage: 24VDC.
- Sink Current Output per channel: 20mA.



#### DM2010 DMX CONVERTER



- The DM2010 is similar to the DM2110 but with outputs 0...10V. It is used for controlling Dimmers with analogue input.
- Output Current: 4mA/ch.



## 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.



#### DMX SPLITTER SP142 WITH OPTO-ISOLATED OUTPUTS

#### 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 ICs
- DMX 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

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



ELECTRON SA, PROFESSIONAL LIGHTING SYSTEMS

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### **CHAMELEON** CONTROLLERS

ELECTRON offers intelligent solutions for controlling the light emitted by the ELECTRON LEDs, known as LEDELEC LEDs, in architectural spaces, shows, theaters or entertainment areas. The intelligent control solutions include the Chameleon 128 and Chameleon 129 Controllers which are the most flexible and user-friendly solutions for controlling the light emitted from the RGB (Red, Green, Blue), AW (Amber, White), AWB (Amber, White, Blue), or even Monochromatic LEDELEC LEDs.

Chameleon 128 is available in Wall Flash Mounted version. Chameleon 129 is available in Desktop or Wall Mounted version.

Both controllers have DMX-512 output and allow lighting designers create a dynamic colour environment from a template of 16.7 million colours, to save this colour for future use, to decrease or increase the intensity of light (dimmer), to activate automatic factory programs (six preset sequencers), to change the time that each colour is on (step time) and to select the time of change from one colour to another (fade time). Thus, when using the Chameleon Controllers the only thing that is required is your imagination.

#### CHAMELEON 128 & CHAMELEON 129

#### **FEATURES**

- ×. Dimmer.
- Six Preset Sequences.
- Step Time.
- in a Fade Time
- 3 Output Channels 10
- (Channel 1: Red, Channel 2: Green, Channel 3: Blue). Scenes: 5+1
- DMX 512/1990 Output. н.
- Supply Voltage: 12-15VDC н.
- н. Supply Current: 40mA max.





POWER SUPPLY FOR CHAMELEON 128 & 129 FOR CHAMELEON 128

WALL BOX 1 GANG





CHAMELEON 129



### **TEMPO 12** CONTROL DESKS

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.

### **TEMPO 12**



#### **FEATURES**

12 Presets which can be assigned to control 12 channels or 12 programmable memories. н.

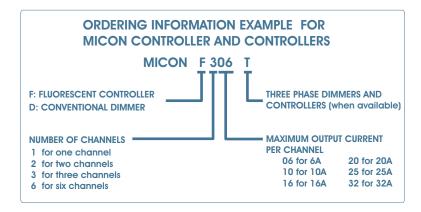
- 12 Flash buttons
- 12 Monitor I FDs.
- Chaser with three operating modes and three functions per mode.
- Rate indicator with LED flashing at rate speed.
- Capability of assigning the chase to two six-channel groups: (group 1 = 1-6 chan., group 2 = 7-12 chan.).
- Chase master with chase off button.
- Grand master with blackout button. Analogue output.
- Digital output.



### **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 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 50-60HZ 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 50-60HZ 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 50-60HZ 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 50-60HZ 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 50-60HZ 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 50-60HZ 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 50-60HZ 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 50-60HZ 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 50-60HZ 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 50-60HZ 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 50-60HZ 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



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## **MICON D SERIES**

#### MICON D SERIES: MICON CONVENTIONAL DIMMERS



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.

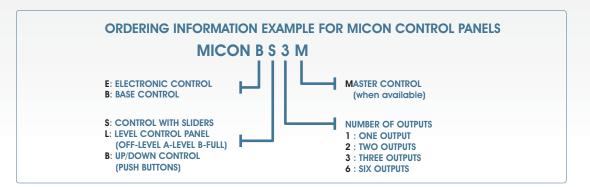
Code	Supply voltage	Dimmers outputs	Output protection	Fade times	Control input	On-board Control	Power Monitor	Output Monitor	Dimensions in mm (WxHxD)
MICON D106	230V 50-60HZ single phase	One channel at 6A (1380W)	6A MCB	0.1 to 60sec.	Easynet 0/+10V	With two push buttons (UP-DOWN)	With one LED	With one LED	152x190x63
MICON D110	230V 50-60HZ 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 50-60HZ 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 50-60HZ 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 50-60HZ 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 50-60HZ 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 50-60HZ 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 50-60HZ 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 50-60HZ 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 50-60HZ 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 50-60HZ 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 50-60HZ 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 50-60HZ 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 50-60HZ 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



### **MICON B SERIES**

MICON B SERIES: BASE ECO CONTROL PANELS

MICON BS 1



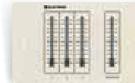


MICON BB 1

One output UP/DOWN Control

MICON BS 3M

one slider



Control with three sliders and Master

#### WALL BOXES



1 GANG metal box



MICON BB 3M

2 GANG metal box

#### **MICON BS 2**

Control with

two sliders

#### MICON BB 2

Two outputs

UP/DOWN Control

**MICON BS 6M** 

Control with

and Master

six sliders

### MICON BS 3

#### **MICON BB 3**





three sliders



Six outputs UP/DOWN Control and Master

#### **CINEMA ADAPTOR CONTROLLER**



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

28 LIGHTING MANAGEMENT & CONTROL SYSTEMS MICON B SERIES



### **MICON E SERIES**

### MICON E SERIES: ELECTRONIC EASYNET CONTROL PANELS

#### **MICON ES 1**





Up/Down Control

**MICON EB 3** 

### **MICON EL 1**



**MICON EL 3** 

One output programmable Level Control OFF-Level A- Level B-Full

**MICON ES 2** 



Electronic control with two sliders

**MICON EB 2** 





Two outputs programmable Level Control OFF-Level A- Level B-Full

**MICON ES 3** 

with one slider

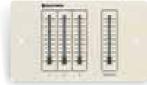


Electronic control with three sliders



Three outputs electronic Up/Down Control

#### **MICON ES 3M**



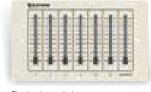
Electronic control with three sliders and Master

**MICON ES 6** 



Electronic control with six sliders

#### **MICON ES 6M**



Electronic control with six sliders and Master



Three outputs electronic

Up/Down Control and Master

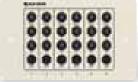
MICON EB 3M

Six outputs electronic Up/Down Control

#### MICON EB 6M



Six outputs electronic Up/Down Control and Master



OFF-Level A- Level B-Full

#### **MICON EL 6M**



Level Control OFF-Level A- Level B-Full and Master



Two outputs electronic



Three outputs programmable Level Control OFF-Level A- Level B-Full and Master

**MICON EL 6** 





Six outputs programmable Level Control



Six outputs programmable



WALL BOXES

1 GANG metal box

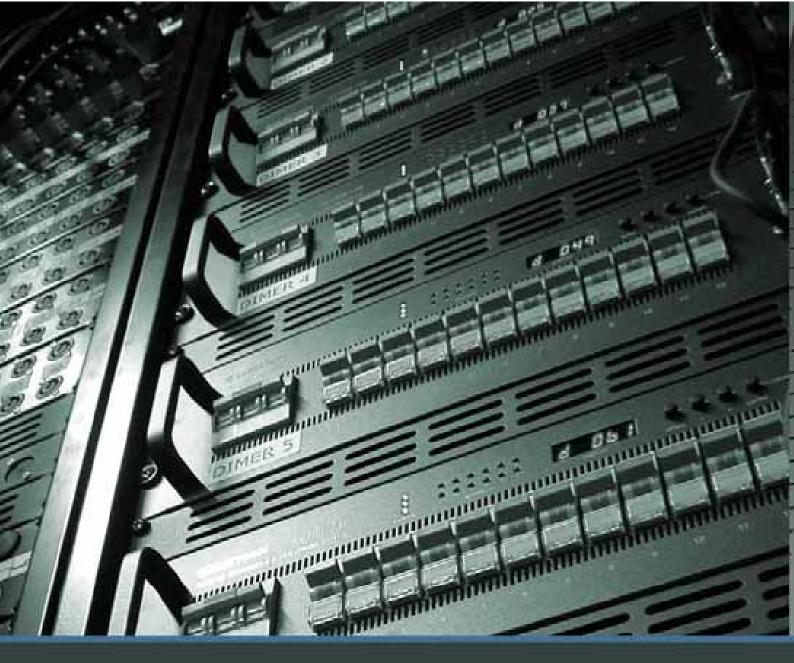


2 GANG metal box

ELECTRON SA, PROFESSIONAL LIGHTING SYSTEMS



**MICON EL 3M** 



### www.electron.gr / info@electron.gr



### **ELECTRON SA, PROFESSIONAL LIGHTING SYSTEMS**

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