

# LIGHTING MANAGEMENT POWER SUPPLIES & CONTROLLERS



Designed & Manufactured  
by ELECTRON SA



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, up-down 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 scenarios 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 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 **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

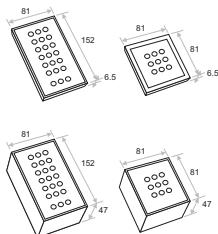
Control panel and controller with **18** scenarios, infrared receiver and DMX output.

### 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

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- 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 WHITE

ARS.009 BLACK

ARS.027 WHITE

### ARS.009

Control panel with 6 scenarios.

### ARS.010

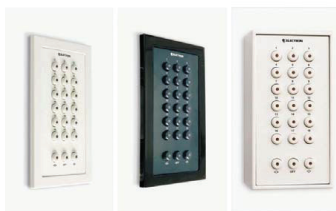
Control panel with 6 scenarios and infrared receiver.

### ARS.027

Wall mounted control panel with 6 scenarios.

### ARS.028

Wall mounted control panel with 6 scenarios and infrared receiver.



ARS.011 WHITE

ARS.011 BLACK

ARS.029 WHITE

### ARS.011

Control panel with 18 scenarios.

### ARS.012

Control panel with 18 scenarios and infrared receiver.

### ARS.029

Wall mounted control panel with 18 scenarios.

### ARS.030

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.





### 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**

ARLIC net 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.

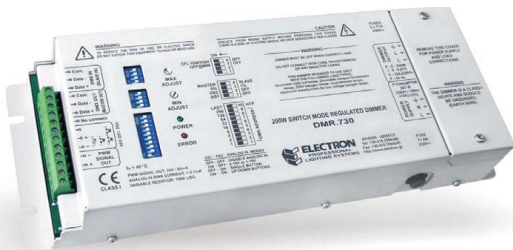
# DMR.730

## TRAILING EDGE Dimmer

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SMRD technology

**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.

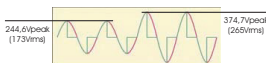
### Mains fluctuation immunity

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.

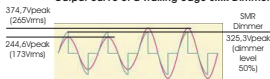


Output curve of a common Trailing edge flicker free dimmer



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.



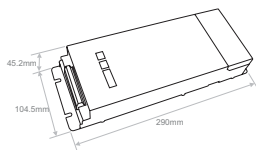
## True output regulation

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:

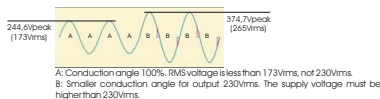
- 1) Mains voltage must be always higher than the output voltage.
- 2) By changing the conduction angle, brightness is affected because the LED lamp(s) luminosity regulation is depended on the conduction angle of the dimmer.
- 3) When the dimmer is on at full (conduction angle 100%), there is no possibility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

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.

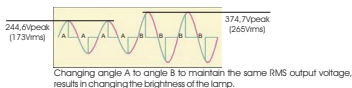
SMR Technology



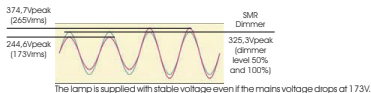
Failure of RMS output voltage stabilization, by changing the conduction angle, when the dimmer is at full (100%).



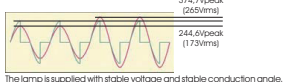
Stabilization of RMS output voltage by changing the conduction angle.



## Stabilization of output voltage at 100% of the SMR dimmer



## Stabilization of output voltage at 50% of the SMR dimmer without changing the conduction angle



## More features of the SMR Dimmer:

### Power Factor

LED lamps but also CFLs (Compact Fluorescent Lamps) are usually loads with low power factor ( $\cos\phi = 0.55-0.75$ ). 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 1sec 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 100k $\Omega$ , 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

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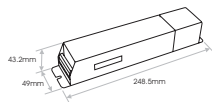


## DMR.731 FLICKER FREE TRAILING EDGE DIMMER

### Economic solution for controlling:

- Dimmable LEDs 230V.
  - Dimmable CFLs .
  - Trailing edge dimmable Electronic Transformers.
- Handles great Inrush currents.
  - Lamps connected up to 350W.
  - Dimming Law 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 100k $\Omega$ , button, UP/DOWN button).
  - PWM signal output can drive ELECTRON SA constant voltage and constant current converters.

**Output power 350W**  
**Controlled by IGBT**





# TRAILING EDGE Dimmers

DMR.732, DMR.733, DMR.734, DMR.735, DMR.736

## Economic solution for controlling:

- Dimmable LEDs 230V
- Dimmable CFLs
- Dimmable Electronic transformers

## Features

- Supports "Aller Retour" between Push Button(s) & 1/10V or Wireless or DMX-512 or DALI (except DMR.736).
- Adjustable minimum level.
- Easily fastened to DIN (EN 60715) RAIL.
- Over temperature protection .

 Designed & Manufactured  
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Code	Power Supply	Power Output	Output Current	Dimming Resolution	Dimming Method	Output Channels	Control
DMR.732	230VAC / 50Hz	350VA	1.52A rms	20000 steps	Trailing Edge	1	1-10V, Push Button(s)
DMR.733	230VAC / 50Hz	350VA	1.52A rms	20000 steps	Trailing Edge	1	Wireless*, Push Button(s)
DMR.734	230VAC / 50Hz	350VA	1.52A rms	20000 steps	Trailing Edge	1	DMX-512, Push Button(s)
DMR.735	230VAC / 50Hz	350VA	1.52A rms	20000 steps	Trailing Edge	1	DALI, Push Button(s)
DMR.736	230VAC / 50Hz	350VA	1.52A rms	20000 steps	Trailing Edge	1	Wireless*

## \*Bluetooth for DMR.733, DMR.736

CASAMBI



Casambi uses mesh network technology so each Casambi product acts also as a repeater. Longer ranges can be achieved by using multiple Casambi units.

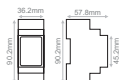
\*\* Range is highly depended on the surrounding and obstacles, such as walls and building materials.



### Compatible devices:

iPhone 4S or later, iPad 3 or later, iPod Touch 5th gen or later  
Android 4.4 KitKat or later devices produced after 2013 with full BT 4.0 support

app available on:



## ANALOGUE to DMX MERGER Converter

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- Converts nine analogue signal inputs (0/10VDC) into the digital DMX-512 signal
- Ideal for installations with Instabus (KNX/EIB) protocols



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Code	Model	Analogue Inputs	Analogue Inputs Voltage	Input Impedance	DMX-512/1990 Input	DMX-512/1990 Output	Merge of Analogue & Digital Input Data	Supply Voltage	Power Consumption
DEM.001	A102DM	9	0/+10VDC	50KΩ (min.)	YES	YES	YES	12-24VDC	0.7W

Envir. Temperature: -5°C to 40°C



## DMX TO 1-10V & DMX TO 0-10V Converters



Designed & Manufactured  
by ELECTRON SA

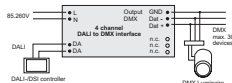
Code	Model	Input Signal	Output Channels	Output Signal	Supply Voltage	Power Consumption	Description
DEM.004	DM2110	DMX-512/1990	4	1/10V sink current	24VDC	2.5W	Converts the DMX signal to 4x1...10V sink current (output per channel 20mA)
DEM.005	DM2010	DMX-512/1990	4	0/10VDC	24VDC	2.5W	Converts the DMX signal to 4x0...10V analogue outputs (output per channel 4mA)



## 4ch DALI / DSI to DMX Interface



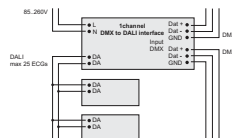
Code	Supply Voltage	Input Signal	Output Signal	No Of control channels
DEM.156	85-260VAC 50-60Hz	DALI / DSI	DMX512	4



## 1ch DMX to DALI Interface



Code	Supply Voltage	Input Signal	Output Signal	No Of control channels
DEM.181	85-260VAC 50-60Hz	DMX512	DALI	1





- Smart Isolated PIR Sensor Switch Controller, with detachable PIR sensor detector (1,5m cable).
- The controller will turn on the switch output when it detects motion. And turn off automatically after the adjustable delay.
- Wide range operation input voltage from 100VAC to 240VAC.
- Stand by consumption <0,5W
- Detection range: 0,5-2,5m
- Detection angle: 80°
- Delay time: 10-30sec
- PIR Sensor available in white colour as standard. Black colour available upon request.
- Operating temperature range: -20° to +50°C
- Indoor use

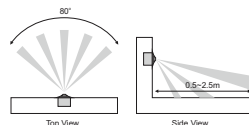
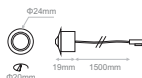
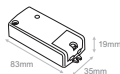


Code	Model	Input Voltage	Delay Time	Detection Angle
SNR.006	PIR Motion Detector	AC100V~240V, 50/60Hz	10sec~3min	80°

Max. Lighting load:

#### Types of load

Range voltage	Incandescent lamp/ HV-halogen lamp	Electronic ballast	Inductance ballast	Electronic transformer	LED driver
AC 100V, 50/60Hz	250VA	80VA	60VA	250VA	80VA
AC 240V, 50/60Hz	250VA	150VA	100VA	250VA	150VA



# Bluetooth Xpress Wireless Interface

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## Bluetooth

Xpress is a wireless user interface that brings huge flexibility to interior design as furniture can be replaced or even walls can be rebuilt without having to take wiring of switches or switch placement into account. The switch can be kept wherever the user needs it and it gives direct access to all the important Casambi lighting control functionalities.



Code	Colour	Range	Battery (incl.)	Battery Lifetime	Dimensions
CDS.191	White	up to 60m in open air	CR2430 Lithium coin cell	2-5 years, depending on usage	90x90x12mm
CDS.192	Black				

Xpress is equipped with magnets for easy attachment to a mounting bracket. The mounting bracket is included.



- Different Casambi enabled products can be used from a simple one luminaire direct control to a complete and full featured light control system where up to 127 units form automatically an intelligent mesh network.
- Casambi products, should not be placed in a metal enclosure or next to large metal structures. Metal will effectively block all radio signals which are crucial to the operation of the product.

### Range



Casambi uses mesh network technology so each Casambi product acts also as a repeater. Longer ranges can be achieved by using multiple Casambi units.

#### Note 1

Range is highly depended on the surrounding and obstacles, such as walls and building materials.



app available on:



Compatible devices:

iPhone 4S or later  
iPad 3 or later  
iPad Touch 5th gen or later

Android 4.4 KitKat or later devices  
produced after 2013 with full BT  
4.0 support



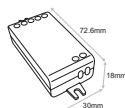
## Bluetooth 4ch PWM Dimmer

### Bluetooth

- Controlled with Casambi app which can be downloaded free of charge from Apple App Store and Google Play Store.
- Bluetooth controllable, four channel PWM dimmer for constant voltage LED loads
- Ideal partner for RGBW and tunable white (TW) applications.



Code	Supply Voltage	Output Voltage	Max. Output Power	Max. Output Current	Control	Dimming Method	Dimensions	IP Rate
DEM.195	12-24VDC 6A Max. input current	12-24VDC same as input voltage	144W @ 24VDC 72W @ 12VDC	6A can be freely divided between the channels	Casambi app. Bluetooth 4.0 protocol	PWM	72.6x30x18mm	IP20



- ✦ Different Casambi enabled products can be used from a simple one luminaire direct control to a complete and full featured light control system where up to 127 units form automatically an intelligent mesh network.
- ✦ Casambi products, should not be placed in a metal enclosure or next to large metal structures. Metal will effectively block all radio signals which are crucial to the operation of the product.

#### Range



Casambi uses mesh network technology so each DEM.195 acts also as a repeater. Longer ranges can be achieved by using multiple Casambi units.

**Note 1**  
Range is highly depended on the surrounding and obstacles, such as walls and building materials.

app available on:



Compatible devices:

iPhone 4S or later  
iPad 3 or later  
iPad Touch 5th gen or later

Android 4.4 KitKat or later devices  
produced after 2013 with full BT  
4.0 support



# Bluetooth 4ch PWM Dimmer

Lighting Management, Power Supplies & Controllers



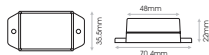
## Bluetooth

- Controlled with Casambi app which can be downloaded free of charge from Apple App Store and Google Play Store.
- Bluetooth controllable, four channel PWM dimmer for constant voltage LED modules.
- Ideal partner for RGBW and tunable white (TW) applications.
- Suitable for TV studios.

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Code	Supply Voltage	Output Voltage	Max. Output Power	Total Output Current	Control	Dimming Method	Dimensions	IP Rate
DEM.214	12-48VDC 10A Max. input current	12-48VDC same as input voltage	480W @ 48VDC 240W @ 24VDC 120W @ 12VDC	10A can be freely divided between the channels or loaded in one channel	Casambi app. Bluetooth 4.0 protocol	PWM (1.95kHz)	70.4x35.5x22mm	IP20
DEM.226	12-48VDC 8A Max. input current	12-48VDC same as input voltage	384W @ 48VDC 192W @ 24VDC 96W @ 12VDC	8A can be freely divided between the channels or loaded in one channel	Casambi app. Bluetooth 4.0 protocol	PWM (3.9kHz)	70.4x35.5x22mm	IP20



- Different Casambi enabled products can be used from a simple one luminaire direct control to a complete and full featured light control system where up to 250 units form automatically an intelligent mesh network.
- Casambi products, should not be placed in a metal enclosure or next to large metal structures. Metal will effectively block all radio signals which are crucial to the operation of the product.

### Range



Casambi uses mesh network technology so each DEM.214 acts also as a repeater. Longer ranges can be achieved by using multiple Casambi units.

**Note 1**  
Range is highly depended on the surrounding and obstacles, such as walls and building materials.



app available on:



Compatible devices:

iPhone 4S or later  
iPad 3 or later  
iPad Touch 5th gen or later

Android 4.4 KitKat or later devices  
produced after 2013 with full BT 4.0 support



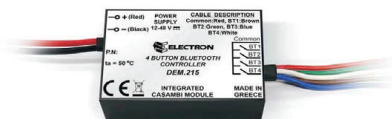
# Bluetooth 4 Push Button Controller

## Bluetooth

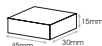
- Controlled with Casambi app which can be downloaded free of charge from Apple App Store and Google Play Store
- Direct access to all the important Casambi lighting control functionalities.
- Flexibility to interior design & communication between casambi's devices.
- Small size. Can be placed inside wall mount push button boxes.



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by ELECTRON SA



Code	Supply Voltage	Push Button No.	Control	Dimensions	IP Rate
DEM.215	12-48VDC	4	Casambi app. Bluetooth 4.0 protocol	45x30x15mm	IP40



- Different Casambi enabled products can be used from a simple one luminaire direct control to a complete and full featured light control system where up to 250 units form automatically an intelligent mesh network.
- Casambi products, should not be placed in a metal enclosure or next to large metal structures. Metal will effectively block all radio signals which are crucial to the operation of the product.

### Range



Casambi uses mesh network technology so each DEM.215 acts also as a repeater. Longer ranges can be achieved by using multiple Casambi units.

**Note 1**  
Range is highly depended on the surrounding and obstacles, such as walls and building materials.



app available on:



Compatible devices:

iPhone 4S or later  
iPad 3 or later  
iPad Touch 5th gen or later

Android 4.4 KitKat or later devices  
produced after 2013 with full BT  
4.0 support

# Bluetooth TRAILING EDGE Dimmer

Lighting Management, Power Supplies & Controllers



## Bluetooth

- Controlled with Casambi app, as well as with traditional wall switches. The Casambi app can be downloaded from Apple App Store and Google Play Store.
- Bluetooth trailing-edge dimmer for controlling incandescent lamps, dimmable LED lamps and dimmable LED control gear.



DEM.191



DEM.219

Code	Supply Voltage	Max Output Power	Max Output Current	Control	Dimensions	IP Rate
DEM.191	85-240VAC 50-60Hz 0,65A Max. mains current	150W / 230VAC 70W / 110VAC	0,65A	Casambi app. Bluetooth 4.0 protocol	40.4x36.3x14mm	IP20
DEM.219	85-240VAC 50-60Hz 0,65A Max. mains current	150W / 230VAC 70W / 110VAC	0,65A	Casambi app. Bluetooth 4.0 protocol	40.4x36.3x14mm	IP20

## Load Suitability

Type of load	Max. load
Incandescent and high voltage halogens (R)	150 W
High quality dimmable LED bulbs (C) 1)	50 W
High quality dimmable CFL bulbs (C) 1)	50 W
Trailing edge dimmable LED drivers (C) 1) 2)	50 W
Low voltage halogens with electronic transformers (C) 1) 2)	50W
High voltage AC LED modules (R) 3)	150W
unimessent lamps, non-dimmable LED and CFL bulbs (C)	Not allowed
Wire wound transformers, electric motors and other inductive loads (I)	Not allowed



**Never connect inductive loads, such as iron core transformers. This could cause permanent damage to the dimmer. Do not mix different types of loads.**

- Dimming quality depends solely on the load electronics. Do not connect more than two LED or CFL bulbs to one CBU-TED. Do not mix different types of bulbs or loads.
- Do not connect more than two electronic transformers to one CBU-TED.
- Some LED modules may flicker at low dimming levels.

- Different Casambi enabled products can be used from a simple one luminaire direct control to a complete and full featured light control system where up to 127 units form automatically an intelligent mesh network.
- Casambi products, should not be placed in a metal enclosure or next to large metal structures. Metal will effectively block all radio signals which are crucial to the operation of the product.

## Range



Casambi uses mesh network technology so each DEM.191 acts also as a repeater. Longer ranges can be achieved by using multiple Casambi units.

## Note 1

Range is highly depended on the surrounding and obstacles, such as walls and building materials.



app available on:

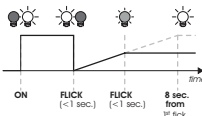


Compatible devices:

iPhone 4S or later  
iPad 3 or later  
iPod touch 5th gen or later  
Android 4.4 KitKat or later devices  
produced after 2013 with full BT 4.0 support

## Dimming without app.

- Turn lights on from a wall switch.
- Quickly flick the wall switch off (max. 1 sec.) and back on. The light level starts to increase gradually.
- Flick the switch again at desired dim level. The selected level is saved automatically.
- If the second flick is not done within 8 sec. the light intensity reaches its maximum level.
- Flicking the switch can also be used to switch between predefined scenes.







# Bluetooth to 0-10V, 1-10V or DALI Control Unit

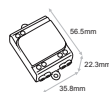
## Bluetooth

- Controlled with Casambi app, as well as with traditional wall switches. The Casambi app can be downloaded from Apple App Store and Google Play Store.
- 0-10V (and 1-10V) or digital Standalone DALI control interface.
- Standalone DALI makes it possible to implement multi-channel lighting systems with adjustable color (RGB and RGBW) or color temperature (CCT), while keeping the wiring and number of components at their minimum.

Code	Supply Voltage	Output Voltage*	Signal Output**	Control	Dimensions	IP Rate
DEM.192	220-240VAC 50Hz 0,6A Max. mains current	220-240VAC 50Hz	0-10VDC or DALI 9-12VDC	Casambi app. Bluetooth 4.0 protocol	56.5x35.8x22.3mm	IP20
DEM.222	220-240VAC 50Hz 0,6A Max. mains current	220-240VAC 50Hz	0-10VDC or DALI 9-12VDC	Casambi app. Bluetooth 4.0 protocol	56.5x35.8x22.3mm	IP20

\*For External Relay use only

\*\* Max. number of drivers connected: 1pc



- Different Casambi enabled products can be used from a simple one luminaire direct control to a complete and full featured light control system where up to 127 units form automatically an intelligent mesh network.
- Casambi products, should not be placed in a metal enclosure or next to large metal structures. Metal will effectively block all radio signals which are crucial to the operation of the product.

### Range



Casambi uses mesh network technology so each DEM.192 acts also as a repeater. Longer ranges can be achieved by using multiple Casambi units.

**Note 1**  
Range is highly depended on the surrounding and obstacles, such as walls and building materials.

app available on:



Compatible devices:

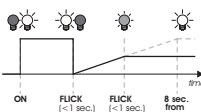
iPhone 4S or later  
iPad 3 or later  
iPad Touch 5th gen or later

Android 4.4 KitKat or later devices  
produced after 2013 with full BT  
4.0 support



### Dimming without app

- Turn lights on from a wall switch.
- Quickly flick the wall switch off (max. 1 sec.) and back on. The light level starts to increase gradually.
- Flick the switch again at desired dim level. The selected level is saved automatically.
- If the second flick is not done within 8 sec. the light intensity reaches its maximum level.
- Flicking the switch can also be used to switch between predefined scenes.



# Bluetooth to DALI Control Unit

Lighting Management, Power Supplies & Controllers



## Bluetooth

- Controlled with Casambi app which can be downloaded free of charge from Apple App Store and Google Play Store.
- Integrated DALI power supply that allows to control a maximum of 25 DALI drivers.
- Bluetooth controller must not be connected to DALI lines that are already supplied by a DALI power supply.
- One independent and mains operated push button input.



Code	Supply Voltage	Output Current	Signal Output	Control	Dimensions	IP Rate
DEM.227	220-240VAC 50/60Hz	50mA	DALI (compatible) 4ch single/group addresses	Casambi app. Bluetooth 4.0 protocol	119x30x21mm	IP20



**ACC.994**  
Optional  
Straight relief set accessory



## Bluetooth

- Controlled with Casambi app which can be downloaded free of charge from Apple App Store and Google Play Store.
- Integrated DALI power supply that allows to control a maximum of 50 DALI drivers.



Code	Supply Voltage	Output Current	Signal Output	Control	Dimensions	IP Rate
DEM.225	220-240VAC 50/60Hz	100mA	DALI	Casambi app. Bluetooth 4.0 protocol	38x38x26mm	IP44



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- Casambi products, should not be placed in a metal enclosure or next to large metal structures. Metal will effectively block all radio signals which are crucial to the operation of the product.

### Range



Casambi uses mesh network technology so each DEM.192 acts also as a repeater. Longer ranges can be achieved by using multiple Casambi units.

#### Note 1

Range is highly depended on the surrounding and obstacles, such as walls and building materials.



app available on:



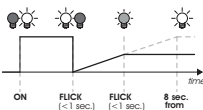
Compatible devices:

iPhone 4S or later  
iPad 3 or later  
iPad Touch 5th gen or later

Android 4.4 KitKat or later devices  
produced after 2013 with full BT  
4.0 support

### Dimming without app

- Turn lights on from a wall switch.
- Quickly flick the wall switch off (max. 1 sec.) and back on. The light level starts to increase gradually.
- Flick the switch again at desired dim level. The selected level is saved automatically.
- If the second flick is not done within 8 sec. the light intensity reaches its maximum level.
- Flicking the switch can also be used to switch between predefined scenes.





# Bluetooth 1ch Relay Switch With Inrush Current Limiter (ICL)

## Bluetooth

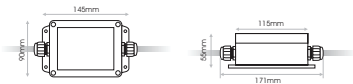
- Controlled with Casambi app which can be downloaded free of charge from Apple App Store and Google Play Store.
- Bluetooth controllable, 1ch Relay switch with built-in inrush current limiter.
- Ideal for outdoor use.
- Material: Polycarbonate (pc) housing.
- In/Out H07RN-F rubber cables (3 x 1.5mm<sup>2</sup>).
- Maximum connected capacity 2000µF.
- Inrush limiting time: 350ms (+/- 50ms).
- Inrush limiting cycles: 3cycles/minute.
- Continuous current up to 10A.
- Operating temperature: -25...+50C°.



Designed & Manufactured  
by ELECTRON SA



Code	Supply Voltage	Peak Current Limitation	RMS Current Limitation	Max. Continuous Current	Max. Continuous Power	Control	Dimensions	IP Rate
DEM.216	220-240VAC / 50Hz	16A	10A	10A rms.	2400W	Casambi app. Bluetooth 4.0 protocol	115x90x55mm	IP65



- ➔ Different Casambi enabled products can be used from a simple one luminaire direct control to a complete and full featured light control system where up to 250 units form automatically an intelligent mesh network.
- ➔ Casambi products, should not be placed in a metal enclosure or next to large metal structures. Metal will effectively block all radio signals which are crucial to the operation of the product.

### Range



Casambi uses mesh network technology so each DEM.195 acts also as a repeater. Longer ranges can be achieved by using multiple Casambi units.

**Note 1**  
Range is highly depended on the surrounding and obstacles, such as walls and building materials.

app available on:



Compatible devices:

iPhone 4S or later  
iPad 3 or later  
iPad Touch 5th gen or later

Android 4.4 KitKat or later devices  
produced after 2013 with full BT 4.0 support



# Bluetooth 2ch Relay Switch

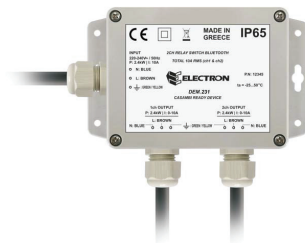
Lighting Management, Power Supplies & Controllers



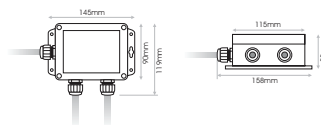
## Bluetooth

- Controlled with Casambi app which can be downloaded free of charge from Apple App Store and Google Play Store.
- Bluetooth controllable, 2ch Relay switch.
- Ideal for outdoor use.
- Material: Polycarbonate (pc) housing.
- In/Out H07RN-F rubber cables (3 x 1.5mm<sup>2</sup>).
- Total current up to 10A (both channels driven).
- Operating temperature: -25...+50°C.

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by ELECTRON SA



Code	Supply Voltage	Number of Channels	Max. Current	Max. Power	Control	Dimensions	IP Rate
DEM.231	220-240VAC / 50Hz	2ch	Total capacity 10A rms (Both channels driven)	2400W	Casambi app. Bluetooth 4.0 protocol	115x90x55mm	IP65



- ✦ Different Casambi enabled products can be used from a simple one luminaire direct control to a complete and full featured light control system where up to 250 units form automatically an intelligent mesh network.
- ✦ Casambi products, should not be placed in a metal enclosure or next to large metal structures. Metal will effectively block all radio signals which are crucial to the operation of the product.

### Range



Casambi uses mesh network technology so each DEM.195 acts also as a repeater.  
Longer ranges can be achieved by using multiple Casambi units.

**Note 1**  
Range is highly depended on the surrounding and obstacles, such as walls and building materials.



app available on:



Compatible devices:

iPhone 4S or later  
iPad 3 or later  
iPad Touch 5th gen or later

Android 4.4 KitKat or later devices  
produced after 2013 with full BT  
4.0 support



## Bluetooth Dali interface Control Unit

### Bluetooth

- Controlled with Casambi app which can be downloaded free of charge from Apple App Store and Google Play Store.
- Integration of Bluetooth Casambi control to BMS, KNX, and smart automation systems.
- Powered directly from a DALI bus
- Can be used with a DALI sensor for presence detection or daylight harvesting

Code	Supply Voltage	Signal Current DALI	Control	Dimensions	IP Rate
DEM.218	9.5-22.5VDC	250mA max.	Casambi app. Bluetooth 4.0 protocol	40.4x36.3x14mm	IP20
DEM.229	9.5-22.5VDC	250mA max.	Casambi app. Bluetooth 4.0 protocol	40.4x36.3x14mm	IP20



DEM.218



DEM.229



## Bluetooth Sensor

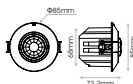
### Bluetooth

- Controlled with Casambi app which can be downloaded free of charge from Apple App Store and Google Play Store.
- Ambient light control and presence detection.
- Detection range mounted at height of 3 meters  $\Phi$  8meters.
- Detection angle 53°.
- Light measurement at sensor head 1-2000lx (+/- 20%).

Code	Supply Voltage	Mounting Height	Control	Dimensions	IP Rate
SNR.000	220-240VAC 50/60Hz	4m max.	Casambi app. Bluetooth 4.0 protocol	Recessed $\Phi$ 85x73.3mm Surface mounted $\Phi$ 85x73.3mm	IP20

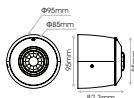


Recessed



ACC.993

Housing for surface mounted installation



## 6 ch DMX Controller with IR Remote Control

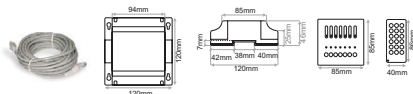
Lighting Management, Power Supplies & Controllers



- LED dimmers / controllers



Code	Supply Voltage	Output	Dimming Control	Scenes	Remote Control	Fade	Signal/Power Distribution Box
CDS.216	230VAC	6 channel DMX-512	6 channel faders and master fader	6 programmable scenes of up to 100 steps per scene	IR	Assignable setting separately and master control	Is included as power supply and DMX signal converter



## 4 ch RGBW Touch DMX and PWM 12/24V Output LED Dimmer / Controller

- LED dimmers / controllers
- Memory retained upon power failure.



Code	Supply Voltage	Nr. of Channels	Output1	Output2	Output Power	Dimming Control	Menus	Store/ Playback
CDS.221	12-24VDC	4	DMX-512	Depending on the power supply 0...12V - 0...24V	24W/ch (12V) total 72W (12V) or 48W/ch (24V) total 144W (24V)	Touch switches	Four function	4 scenes and 4 colours



## 3 ch DMX Output CHAMELEON controllers CONSTANT VOLTAGE

- The most flexible and user friendly series of architectural controllers.
- Ideal for creating scenes and controlling the light in architectural applications.
- Intelligent control solutions for RGB, AW, AWB, Monochromatic LEDs.

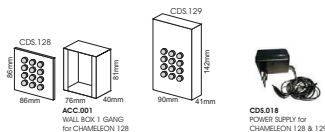
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Code	Description	Scenes	Op. Volt.	Current	Output Channels	Output Digital DMX-512	Dimensions
CDS.128	CHAMELEON 128 WALL/FLASH MOUNTED	5+1	12-15VDC	40mA	3DMX	YES	86x86x28mm
CDS.129	CHAMELEON 129 DESKTOP/WALL MOUNTED	5+1	12-15VDC	40mA	3DMX	YES	142x41x90mm

### TECHNICAL SPECIFICATIONS

- DMX-512 output.
- Dynamic colour environment from a template of 16.7 million colours.
- Save of colours for future use.
- Decrease or increase of the intensity of light (dimmer).
- Ability to activate automatic factory programs (six preset sequences).
- Capability of changing the time that each colour is on (step time).
- Selection of the time of change from one colour to another (fade time).





## INRUSH CURRENT LIMITER 300ms / 230VAC

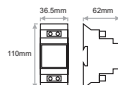
### INRUSH CURRENT LIMITER 300ms / 230VAC / 16A

Code	Model
DEM.193	INRUSH CURRENT LIMITER 300ms / 230VAC / 16A



### INRUSH CURRENT LIMITER LED 300ms / 230VAC / 48A peak

Code	Model
DEM.194	INRUSH CURRENT LIMITER LED 300ms / 230VAC / 48A peak



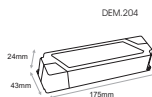
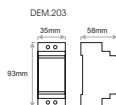
## INRUSH CURRENT LIMITER 300ms / 180-264VAC / 23A peak / 16A

### INRUSH CURRENT LIMITER LED 300ms / 180-264VAC / 23A peak / 16A

- Overheating, Overload protection.



Code	Relay Limiting Time	Supply Voltage	Inrush Current Limiting	AC Continuous Rated Current
DEM.203	300ms	180-264VAC	23A peak	16A
DEM.204	300ms	180-264VAC	23A peak	16A



# EMERGENCY LIGHT KIT for CONSTANT VOLTAGE or CONSTANT CURRENT LED

Lighting Management, Power Supplies & Controllers



- Instant emergency operation at mains failure.
- Maintained or not maintained operation (maintained operation suitable with electronic drivers or dimmable electronic drivers).
- Multi-power dimmable version DIP-SWITCH, constant current or constant voltage to power LED to LED modules.
- "High temperature" Ni-Cd batteries.
- Charge Indicator with LED.
- Protection device against extensive discharge.
- "Rest mode" facility with remote control device.
- Self diagnosis system with internal module, optional.
- Reference Norms: EN55015, EN6100-3-2, EN61347-2-13, EN61347-2-7, EN61547.
- Lamps: Power LEDs, LED modules.



Code	Voltage	Frequency	Battery V-Ah	to °C	to °C	Charge time
EKT.001	220-240V	50...60Hz	7.2V-4Ah	0 + 55	75	24h

## Technical Data:

- Length battery cable: 280mm.
- Length LED cable: 350mm.
- Led mounting hole: 9mm.
- Supply current: 35mA max.
- Terminal blocks max. connection size: 1.5mm<sup>2</sup>
- Max distance between driver and lamp: 2 meters.

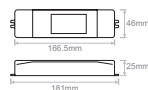
## Battery:

- **Rechargeable high temperature Ni-Cd Safe batteries.**
- These cells accept a permanent charge for a minimum of 4 years in high-temperature environments (up to +55°C) such as security lighting equipment.
- Constant current during charge.
- Zero maintenance.
- Long cycle life (over 500 charge discharge cycles).

DIP-SWITCH position	Working voltage in an emergency (V)	Output current in an emergency (I)	n° max. power of LED current	Power max. for LED modules voltage
A	12V const.	200mA ± 10%	$N_{LED} = 12V_f$	24W
B	24V const.	160mA ± 10%	$N_{LED} = 24V_f$	30W
C	46V const.	60mA ± 10%	$N_{LED} = 46V_f$	50W
D	9-58V	200-30mA	$N_{LED} = 58V_f$	-

## DIP-SWITCH positions example:

- A** position, can connect 3 LED with  $V_f$  3.5V or 1 LED  $V_f$  10V, or a strip LED 12V-24W max.  
**B** position, can connect 6 LED with  $V_f$  3.7V or 2 LED  $V_f$  10V, or a strip LED 24V-30W max.  
**C** position, can connect 12 LED with  $V_f$  3.7V or 4 LED  $V_f$  10V.  
**D** position, can connect 18 LED with  $V_f$  3.2V or 3 LED  $V_f$  17V.







## EMERGENCY LIGHT KIT for 12V LED Lamps with Lamp Holder GU5.3

- Instant emergency operation at mains failure.
- Maintained or not maintained operation.
- Suitable for LED lamps 12V.
- High efficiency, minimum heat dispersion and absolute reliability.
- "High temperature" Ni-Cd batteries.
- Charge indicator with LED.
- Protection device against extensive discharge.
- Reference Norms: EN 61347-2-7.
- Lamps: LED lamps 12V / GU5.3.



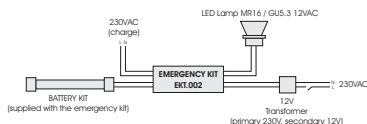
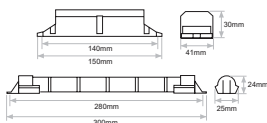
Code	Voltage	Frequency	Power W	Battery V-Ah	Flux %	ta °C	tc °C	Weight	Charge Time
EKT.002	220-240V	50...60Hz	3-7W	7.2V-1.6Ah	80/100%	0 +50	70	170gr	24h

### Technical Data:

- Length battery cable: 280mm.
- Length LED cable: 350mm.
- Led mounting hole: 9mm.
- Supply current: 20mA max.
- Push-wire connections max. size: 1.5mm<sup>2</sup>
- Max distance between driver and lamp: 2 meters.

### Battery:

- **Rechargeable high temperature Ni-Cd Saff batteries.**
- These cells accept a permanent charge for a minimum of 4 years in high-temperature environments (up to +50°C) such as security lighting equipment.
- Constant current during charge.
- Zero maintenance.
- Long cycle life (over 500 charge discharge cycles).
- Long term storage (up to 4 months in normal conditions: temperature range from +5°C to +25°C in a 65% ±5% relative humidity atmosphere).



# EMERGENCY LIGHT KIT for 230V LED Lamps with Lamp Holder GU10

Lighting Management, Power Supplies & Controllers



- Instant emergency operation at mains failure.
- Maintained or not maintained operation (maintained operation suitable with electronic drivers and dimmable electronic drivers).
- Suitable for LED lamps 230V - 0/50Hz.
- High efficiency, minimum heat dispersion and absolute reliability.
- "High temperature" Ni-Cd batteries.
- Charge indicator with LED.
- Protection device against extensive discharge.
- "Rest mode" facility with remote control device.
- Reference Norms: EN 61347-2-7.
- Lamps: LED lamps 230V / GU10.



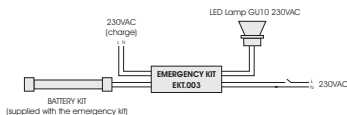
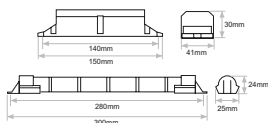
Code	Voltage	Frequency	Power W	Battery V-Ah	Flux %	ta °C	tc °C	Weight	Charge Time
EKT.003	220-240V	50...60Hz	3-6.5W	7.2V-1.6Ah	80/100%	0 +60	80	170gr	24h

## Technical Data:

- Length battery cable: 280mm.
- Length LED cable: 350mm.
- Led mounting hole: 8.8mm.
- Supply current: 20mA max.
- Push-wire connections max. size: 1.5mm<sup>2</sup>
- Max distance between driver and lamp: 2 meters.

## Battery:

- **Rechargeable high temperature Ni-Cd Safe batteries.**
- These cells allow a permanent charge for a minimum of 4 years in high-temperature environments (up to +50°C) such as security lighting equipment.
- Constant current during charge.
- Zero maintenance.
- Long cycle life (over 500 charge/discharge cycles).
- Long term storage (up to 4 months in normal conditions: temperature range from +5°C to +25°C in a 65% ±5% relative humidity atmosphere).





## DIMMABLE ELECTRONIC TRANSFORMER

- Dimmable with trailing or leading edge dimmers.
- Short circuit protection.

Code	Power Supply	Output Voltage	Max. Watt
TRF.002	230VAC	12VAC	60W



## CABLES / CONNECTORS

### 3P XLR PREFAB CABLE

3PIN MALE TO 3PIN FEMALE XLR (MIC/DMX)

Code	Model	Connectors	Length	Diameter	Colour
WIR.019	3P XLR 150	XLRM / XLRF	150cm	6mm	Black
WIR.020	3P XLR 300	XLRM / XLRF	300cm	6mm	Black
WIR.021	3P XLR 600	XLRM / XLRF	600cm	6mm	Black
WIR.022	3P XLR 900	XLRM / XLRF	900cm	6mm	Black



### 5P XLR PREFAB CABLE

5PIN MALE TO 5PIN FEMALE XLR CABLE (DMX)

Code	Model	Connectors	Length	Diameter	Colour
WIR.005	5P XLR 150	5P XLRM / 5M XLRF	150cm	6,8mm	Black
WIR.001	5P XLR 300	5P XLRM / 5M XLRF	300cm	6,8mm	Black
WIR.002	5P XLR 600	5P XLRM / 5M XLRF	600cm	6,8mm	Black
WIR.003	5P XLR 900	5P XLRM / 5M XLRF	900cm	6,8mm	Black



### XLR CONNECTORS

3P/5P MALE &amp; FEMALE XLR CONNECTORS

Code	Model	Connectors
100.003	3P XLRF	3PIN XLR FEMALE
100.002	3P XLRM	3PIN XLR MALE
100.011	5P XLRF	5PIN XLR FEMALE
100.010	5P XLRM	5PIN XLR MALE



### WIR.405

DMX CABLE ON SPOOL 100M

Code	Spool	Colour	Diameter
WIR.405	100m	Black	6mm





## Extension cables with connectors IP68

Code	Description
<b>WIR.500</b>	2 pole 100cm extension cable 2x13A / IP68
<b>WIR.501</b>	2 pole 200cm extension cable 2x13A / IP68
<b>WIR.502</b>	2 pole 300cm extension cable 2x13A / IP68
<b>WIR.503</b>	2 pole 500cm extension cable 2x13A / IP68
<b>WIR.504</b>	4 pole 100cm extension cable 1x6,6A+3x2,5A / IP68
<b>WIR.505</b>	4 pole 200cm extension cable 1x6,6A+3x2,5A / IP68
<b>WIR.506</b>	4 pole 300cm extension cable 1x6,6A+3x2,5A / IP68
<b>WIR.507</b>	4 pole 500cm extension cable 1x6,6A+3x2,5A / IP68
<b>WIR.512</b>	5 pole 100cm extension cable 1x6,6A+4x2A / IP68
<b>WIR.513</b>	5 pole 200cm extension cable 1x6,6A+4x2A / IP68
<b>WIR.514</b>	5 pole 300cm extension cable 1x6,6A+4x2A / IP68
<b>WIR.515</b>	5 pole 500cm extension cable 1x6,6A+4x2A / IP68
<b>WIR.508</b>	7 pole 100cm extension cable 7x5A / IP68
<b>WIR.509</b>	7 pole 200cm extension cable 7x5A / IP68
<b>WIR.510</b>	7 pole 300cm extension cable 7x5A / IP68
<b>WIR.511</b>	7 pole 500cm extension cable 7x5A / IP68

Code	Description
<b>WIR.520</b>	2 pole 100cm extension cable 2x30A / IP68
<b>WIR.521</b>	2 pole 200cm extension cable 2x30A / IP68
<b>WIR.522</b>	2 pole 300cm extension cable 2x30A / IP68
<b>WIR.523</b>	2 pole 500cm extension cable 2x30A / IP68
<b>WIR.524</b>	4 pole 100cm extension cable 1x30A+3x10A / IP68
<b>WIR.525</b>	4 pole 200cm extension cable 1x30A+3x10A / IP68
<b>WIR.526</b>	4 pole 300cm extension cable 1x30A+3x10A / IP68
<b>WIR.527</b>	4 pole 500cm extension cable 1x30A+3x10A / IP68
<b>WIR.532</b>	5 pole 100cm extension cable 1x30A+4x8A / IP68
<b>WIR.533</b>	5 pole 200cm extension cable 1x30A+4x8A / IP68
<b>WIR.534</b>	5 pole 300cm extension cable 1x30A+4x8A / IP68
<b>WIR.535</b>	5 pole 500cm extension cable 1x30A+4x8A / IP68
<b>WIR.528</b>	7 pole 100cm extension cable 7x13A / IP68
<b>WIR.529</b>	7 pole 200cm extension cable 7x13A / IP68
<b>WIR.530</b>	7 pole 300cm extension cable 7x13A / IP68
<b>WIR.531</b>	7 pole 500cm extension cable 7x13A / IP68



The above extension cables are used for junction boxes only. For all other lighting fixtures, extension cables are available on request.

## Connectors for cables IP68

For cables with outer diameter: 5-8mm

Code	Description
<b>CNC.006</b>	2 pole male connector 13A per pole / IP68
<b>CNC.007</b>	2 pole female connector 13A per pole / IP68
<b>CNC.008</b>	In-line 2 pole male connector 13A per pole / IP68
<b>CNC.009</b>	In-line 2 pole female connector 13A per pole / IP68
<b>CNC.010</b>	4 pole male connector 5A per pole / IP68
<b>CNC.011</b>	4 pole female connector 5A per pole / IP68
<b>CNC.012</b>	In-line 4 pole male connector 5A per pole / IP68
<b>CNC.013</b>	In-line 4 pole female connector 5A per pole / IP68
<b>CNC.052</b>	5 pole male connector 5A per pole / IP68
<b>CNC.079</b>	5 pole female connector 5A per pole / IP68
<b>CNC.080</b>	In-line 5 pole male connector 5A per pole / IP68
<b>CNC.053</b>	In-line 5 pole female connector 5A per pole / IP68
<b>CNC.014</b>	7 pole male connector 5A per pole / IP68
<b>CNC.015</b>	7 pole female connector 5A per pole / IP68
<b>CNC.016</b>	In-line 7 pole male connector 5A per pole / IP68
<b>CNC.017</b>	In-line 7 pole female connector 5A per pole / IP68

For cables with outer diameter: 7-12mm

Code	Description
<b>CNC.026</b>	2 pole male connector 30A per pole / IP68
<b>CNC.027</b>	2 pole female connector 30A per pole / IP68
<b>CNC.028</b>	In-line 2 pole male connector 30A per pole / IP68
<b>CNC.029</b>	In-line 2 pole female connector 30A per pole / IP68
<b>CNC.030</b>	4 pole male connector 30A per pole / IP68
<b>CNC.031</b>	4 pole female connector 30A per pole / IP68
<b>CNC.032</b>	In-line 4 pole male connector 30A per pole / IP68
<b>CNC.033</b>	In-line 4 pole female connector 30A per pole / IP68
<b>CNC.081</b>	5 pole male connector 30A per pole / IP68
<b>CNC.082</b>	5 pole female connector 30A per pole / IP68
<b>CNC.083</b>	In-line 5 pole male connector 30A per pole / IP68
<b>CNC.084</b>	In-line 5 pole female connector 30A per pole / IP68
<b>CNC.034</b>	7 pole male connector 15A per pole / IP68
<b>CNC.035</b>	7 pole female connector 15A per pole / IP68
<b>CNC.036</b>	In-line 7 pole male connector 15A per pole / IP68
<b>CNC.037</b>	In-line 7 pole female connector 15A per pole / IP68



## Chassis connectors IP68

Code	Description
<b>CNC.000</b>	Chassis 2 pole male 13A per pole / IP68
<b>CNC.001</b>	Chassis 2 pole female 13A per pole / IP68
<b>CNC.002</b>	Chassis 4 pole male 5A per pole / IP68
<b>CNC.003</b>	Chassis 4 pole female 5A per pole / IP68
<b>CNC.075</b>	Chassis 5 pole male 5A per pole / IP68
<b>CNC.076</b>	Chassis 5 pole female 5A per pole / IP68
<b>CNC.004</b>	Chassis 7 pole male 5A per pole / IP68
<b>CNC.005</b>	Chassis 7 pole female 5A per pole / IP68

Code	Description
<b>CNC.020</b>	Chassis 2 pole male 30A per pole / IP68
<b>CNC.021</b>	Chassis 2 pole female 30A per pole / IP68
<b>CNC.022</b>	Chassis 4 pole male 30A per pole / IP68
<b>CNC.023</b>	Chassis 4 pole female 30A per pole / IP68
<b>CNC.077</b>	Chassis 5 pole male 30A per pole / IP68
<b>CNC.078</b>	Chassis 5 pole female 30A per pole / IP68
<b>CNC.024</b>	Chassis 7 pole male 15A per pole / IP68
<b>CNC.025</b>	Chassis 7 pole female 15A per pole / IP68



**T-Connect junction boxes IP68 (1 input + 2 outputs)**

Code	Description
<b>CNC.040</b>	T-connect 2p Junction box, 13A, IP68
<b>CNC.041</b>	T-connect 4p Junction box, 5A, IP68
<b>CNC.073</b>	T-connect 5p Junction box, 5A, IP68
<b>CNC.042</b>	T-connect 7p Junction box, 5A, IP68

Code	Description
<b>CNC.045</b>	T-connect 2p Junction box, 30A, IP68
<b>CNC.046</b>	T-connect 4p Junction box, 30A, IP68
<b>CNC.074</b>	T-connect 5p Junction box, 30A, IP68
<b>CNC.047</b>	T-connect 7p Junction box, 15A, IP68

**X-Connect junction boxes IP68 (1 input + 3 outputs)**

Code	Description
<b>CNC.048</b>	X-connect 2p Junction box, 13A, IP68
<b>CNC.064</b>	X-connect 3p Junction box, 13A, IP68
<b>CNC.065</b>	X-connect 4p Junction box, 5A, IP68
<b>CNC.066</b>	X-connect 5p Junction box, 5A, IP68
<b>CNC.067</b>	X-connect 7p Junction box, 5A, IP68

Code	Description
<b>CNC.068</b>	X-connect 2p Junction box, 30A, IP68
<b>CNC.069</b>	X-connect 3p Junction box, 30A, IP68
<b>CNC.070</b>	X-connect 4p Junction box, 30A, IP68
<b>CNC.071</b>	X-connect 5p Junction box, 30A, IP68
<b>CNC.072</b>	X-connect 7p Junction box, 15A, IP68

**T-Connect mini junction boxes IP65 on request**

Description
T-connect 2p Mini Junction box, 13A/4A, IP65
T-connect 3p Mini Junction box, 13A/4A, IP65
T-connect 4p Mini Junction box, 6.6A/4A, IP65
T-connect 5p Mini Junction box, 6.6A/4A, IP65

Description
T-connect 2p Mini Junction box, 30A/4A, IP65
T-connect 3p Mini Junction box, 30A/4A, IP65
T-connect 4p Mini Junction box, 30A/4A, IP65
T-connect 5p Mini Junction box, 30A/4A, IP65

The above mini junction boxes are provided with female mini connector and 40cm cable.



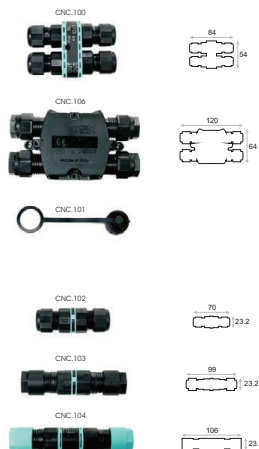
## IP68 CONNECTORS

### H-Connect junction IP68 (1 input + 3 outputs)

Code	Description	Cable diameter
<b>CNC.100</b>	H-connect 4p Junction, 17.5A, IP68	7-12mm
<b>CNC.106</b>	H-connect 5p Junction, 16A, IP68	7-14mm
<b>CNC.101</b>	End cap with rubber holder for CNC.100	

### Connectors for cables IP68

Code	Description	Cable diameter
<b>CNC.102</b>	4 pole connector 32A per pole/ IP68	7-12mm
<b>CNC.103</b>	4 pole connector 32A per pole/ IP68	7-13.5mm
<b>CNC.104</b>	4 pole connector 17.5A per pole/ IP68	7-13.5mm



## IP68 MICRO CONNECTORS

### 2 pole connectors 10A per pole IP68

Code	Description	Cable diameter
<b>CNC.107</b>	2 pole connector female 10A per pole/ IP68	5.8-6.9mm
<b>CNC.108</b>	2 pole connector male 10A per pole/ IP68	5.8-6.9mm

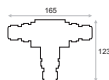




## IP65 JUNCTION BOX

### T-Connect junction box IP65 (1 input + 2 outputs)

Code	Description	Cable diameter
CNC.105	T-connect 4p Junction, 24A, IP65	8-17.5mm



## IP68 CONNECTORS WITH SEALING GEL

### Connectors for cables IP68

Code	Description	Cable diameter
GEL.001	2 pole connector 6A per pole/ IP68	4.8-6mm
GEL.002	2 pole connector 10A per pole/ IP68	5.5-10mm



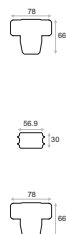
### H-Connect junction IP68 (1 input + 3 outputs)

Code	Description	Cable diameter
GEL.003	H-connect 3p Junction, 16A, IP68	6.5-12mm



### Connectors for cables IP68

Code	Description	Cable diameter
GEL.004	T-connect 3p Junction, 16A, IP68	6.5-12mm (in/out) / 5.5-10mm (output)
GEL.005	T-connect 2p Junction, 6A, IP68	5.5-9mm
GEL.006	T-connect 5p Junction, 10A, IP68	6.5-12mm (in/out) / 5.5-10mm (output)



## EXTENSION CABLES & SPLITTERS

Lighting Management, Power Supplies & Controllers



### 2 pole extension cables & splitters

- IP protection: IP20

Code	Description
<b>WIR.130</b>	Male+Female 2 pole extension cable 12-24V / 6A, 2x0.75mm <sup>2</sup> , IP20, 100cm
<b>WIR.131</b>	Male+Female 2 pole extension cable 12-24V / 6A, 2x0.75mm <sup>2</sup> , IP20, 200cm
<b>WIR.132</b>	Male+Female 2 pole extension cable 12-24V / 6A, 2x0.75mm <sup>2</sup> , IP20, 500cm

Code	Description
<b>WIR.134</b>	Six way, 2 pole splitter for WIR.130-131-132 with 100cm cable 12-24V / 10A (max 5A/socket), IP20

Code	Description
<b>WIR.135</b>	Two way, 2 pole splitter for WIR.130-131-132, 12-24V / 10A (max 5A/socket), IP20



### 4 pole extension cables & splitters

- IP protection: IP20

Code	Description
<b>WIR.136</b>	Male+Female 4 pole extension cable 12-24V / 6A max, 4x0.34mm <sup>2</sup> , IP20, 100cm
<b>WIR.137</b>	Male+Female 4 pole extension cable 12-24V / 6A max, 4x0.34mm <sup>2</sup> , IP20, 200cm
<b>WIR.138</b>	Male+Female 4 pole extension cable 12-24V / 6A max, 4x0.34mm <sup>2</sup> , IP20, 500cm

Code	Description
<b>WIR.139</b>	Six way, 4 pole splitter for WIR.136-137-138 with 100cm cable 12-24V / 6A max

Code	Description
<b>WIR.140</b>	Mounting Kit for sockets WIR.130-131-132-136-137-138



### 5 pole extension cables IP67

- IP protection: IP67

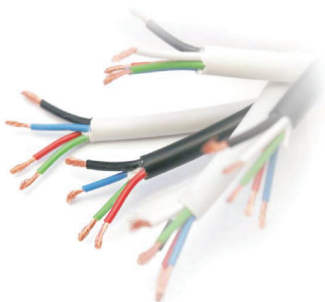
Code	Description
<b>WIR.141</b>	Male+Female 5 pole extension cable 12-24V / 2A, 5x0.2mm <sup>2</sup> , IP67, 100cm
<b>WIR.142</b>	Male+Female 5 pole extension cable 12-24V / 2A, 5x0.2mm <sup>2</sup> , IP67, 200cm
<b>WIR.143</b>	Male+Female 5 pole extension cable 12-24V / 2A, 5x0.2mm <sup>2</sup> , IP67, 500cm







- 4wire or 5wire LED supply cable, RGB or RGBW in the corresponding colors and common return with cross section of 1qmm in black colour, to simplify the installation and minimize any mistakes.
- Twisted cores in layers and bending radius 8xO.D. static.



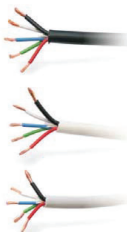
#### 4 Wires LED PVC Cables

Code	Description	Cove Colours	Jacket Colour	Outer Diameter	Static Ambient Temperature
<b>WIR.110</b>	PVC high flexibility cable 3x0,50mm <sup>2</sup> + 1x1mm <sup>2</sup>	Red / Green / Blue / Black	Black	5.1mm	-20°C to +70°C
<b>WIR.111</b>	PVC high flexibility cable 3x0,50mm <sup>2</sup> + 1x1mm <sup>2</sup>	Red / Green / Blue / Black	White	5.1mm	-20°C to +70°C
<b>WIR.115</b>	PVC flexible UV resistant cable 3x0,50mm <sup>2</sup> + 1x1mm <sup>2</sup> (suitable for outdoor use)	Red / Green / Blue / Black	Light Grey	5.1mm	-20°C to +70°C



#### 5 Wires LED PVC Cables

Code	Description	Cove Colours	Jacket Colour	Outer Diameter	Static Ambient Temperature
<b>WIR.112</b>	PVC high flexibility cable 4x0,50mm <sup>2</sup> + 1x1mm <sup>2</sup>	Red / Green / Blue / White / Black	Black	5.9mm	-20°C to +70°C
<b>WIR.113</b>	PVC high flexibility cable 4x0,50mm <sup>2</sup> + 1x1mm <sup>2</sup>	Red / Green / Blue / White / Black	White	5.9mm	-20°C to +70°C
<b>WIR.114</b>	PVC flexible UV resistant cable 4x0,50mm <sup>2</sup> + 1x1mm <sup>2</sup> (suitable for outdoor use)	Red / Green / Blue / White / Black	Light Grey	5.9mm	-20°C to +70°C



# PREMIUM SERIES TRAILING

Lighting Management, Power Supplies & Controllers



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

Designed & Manufactured  
by ELECTRON SA



**PREMIUM 79 / 68 / 37 SERIES** of multifunctional custom made power controllers **NEW** power units with **Trailing Edge** dimmers for:

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



## **PREMIUM 79 Series GO TRAILING!**

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



## **PREMIUM 68 Series GO TRAILING!**

Available versions:

- Premium 68 with 12 channels x 6A per channel



## **PREMIUM 37 Series GO TRAILING!**

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!



Designed & Manufactured  
by ELECTRON SA



#### NEW ACTOR BASE Trailing Edge dimmer

- Designed and manufactured by ELECTRON SA

#### ACTOR Series GO TRAILING!

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

Model	Number of Channels	Channel Capacity (Watts at 230V)	Maximum Current per Channel	Supply Voltage	Dimensions (WxDxD)
ACTOR B610 Trailing Edge	6	2300	10A	400/230V~3/N/PE/ 50Hz	482x88x340mm

# DMX MERGER SPLITTER

Lighting Management, Power Supplies & Controllers



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

Code: **DEM.046**

Designed & Manufactured  
by ELECTRON SA

## 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 / +50°C.



# DMX REPEATER

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

Code: **DEM.045**

Designed & Manufactured  
by ELECTRON SA

## 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 / +50°C.
- 0.5-2,5mm<sup>2</sup> screw terminals, for DMX input and output cable connection.
- Dimensions: L x W x H: 125mm x 68,5mm x 42,5mm.



# DMX512 / RDM WiFi LED Controller

- DMX address set up through Wi-Fi.
- Test DMX fixtures and connections.
- User friendly mobile app.

Code	Power Supply	Output Signal	Operating System	Protocol
<b>PCK.218</b>	5-24VDC	DMX 512 / RDM	ANDROID or IOS	2.4GHz Wi-Fi

