

#### FEATURES

- AC DIMMER + FADER
- AC Input 230Vac
- Command:
  - N.O. Push Button
  - Analog Signal 0/1-10V and Potentiometer
- BUS Command: DMX
  
- Output channel for R-C loads
- Adjustable the brightness of white light
- Four channel dimmer output phase-cut (trailing edge) for LED Lamp dimmable and Halogen Lamp dimmable.
  
- Typical Efficiency > 95%
- Minimum value of dimming adjustable
- Soft Start and Soft Stop
- Optimized output curve
- Memory function
- 100% Functional Test
- 5 Years warranty

- **Applications**

L'AC Dimmer is a single channel dimmer output phase-cut and adjusting the brightness of dimmable LED Lamp dimmable halogen lamp and AC phase-cut power supply.

- **Variant: Dimmer at phase-cut**

CODE	Supply Voltage	Output	Channel	Local Command	Bus Command
4CH-230-DIMMER-DMX	230Vac	4 x 200W/ch max	4	N° 4 N.O. Push Button	DMX

- **Reference standard**

Code	Description
EN 61347-1	Lamp controlgear - Part 1: General and safety requirements
EN 55015	Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment
EN 61000-3-2	Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current ≤ 16 A per phase)
EN 61000-3-3	Electromagnetic compatibility (EMC) - Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤ 16 A per phase and not subject to conditional connection
EN 61547	Equipment for general lighting purposes - EMC immunity requirements

- **Technical specifications**

		230Vac Variant	
INPUT	Nominal Voltage	230 Vac	
	Voltage Range	210...240 Vac	
	Mains Frequency	50Hz	
	Efficiency at full load	>95%	
	Power loss in stand by mode @230Vac	<500mW	
OUTPUT	Nominal Output Voltage	210...240 Vac	
	Nominal Output Current	max 0.8 A/ch	
	Type of Load	R+C	
	Nominal Power <sup>1)</sup>	1 Canale	4 Canali
200 W/ch		800W tot	
DIMMING	Dimming Resolution	16bit	
	Dimming Method	Trailing Edge	
	Dimming Range	0 – 100 % <sup>2)</sup>	
ENVIRONMENTAL	Storage Temperature	min: -40 max: +60 °C	
	Ambient Temperature <sup>3)</sup>	min: -10 max: +40 °C	
	Protection Grade	IP20	
	Wiring	2.5mm <sup>2</sup> solid - 2.5mm <sup>2</sup> stranded - 30/12 AWG	
	Wire preparation length	6 mm	
	Mechanical Dimension	143 x 91 x 62 mm – DIN RAIL 8M	
	Packaging Dimension	156 x 124 x 71 mm	
	Casing material	Plastica	
	Product Weight	210g	

<sup>1)</sup> Maximum value, dependent on ventilation conditions

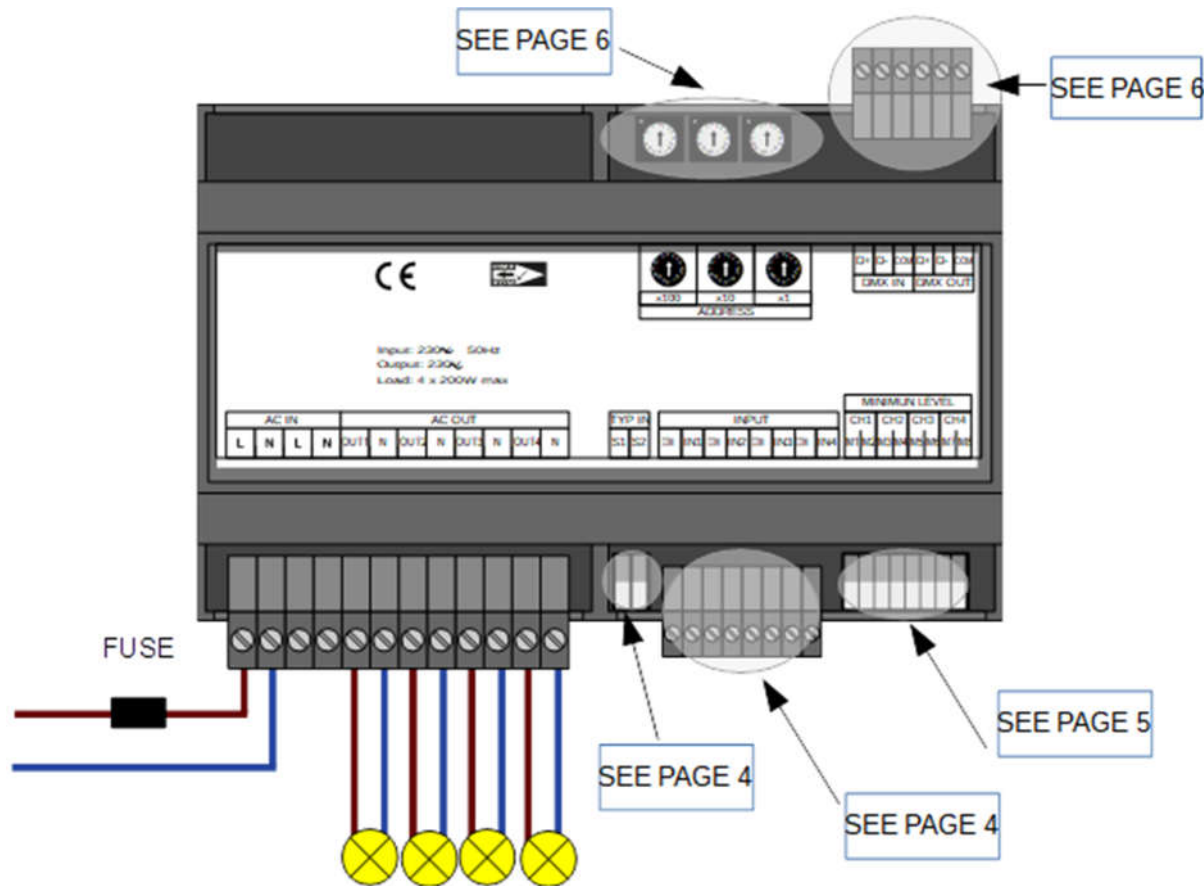
<sup>2)</sup> It depends on the type of lamp connected

<sup>4)</sup> At full load

• **Installation**

As shown in the scheme below, proceed as follows to install the product:.

- 1) Installation and maintenance must be performed only by qualified personnel in compliance with current regulations.
- 2) Isolate the mains supply before the installation or adjusting the switches. The external supply must be protected. The product must be protected by fuse and /or by a Circuit Breaker with overcurrent protection correctly dimensioned.
- 3) Connect the Lamp Load to the “AC OUT” terminal blocks.
- 4) Connect the local command of the terminal blocks “INPUT” or the Bus command of the terminal block “BUS IN” and/or “BUS OUT”.
- 5) Connect a Fuse into “Line” cable. The fuse must be correctly dimensioned. Connect the cable of supply mains to “AC IN” terminal blocks.



• **Technical Note**

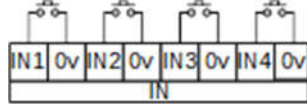

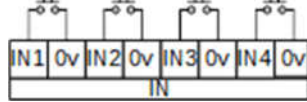

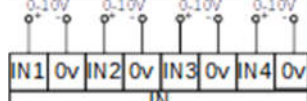

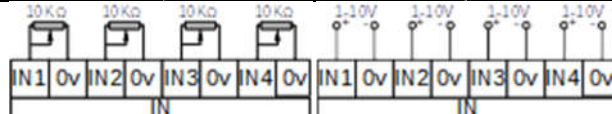

**Installation:**

- Isolate the mains supply before the installation or adjusting the switches. Installation and maintenance must be performed in the absence of AC Voltage.
- Installation and maintenance must be performed only by qualified personnel in compliance with current regulations.
- The product must be installed inside an electrical cabinet protected against overvoltages.
- The external supply must be protected. The product must be protected from Fuse and/or Circuit Breaker with overcurrent protection correctly dimensioned.
- The product must be installed only in a vertical or horizontal position with the cover / label pointing upwards or vertically; No other positions are allowed. Bottom-up positive is not permitted (downward label).
- The use of the product in harsh environments could limit the output power.
- Keep the circuits at 230V (LV) and the no SELV circuits separated from extra low voltage circuits (SELV)

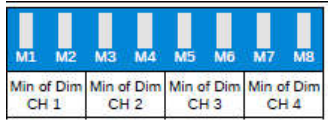
**Commands and Outputs:**





- The connecting cables length between the local commands (N.O. Push button or other) and the product must be less than 25m; the cables must be dimensioned correctly.
- The connecting cables length between the product and the LED modules must be less than 25m; the cables must be dimensioned correctly.





• **Local input type**





In Type	Description	Connections	Settings
Push	N.O. Pushbutton, with memory		
	N.O. Pushbutton, NO MEMORY		
0-10V	Analogic 0-10V		
1-10V	Analogic 1-10V & Potentiometer		





• **Setting the minimum value of dimming**

Function	 <p>M1 M2 M3 M4 M5 M6 M7 M8          Min of Dim CH 1 CH 2 CH 3 CH 4</p>	<ul style="list-style-type: none"> <li>Switches from 1 to 2: <b>Minimum of dimming, channel 1</b></li> <li>Switches from 3 to 4: <b>Minimum of dimming, channel 2</b></li> <li>Switches from 5 to 6: <b>Minimum of dimming, channel 3</b></li> <li>Switches from 7 to 8: <b>Minimum of dimming, channel 4</b></li> </ul>
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Canale1 – Channel 1			
Minimum of Dimming 0%		Minimum of Dimming 5%	
Minimum of Dimming 10%		Minimum of Dimming 20%	

Canale 2 – Channel 2			
Minimum of Dimming 0%		Minimum of Dimming 5%	
Minimum of Dimming 10%		Minimum of Dimming 20%	

Canale3 – Channel 3			
Minimum of Dimming 0%		Minimum of Dimming 5%	
Minimum of Dimming 10%		Minimum of Dimming 20%	

Canale 4 – Channel 4			
Minimum of Dimming 0%		Minimum of Dimming 5%	
Minimum of Dimming 10%		Minimum of Dimming 20%	

• **PUSH DIMMER FEATURE**

The intensity and the status change (ON/OFF) are controlled by the N.O. push button.

**N.O. Push Button Command**

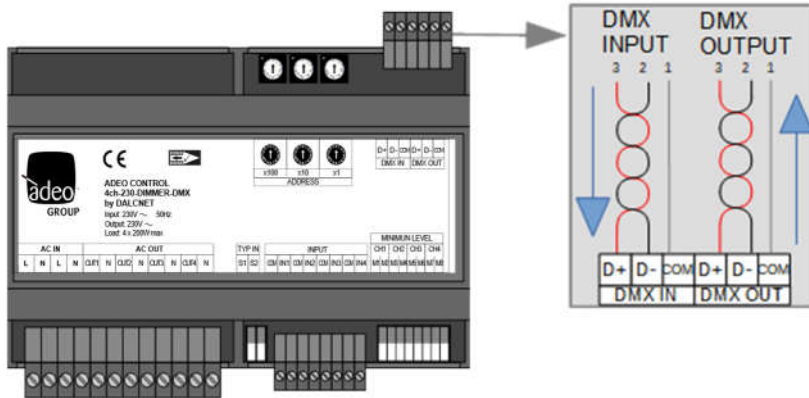
Click	On/Off
Double Click	Maximum intensity
Long pressure (>1s) from ON	Dimmer up/down
Long pressure (>1s) from OFF	Turn ON at 1% (Nightly Time), then dimmer up/down

**0-10V / 1-10V Command**




0÷10V 1÷10V Potentiometer	Dimmer: 0-1V=0% 10V=100%
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• **DMX+RDM bus setup**

With the **DMX+RDM BUS SETUP** in the “slave” condition the output are manages by an external DMX controller. In the “master” condition, the DMX+RDM allows the communications between devices.



• **Addressing**

DMX	000 (default):		Address defined by RDM
	from 001		to  512
			First channel address, from 1 to 512

• **Onboard led:**

In the case of bus error, the led blinks fast (2 pulsed per second).  
 In the case of no bus detected, led blinks slow (1 pulse per second).  
 In the case of data link active, the led stands on.

• **Relation with local commands**

At power-up, in case of absence of connection to the BUS, local control is active.  
 When the BUS is detected, the control passes to the BUS. It remains to the BUS until there is signal.  
 In the absence of signal:  
 - if the local command is N.O. PUSH BUTTON, the control passes to local command in the event of a N.O. push button pressure.  
 - if the local command is 0-10V or 1-10V the control passes immediately to the local command.

- **CHANNELS MAP – DMX512**

Load Type: White - up to 4 loads

Ch.	Function	Map: Dimmer
1	Dimmer 1	0 .. 255
2	Dimmer 2	0 .. 255
3	Dimmer 3	0 .. 255
4	Dimmer 4	0 .. 255

- **RDM COMMAND**

<i>PARAMETRI NECESSARI</i>
DISC_UNIQUE_BRANCH
DISC_MUTE
DISC_UN_MUTE
SUPPORTED_PARAMETERS
PARAMETER_DESCRIPTION
DEVICE_INFO
SOFTWARE_VERSION_LABEL
DMX_START_ADDRESS
IDENTIFY_DEVICE

<i>PARAMETRI SUPPORTATI</i>
PRODUCT_DETAIL_ID_LIST
DEVICE_MODEL_DESCRIPTION
MANUFACTURER_LABEL
DEVICE_LABEL
BOOT_SOFTWARE_VERSION_ID
BOOT_SOFTWARE_VERSION_LABEL
DMX_PERSONALITY
DMX_PERSONALITY_DESCRIPTION
SLOT_INFO
SLOT_DESCRIPTION
DEFAULT_SLOT_VALUE