

# 2 Channel Dimmer DMX

IIK-DIM2



## Main Features

- 2 Channel 100 - 230Vac
- Selectable leading / trailing edge phase dimming
- Compliant with DMX512 protocol
- Configurable minimum brightness between 1% to 40%
- Additional stand-alone dimmer and dynamic operation modes

**IIKSA**

IIKSA Ltd  
H10, TOB1,  
University of Reading,  
Earley Gate,  
Reading, RG6 7BE.

Reg: 12028986  
VAT: GB 326 2356 16

## Technical Details

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Electrical	
Input Voltage	100-240Vac
Output Voltage	100-240Vac
Output Current	0.9-1.3A per channel
Output Power	100-300W per channel
Inrush Current	Taht

Safety and EMC	
EMC Compliance	ETSI EN 301 489-1 V2.2.3 ETSI EN 301 489-17 V3.2.4
LVD Compliance	EN 62368-1:2020+A11:2020
Certification	CE, EMC, LVD, RoHS

Control Information	
Control Protocol	DMX512
Dimming Levels	256

Environmental	
Ambient Temperature	-30°C to +55°C
Protection	IP20
Dimensions (WxHxD)	48mm x 110mm x 65mm
Weight	135g

Load Type	Maximum Load	Comments
Dimmable LEDs	2x 200W @ 220Vac 2x 100W @ 110Vac	If the LEDs or LED drivers used have a power factor < 0.7 please be sure to derate the maximum load.
Incandescent or HV Halogen Lamps	2x 300W @ 220Vac 2x 150W @ 110Vac	

# System Parameter Setup

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## Enter Parameter Setup

To change these setting and enter the parameter setup

- Press and hold the **M** and ◀ key for 2s, to enter the parameter settings
- Once you are in the parameter settings, press **M** to cycle through settings for:
  - Decode mode,
  - Control method
  - Minimum brightness level
  - Default output level
  - Automatic blank screen
- Once done you press and hold the **M** and ◀ key for 2s to leave the parameter setup, alternatively simply wait for 10s timeout. Changes will still be saved irrespectively.

### Decode mode:

- Press ◀ or ▶ to switch between:
  - “d-1” for single channel mode. A single DMX address controls both channels together
  - “d-2” for dual channel mode. 2 sequential DMX addresses will control each channel independently.

### Control method:

- Press ◀ or ▶ to switch between:
  - “C-F.” for forward phase control, also known as leading edge dimming
  - “C-R” for reverse phase control, also known as trailing edge dimming

### Minimum brightness:

- Press ◀ or ▶ to set the minimum brightness level between 1% (“b01”) and 40% (“b40”). You need to set a suitable minimum brightness to avoid flickering at low level.

### Default Output Level:

- Press ◀ or ▶ to set the default output level that the dimmer channels will revert to in case of no DMX signal being detected. 0% (“d00”) and 100% (“dFF”).

### Automatic blank screen:

- Press ◀ or ▶ to switch between:
  - “bon” to enable automatic screen blanking.
  - “boF” to disable automatic blank screen.

## Factory Defaults

The factory defaults of the Dimmer are as follows:

- DMX operating mode with address set to 1
- Decode mode is set to 2 for independent control of output channels
- Control type is set to reverse phase control, also known as trailing edge dimming
- Minimum brightness is set to 2%
- Default output level is set to 100% brightness in case of DMX control signal loss
- Automatic blank screen is disabled

### **Restore factory defaults**

- Press and hold the ◀ and ▶ for 2s until you see “RES” on the display. Long press • and • key for 2s, restore factory default parameter, display RES.

# Operating Modes

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By default the dimmer is in the DMX operating mode.

- Press **M** to cycle through the operating modes
  - DMX Mode - Display shows “000” - “512”
  - Stand-alone Dynamic Mode - Display shows “P-1” - “P-4”
  - Stand-alone Dimmer Mode - Display shows “L-1” - “L-8”

## DMX Operating Mode

In DMX operating mode the only setup required is the DMX address. If the dimmer decode mode is set to single channel the displayed address will control both output channels together. In dual channel mode the dimmer will control the 2 output channels independently using the displayed address for output 1 and the displayed address +1 for output 2.

### To adjust the channel:

- Press ◀ or ▶ to set the desired DMX address between 001 and 512

*Note: You can press and hold the ◀ or ▶ for fast adjustments of the address.*

## Stand-alone Dynamic Mode (only when no DMX Signal present)

The stand-alone dynamic mode allows the dimmer to be configured to cycle through different brightness levels at a predefined speed.

Presets	
P-1	Both channels switch states synchronously
P-2	Channels switch states in sequence
P-3	Both channels fade between states synchronously
P-4	Channels fade between states in sequence

### Switching between presets:

- Press ◀ or ▶ to select the desired preset "P-1" - "P-4"

### Setting brightness levels and fade rate:

- Press and hold the **M** for 2s
  - Press **M** key to switch between configuring brightness level and fade rate.
  - Press ◀ or ▶ to select desired brightness level. 0% "b-1" to 100% "b-F"
  - Press ◀ or ▶ to select desired fade rate. Slow "S-1" to Fast "S-F"
- Once done you press and hold the **M** key for 2s to leave the parameter setup, alternatively simply wait for 10s timeout. Changes will still be saved irrespectively.

## Stand-alone Dimmer Mode (only when no DMX Signal present)

The stand-alone dimmer mode is for operation without DMX control and allows the dimmer to be configured to switch between 8 preset brightness levels using the button on the front. This operating mode is useful for testing of lights or site lighting prior to the controls being commissioned as it allows easy manual control of the outputs.

### Switching between presets:

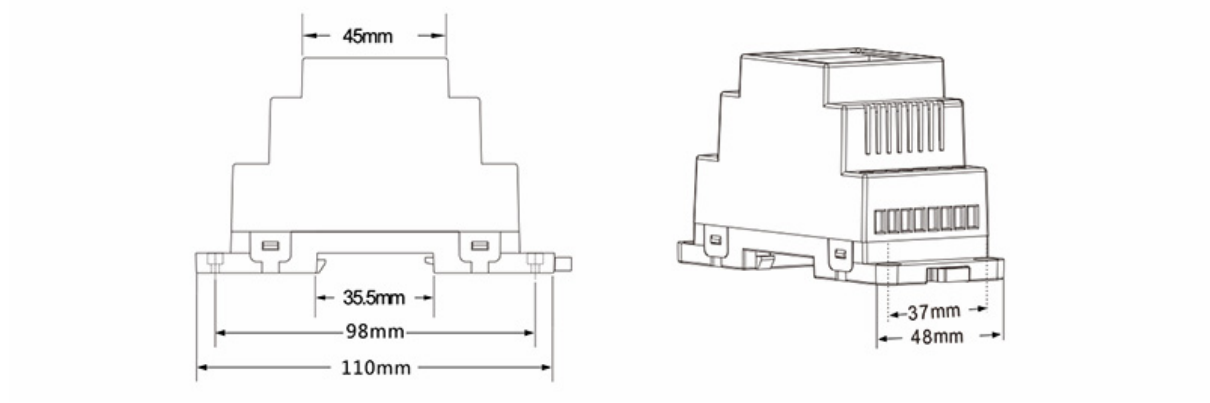
- Press ◀ or ▶ to select the desired preset "L-1" - "L-8"

### Setting brightness levels per preset:

- Press ◀ or ▶ to select the preset you want to configure the brightness levels for.
- Press and hold the **M** for 2s
  - Press **M** key to switch between configuring output 1 and output 2.
  - Press ◀ or ▶ to select desired brightness level for the output.
    - Output 1: 0% "100" to 100% "1FF"
    - Output 2: 0% "200" to 100% "2FF"
- Once done you press and hold the **M** key for 2s to leave the parameter setup, alternatively simply wait for 10s timeout. Changes will still be saved irrespectively.

## Dimensions

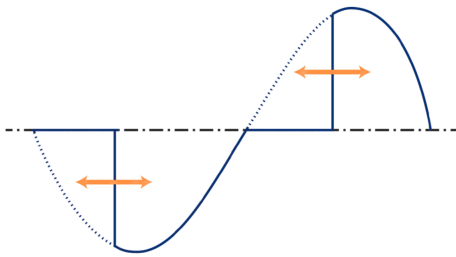
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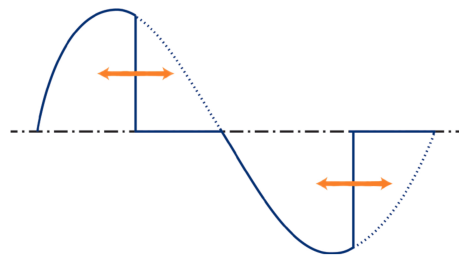
## Dimming Types

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Leading Edge



Trailing Edge



# Electrical Connections

