XRD600 REG

DMX Retrofit Universal Dimmer

Item.No. 10.252

Installation guide

Valid from Version: Hardware: H2 Firmware: F2.2.0
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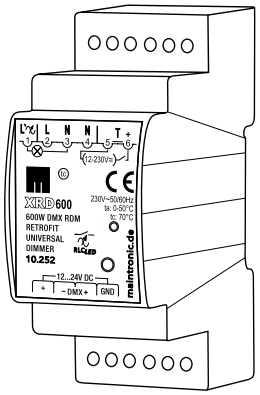

NOTE: Please also refer to the manual for this product at www.maintronic.de.

Applicable Documents:

Manual Datasheet

EN

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1. Functions and features

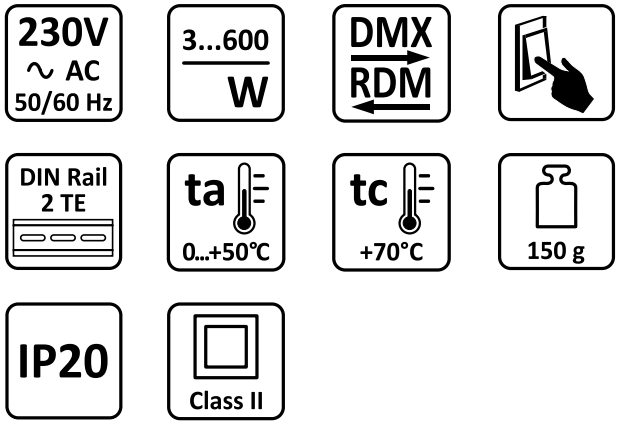


Fig. 1 - Icons functions

2. Product description

One-channel phase dimmer for brightness control of R,L,C including LED retrofit loads. Operates as a digital leading and trailing edge phase dimmer with automatic load detection.

3. Installation

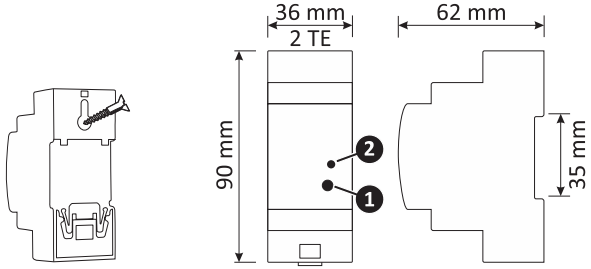


Fig. 2 - Housing dimensions and connections

4. Connection diagram

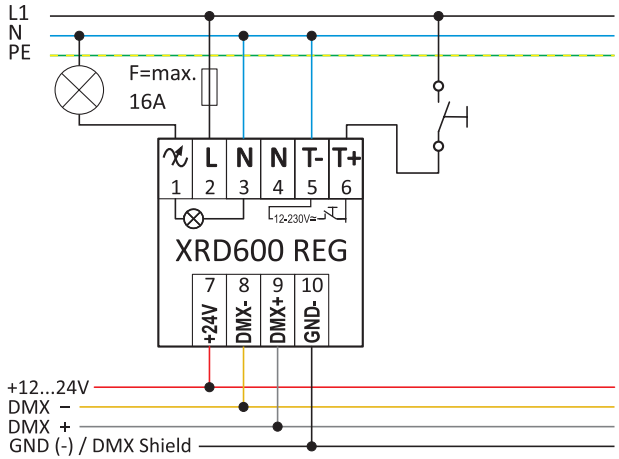


Fig. 3 - Connection diagram with push button 230 VAC

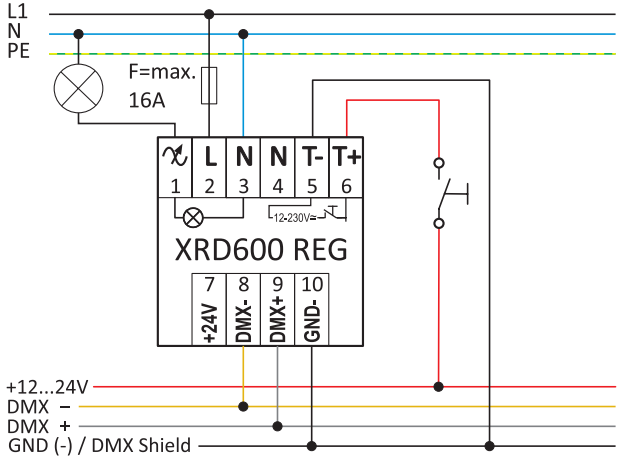
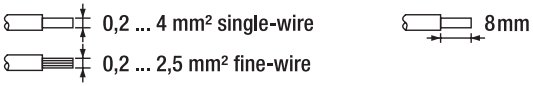


Fig. 4 - Connection diagram with push button 24 VDC

4.1 Connection terminals

L'	1	Load input	N	4	Neutral conductor
L	2	Input Voltage 230V AC	T (-)	5	Push button input GND / N
N	3	Neutral conductor	T (+)	6	Push button input 12...230V ≂

+24V	7	+24V DC	DMX +	9	DMX/DMX RDM Signal +
DMX -	8	DMX/DMX RDM Signal -	GND	10	-24V / DMX Shield



4.2 Operating elements and indicators

1	Device button	Commissioning; Programming
2	Status LED	Display Status of the device

5. Comissioning

5.1 Measuring procedure (AdaptivDIM)

When starting up for the first time (voltage is applied to the device for the first time after installation), the dimmer will start a measuring procedure and calibrate accordingly to the connected load. For minor calibration, the dimmer decides which cutting method (leading or trailing edge) is used and adjusts itself to load type 3 or 4.

NOTE - During calibration, the connected lights may flicker. This is system-conditioned and not a defect of the device. The calibration must be completed and can not be interrupted by switching off the device.

Should a new calibration be required by changing the light source or to set a different load type, the device must be re-calibrated, for a new calibration see manual.

5.2 Power rating of retrofit dimmers

Load type	cutting method	Power output in percent	Calculated power load
Ohmic	trailing edge	approx. 100% of the rated power	600 VA
LED	trailing edge	approx. 70% of the rated power	420 VA
LED	leading edge	approx. 20% of the rated power	120 VA

As a rule:
Example 28x 4W (rated power LED) + 20% power factor = 135 VA power to be processed. Specifications depend on the light source used and may vary upwards and downwards.

5.3 Operating notes

Derating:
In the event of over temperature, an automatic derating occurs (status derating is indicated by the LED), which means that the dimmer's power is reduced and the load dimmed down.

Short circuit:
Automatic shutdown in the event of a short circuit.
Every 30 sec. it is tested whether the short circuit is still present. As soon as the short circuit is eliminated, an automatic restart takes place. If the error is still present after 5 min, the device is switched off completely.
Turn off the power and remove the error.

Noise emission:
It may occur that the dimmers cause acoustic noise when they are not used under unfavourable conditions or with certain consumers.
Make sure the phases are evenly balanced.

Flickering:
The dimmer requires a faultless mains, flickering may occur in case of mains supply fluctuations or ripple control signals as well as during calibration. This circumstance is system related and not a defect of the device.

6. Operation via buttons

6.1 Device button 1

6.2 Push button input - Universal voltage input

The device is equipped with a push button input (T), on which standard 230V AC buttons can be connected. Both DC voltage (from 12V DC) or AC voltage can be used on the push button input.

6.3 Functions push button operation

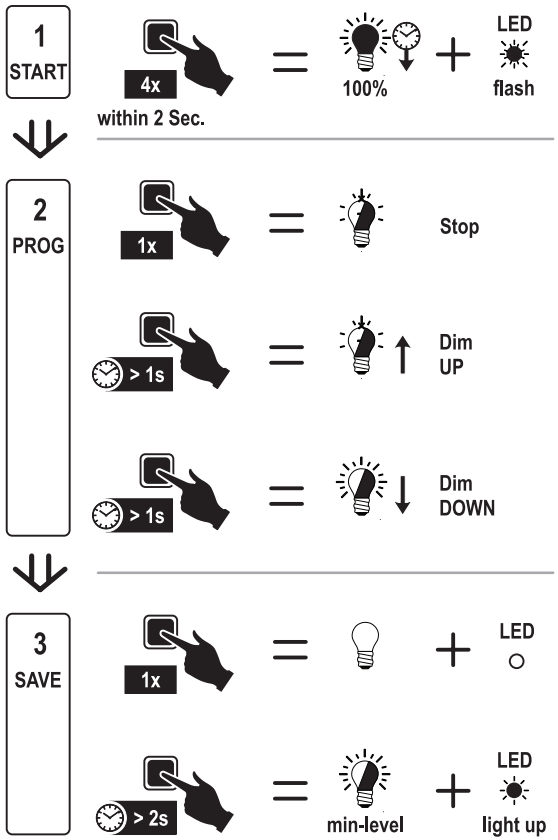
		1x	On / Off		✹ / ○
		> 1s	Dimming up / down		LED ↑/↓
		2x	Max-Level 100%	100%	LED
		3x	Show DMX channel		n x ✹ ○ ○ ✹ ○ ○
		4x	Programming Min-Level See 6.4	100%	LED ↑/↓
		> 20s	Start New measurement See manual		n x ✹✹✹✹○○○✹
		> 2s	DMX address Programming See 7.2		○ ○ ✹ ✹ ○ ○
		> 2s + ... x	DMX Parameter Programming See manual		n x ✹✹✹✹○○○✹

NOTE - Operation with the device button is only possible within the first 60 minutes after Power-On and will be deactivated after 60 minutes.

6.4 Set min-level with push button

In case of a flickering load or if the load remains too bright, the in-level (the lowest dimming value) can be adjusted via a push button connected to the push button input.

Perform the configuration with the following steps:



7. Operation via DMX

This dimmer operates based on the DMX512 protocol or via push button input - see manual for the product at www.maintronic.de.

NOTE - Before operating the dimmer, it is necessary to send a DMX signal once. As long as the DMX input is used (DMX signal is transmitted), the device button and push button inputs are not active. One second after the last DMX signal has been received, the button inputs are reactivated again.

7.1 Preparation

A supply voltage of 24V DC must be available (current consumption per module <7mA). Within the DMX protocol, a correct clamping of the signal line with + 24V and -GND must be ensured.

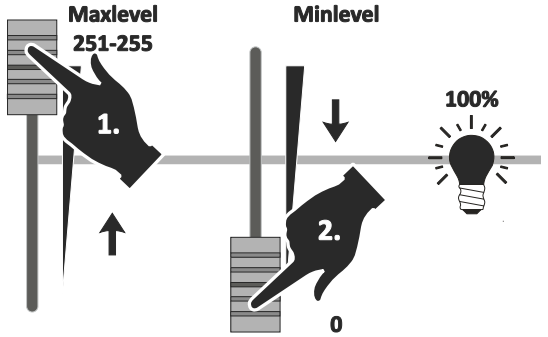
According to the DMX standard, no more than 32 DMX devices (with separate power supply) should be connected to a DMX signal. Then the DMX signal must be amplified with a repeater. To supply the bus, a supply voltage of 12 - 24V DC must be present (current consumption per module <7mA).

7.2 Assign DMX start address

In the delivery state, the start address (of the device) is preset to 1. The module uses one DMX channel.

1. Press the device button> 2 seconds ... (load jumps to 0 and 100% for half a second each), then the LED 2 flashes consistently.

2. At the desired start address (1-512) briefly set or fade the value to 251-255 (full on) and set to 0 (full off) again..



3. The dimmer accepts this channel as a new DMX start address. This is indicated by two long flashes of the LED 2 d possibly connected lights go to 100% brightness for about one second. Afterwards, the programming mode is exited.

NOTE - If the programming does not take place after 10 minutes, the programming mode will be exited and the device is back in normal operation.

The module can display the currently configured DMX address via the LED To do this, press the device button 3 times in succession. The address is displayed as a digit, for each digit the LED flashes as often as the value of the digit is. For the digit 0 the LED flashes long.

8. Kontaktaufnahme mit maintronic

Unter www.maintronic.de finden Sie Downloads, Anleitungen, Onlinehilfen sowie Antworten zu häufig gestellten Fragen (FAQ) zu den Produkten. Setzen Sie sich mit uns in Verbindung wenn Probleme oder Fragen zu Ihrem Gerät auftauchen.

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