

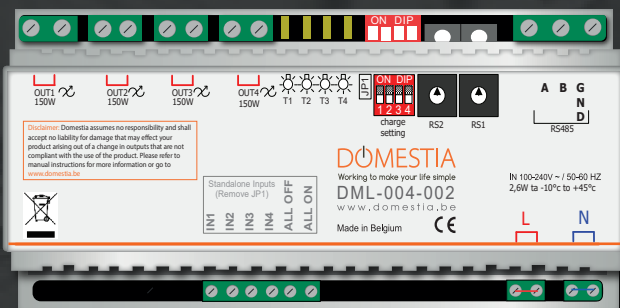
DOMESTIA

Working to make your life simple



USERS MANUAL

DML-004-002 | EXTENSION MODULE 4 DIMMABLE OUTPUTS COMPATIBLE



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1. DESCRIPTION

The module DML-004-002 allows you to dim the luminosity of the following charges :

- **230V dimmable LED lamps: 3W to 150W ***
- **230V incandescent and halogen lamps: 5W to 250W ***
- Non-dimmable lamps are not compatible with this product.
- Incandescent bulb
- Halogen LV (230V)
- Halogen low voltage (12V or 24V) by means of electronic or electromagnetic transformer.

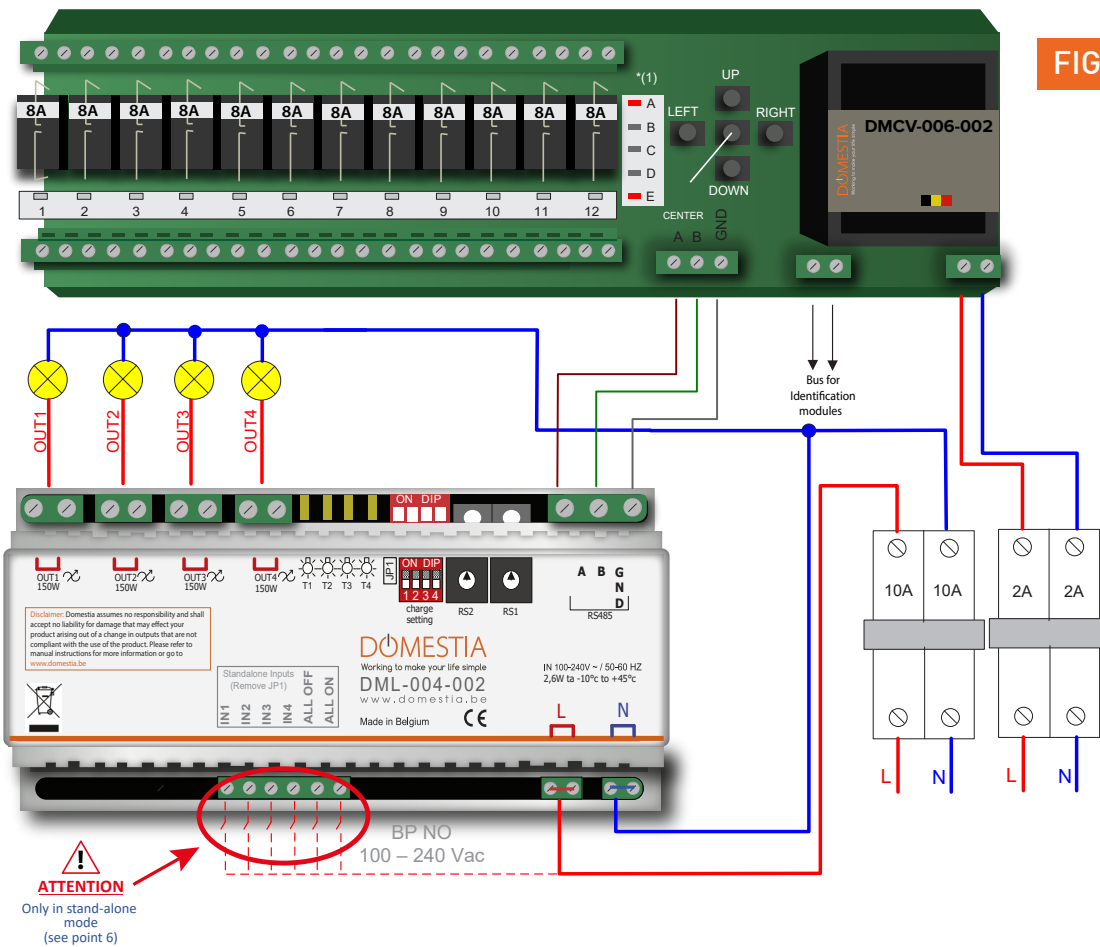
Always ensure that the maximum authorized power is respected according to the type of variable load. (see TECHNICAL CHARACTERISTICS in 9.)

2. CONNECTIONS

The extension module 4 dimmable outputs DML-004-002 can function in “**stand-alone**” mode or in slave mode behind the :

- **DMC/DKS-012-002 module with relay outputs.**
- **DME-LAN-002 command module**
- **An 8 DMC / DKS-008-001 relay output card**

For the connection to the DMC(DKS)-012-002, refer to the schematic drawing of figure A.
For the connection and the programming with the command module DME-LAN-002, refer to the user’s manual of the DME-LAN-002.



The basic module DMC-012-002 (programmed as master – **see instruction 3.2**) occupies the addresses 1 to 12 and the DML-004-002 will occupy 4 addresses between 13 and 48 (**see 3.1**).

3. ADDRESSING

3.1 CONFIGURATION OF THE MODULE DML-004-002

- I. Shut off the power supply to the extension module.
- II. Using a small screwdriver, turn the addressing dials integrated in the module and visible through the slots at the top of the cover to the position of the extension module (see table).

NOTE : in the mode “stand alone” leave the addressing dials on (0) and remove JP1.

Commutateurs d'adresse DML-004-002		Plage de sortie
RS2	RS1	
0	1	De 13 à 16
0	2	De 17 à 20
0	3	De 21 à 24
0	4	De 25 à 28
0	5	De 29 à 32
0	6	De 33 à 36
0	7	De 37 à 40
0	8	De 41 à 44
0	9	De 45 à 48

- III. Adaptation to different types of lighting.

The module DML-004-002 is designed to function with many different types of “VARIABLE” lighting elements. The configuration must be adapted accommodate each different type of element.

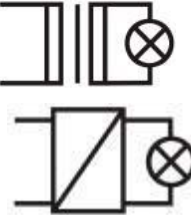

DOMESTIA DOES NOT GUARANTY THAT ALL “LED” MODELS WILL FUCTION CORRECTLY.

For more information, contact your LED lamp dealer.



The DIP SWITCH allows you to adapt the mode of each output individually. The “dip switch” will be placed in its original position (OFF), or position (ON).

CONFIGURATION TABLE FOR THE “DIP SWITCH” IN RELATION TO THE TYPE OF LIGHTING ELEMENT USED :

DIP SWITCH in OFF position	<ul style="list-style-type: none"> • LED dimmable with phase control • Halogen with transformer electromagnetic • Halogen with a transformer electronic compatible « Leading Edge Dimmer » 	
DIP SWITCH in ON position	<ul style="list-style-type: none"> • LED dimmable with inverse phase controle • Incandescence light 100-240VAC • Halogène 100-240VAC • Halogen with electronic transformer and compatible « Trailing Edge Dimmer » 	

IV. Turn back on the power supply of the extension module.

3.2 PROGRAMMING THE MASTER MODULE DMC-012-002

- I. Shut off the power supply to the master module.
- II. Hold the right directional button down and turn the power back on. The indicator lights **A, B, AND E** should be lit; If this is not the case, use the UP and DOWN buttons to light the **A, B, and E** - LEDs.
- III. Using the LEFT and RIGHT buttons and the indicator lights for circuits **1 to 4**, select the number of outputs the installation possesses
- IV. Push the center button to confirm.

CODE LED	Output numbers
1,2	Max 24
1,2,3	Max 36
1,2,3,4	Max 48

3.3 CONFIGURATION OF THE DMC-008-001 MASTER CARD

- I. Menu 7.2 of the DMC-008-001 card is used to select the master mode
- II. Press UP or DOWN to change the mode.
- III. Then confirm with ENTER.

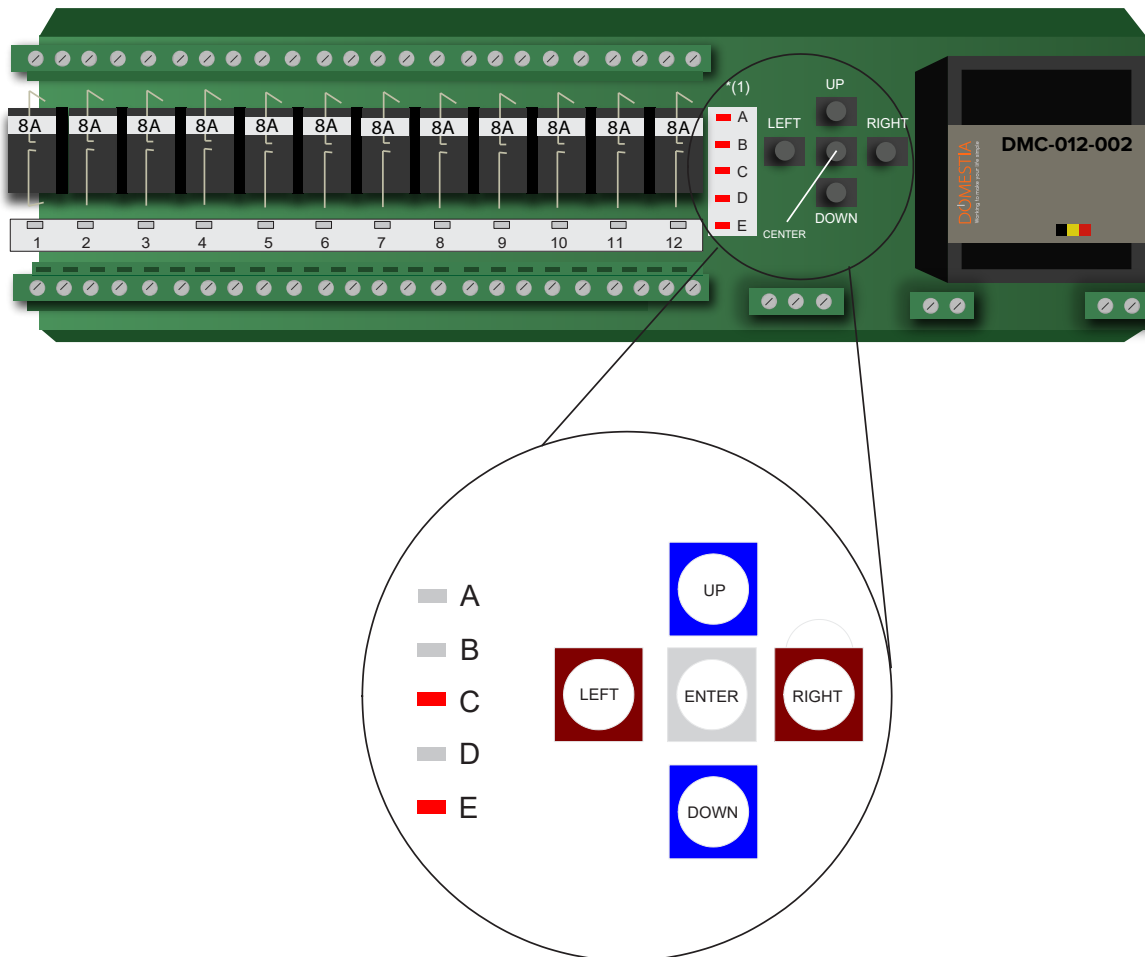
Reminder: There can only be one master card on an installation.

4. PROGRAMMING

The module DML-004-002 must be programmed in relay mode, that is indicators **C** and **E** lit (see figure B) or **user's manual for the DMC-012-002**).

Having selected the Relay mode, use the LEFT & RIGHT buttons to select the dimmable outlets. The selected output LED is now blinking.

- IV. Confirm by pushing the center button. The LED indicator for the output stops blinking and the power is sent to that output.
- V. Press the PB switches to associate them to this output. When pushing the PB The power is briefly interrupted signaling that the addressing is registered.
- VI. Repeat this operation for each PB switch that you wish to associate to this same output.
- VII. To leave the Relay mode, push the CENTER button to confirm your programming. Then push the UP PB as many times as necessary to return to mode function (LEDS **A** and **E** lit).



5. OPERATING in “Slave” mode

- As long as a push on a push button (BP) is in progress, the associated output will be variable.
- Briefly pressing the PB when the output is “on” will turn it off.
- A short press on the PB when the output is “off” will “turn on” the output at the last brightness applied to that output.

6. OPERATING in “Stand alone” mode

- Briefly pressing the PB when the output is “on” will turn it off. A short press on the BP when the output is “off” will “turn on” the output at the last brightness applied to that output. Continuous press allows the output to be dimmed.
- The ALL OFF input turns off all outputs. The ALL ON input turns on all outputs at the last applied brightness.
- Warning: the LPs (NO 230 Vac) must be connected between the phase (terminal 22-23) and the inputs (terminals 8-9-10-11-12-13)

Reminder: in stand-alone mode, you must not use an identification module. (DMI-006-001)

7. Regulating minimum intensity

To start the operation, please note the initial address on the ADDRESSING DIALS RS2 et RS1 so that you use the same output numbers (**see ADDRESSING In 3.1**)

Set the ADDRESSING DIAL RS2 at the following addresses :

- 6 for output 1
- 7 for output 2
- 8 for output 3
- 9 for output 4

Now set the ADDRESSING DIAL RS1 to the minimum intensity by selecting different intensities from 0 to 9. Turning clockwise you increase, counter-clockwise you decrease. Do not select a minimum intensity that's too weak, (if you do the light may not light up at all).

To exit the programming, reset the ADDRESSING DIALS RS2 and RS1 back to their initial settings which correspond to the address of your extension module. **Starting with the DIAL RS2 and then RS1 so as not to modify the minimum intensity that you have set.**

If you use the extension module in “STAND ALONE”, you will have to place the “JUMPER”

(JP1) that will allow you to make this setting. Then remove the (JP1) again as soon as the setting is completed.

8. ERROR CODES

Functioning normally:

The LED associated to the output (channel) is lit continually when activated, and off when it is inactive.

In case of malfunction, the table below gives a series of error codes.

STATUS	PROBLEM	POSSIBLE CAUSES
The LEDs 1 to 4 light up in sequence.	Impossible to control the lights.	Verify the connections to the bus RS485 (connection between the DML-004-002 and the master module)
LED 1, 2, 3 and 4 blink simultaneously every second.	Overheating of channels 1, 2, 3 and 4 : The thermal protection was activated.	<ul style="list-style-type: none"> The connected element is too powerful. The surrounding temperature is too high.
LEDs 1 or 2 or 3 or 4 blink rapidly (2 times/second).	Short-circuit or overload.	<ul style="list-style-type: none"> The output is in short-circuit. The connected element is much too powerful The connected element is not connected correctly. (see the configuration table of the « DIP SWITCH »)
The LEDs function normally	The lights will not turn on.	<ul style="list-style-type: none"> Verify the connections of the lights. The outputs are not programmed in mode relay (C+E).

9. TECHNICAL CHARACTERISTICS

FUNCTIONAL CHARACTERISTICS

- **LED dimmable 230V : 3W to 150W**
- Incandescent and Halogen 230V : 5W to 250W. 110V max. 150W

- Halogen very low voltage via electromagnetic transformer : 20VA to 250VA; 110V max. 150VA.
- **The transformer should not be used at less than 75% of its capacity.**
- Halogen very low voltage via transformer electronic : 25VA to 250VA; 110V max. 150VA.
- **We have to take into account the performance of the transformers to calculate the maximum number of lights.**

ELECTRICAL CHARACTERISTICS

- Power supply : 100-240VAC/50-60Hz
- Consumption free of polarity : 2.6W

TEMPERATURE RANGE

- Stocking : -30°C to +65°C
- Functioning : -10°C to +45°C

10. WARRANTIES

The basic duration of the warranty is 2 years starting the date of reception of your order. Whatever the problem with your article make sure you keep your sales receipt with the serial number of the product because this receipt is your sole warranty.

The warranty is not valid under the following conditions :

- Damages caused by incorrect use, visible damages, poor maintenance, or non respect of correct use of the material cited by the manufacturer in the user's manual. Attempts to repair or tampering by the customer or an unauthorized third party. Damages caused by accident, natural disasters, or other events that Domestia cannot be held responsible.
- Default that does not hinder the correct functioning or correct use of the material.

11. STANDARDS (see UL)

11.1 EMISSIONS

- Emission EN 55022 class B
- Emission radiating 30-1000MHz
- Emission conducting on the power supply 230VAC 150k-30MHz

- Emission current disturbance on the bus 150k-30MHz(current pinching)
- EN 61000-3-2 Harmonic Emission to 2kHz
- EN 61000-3-3 Flicker Emission

11.2 IMMUNITY

11.2.1 ENVELOPE

- EN 61000-4-2 electrostatic discharge 8kV/air (insulated portion=box)criteria B
- EN 61000-4-3 Immunity to field RF 80MHz-2GHz 10V/m in criteria B

11.2.2 LINES AC 230V

- EN 61000-4-4 burst 2kV in criteria B
- EN 61000-4-5 chock wave 2kV between phase and ground, 1kV between phases, all in criteria B
- EN 61000-4-6 inducted signals due to RF field 150kHz-80MHz 3V in criteria A, or 10V in criteria B
- EN 61000-4-11 dips and cutoffs in tension 70%U during 3 x 0.3s, then 0% during 3 x 0.1s in criteria B

11.2.3 TESTS SECTOR

- EN 50090-2-2 from 1996 + A1 from 2002
- Circuit insulation EN 60664 – 1



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