

# USERS MANUAL extension module 4 dimmable outputs (4 x 0/1 - 10V) : DMA-004-003

## 1. DESCRIPTION

The module DMA-004-003 allows you to regulate the luminosity of the following elements :

- 0 – 10 V
- 1 – 10 V

## 2. CONNECTIONS

The extension module 4 dimmable outputs DMA-004-003 will function in « slave » mode with :

- The module relay outputs DMC/DKS-012-002
- The command module DME-LAN

For the connection with the module DMC-012-002, refer to the drawing figure A.

For the connection and programming with the command module DME-LAN, refer to the users manual of the DME-LAN.

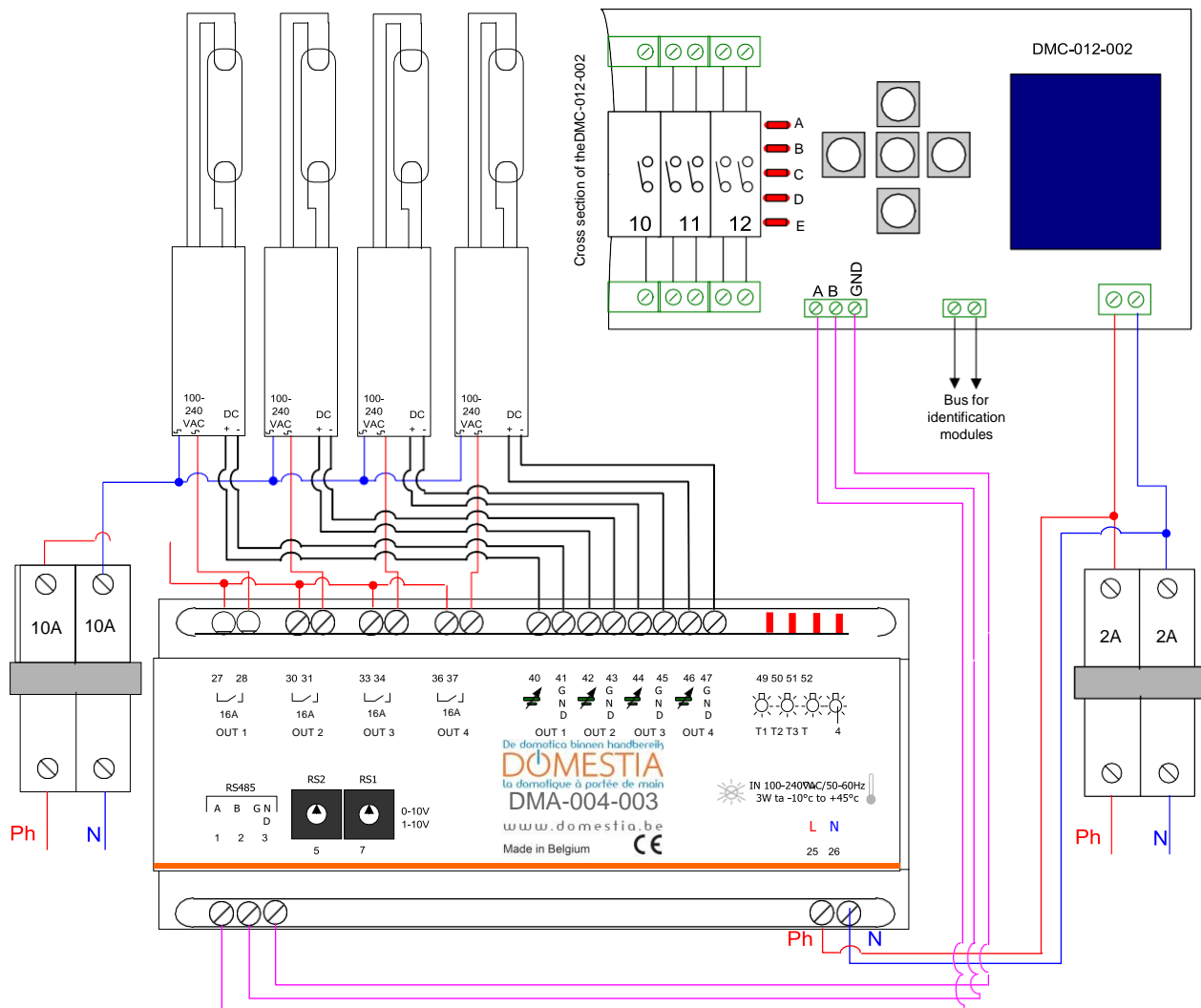


Figure A

The basic module DMC-012-002 (programmed as master – see instruction 3.2) occupies the addresses from 1 to 12 and the module DMA-004-003, the addresses from 13 to 48 (see instruction 3.1)

### 3. ADDRESSING

#### 3.1 Programming of the module DMA-004-003

There is a « jumper » placed on this module, accessible through the slot in the cover. This allows you to pilot your choice of different elements of regulating luminosity, dimmable in 0-10V or 1-10V. here are two possible combinations :

<b>« Jumper » DMA-004-003</b>	<b>4 outputs</b>
In Place	0 – 10V
Taken out	1 – 10V

- I. Cut off the power to the extension module.
- II. With a small, flat screwdriver, turn the addressing dials (code dials) integrated into the circuit and accessible through the slot in the cover to the position of the extension module.
- III. Turn the power supply of the extension module back on.

<b>Addressing Dials DMA-004-003</b>		<b>Output numbers</b>
RS2	RS1	
0	1	13 to 16
0	2	17 to 20
0	3	21 to 24
0	4	25 to 28
0	5	29 to 32
0	6	33 to 36
0	7	37 to 40
0	8	41 to 44
0	9	45 to 48

#### 3.2 Programming the master module DMC-012-002 :

- I. Cut off the power supply to the master module.
- II. Push and hold the RIGHT button while turning the power back on. The LEDS A, B and E should be lit. if this is not the case, use the UP and DOWN buttons until the LEDS A, B et E are lit.
- III. Using the buttons LEFT and RIGHT and the LEDS 1 to 4 (the outputs), select the total number of outputs you have for your installation.
- IV. Validate by pushing the CENTER button.

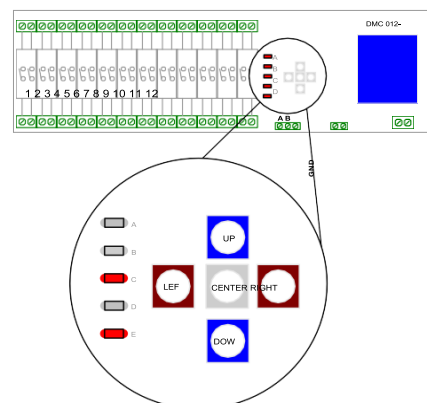
<b>Code LED</b>	<b>Output numbers</b>
1, 2	13 to 24
1, 2, 3	25 to 36
1, 2, 3, 4	37 to 48

### 4. PROGRAMMING

The DMA-004-003 modules must be programmed in **relay mode**, with the LEDS « C » and « E » lit (see « Figure B » or the users manual for the module DMC-012-002).

Once you have chosen the Relay mode, use the LEFT and RIGHT buttons to select the dimmable outlets. The LED for the selected output is now blinking.

- I. Validate by pushing on the CENTER button. The LED of the selected output is now lit and the power is sent to that output.
- II. Press the PB switch that will pilot this output. (When pushing on the PB, the power supply of this output is interrupted for a brief instant : this indicates that the addressing process has been registered.)



- III. Repeat this procedure for each PB switch you wish to associate to this same output.
- IV. To exit the Relay mode, push the CENTER button to confirm, then as many times as necessary the UP button to return to the FUNCTION mode (LEDS A and E lit).

## 5. FUNCTIONING

As long as you press and hold the Push Button (PB) switch, the associated output will be dimmed or increased in intensity. A brief push on the PB when the output is « lit », will turn it off. A brief push on the PB when the output is « off », will « light » the output to the last luminosity applied to this output.

## 6. OPERATING in « Stand Alone » mode

- Briefly pushing on the PB when the output is lit, will turn it off. Briefly pushing on the PB when the output is off, will turn it on to the last intensity applied to this output. Pushing and holding the PB will allow you to dim the associated output.
- The input ALL OFF, allows you to turn off all the outputs. The input ALL ON, allows you to turn on all the outputs to the last applied intensity.
- Note: The push buttons “NO: Normally Open” must be connected between the common connector 16 and the (input connectors 10-11-12-13-14-15)
- **Reminder: In “Stand alone” mode, you do not need to use the identification modules (DMI-006-01).**

## 7. ERROR CODES

Normal Function :

The LED indicator light (situated under the relays) associated to the output is « lit » (not blinking) when active, and « off » when the output is inactive.

In case of abnormal functioning, the below table gives you an insight into possible solutions.

STATUS	Problem	Possible causes
LEDS 1 thru 4 light up one after the other.	Impossible to control the lights.	- Verify the connections of the bus RS485 (connection between the DMA-004-003 and the master module). - There is no power supply to the master module
LED 1 is blinking every second.	Overheating of output 1 : The thermal protection was activated.	- The connected element is too powerful. - The surrounding temperature is too high.
LED 2 is blinking every second.	Overheating of output 2 : The thermal protection was activated.	- The connected element is too powerful. - The surrounding temperature is too high.
LED 3 is blinking every second.	Overheating of output 3 : The thermal protection was activated.	- The connected element is too powerful. - The surrounding temperature is too high.
LED 4 is blinking every second.	Overheating of output 4 : The thermal protection was activated.	- The connected element is too powerful. - The surrounding temperature is too high.

## **8. TECHNICAL CHARACTERISTICS**

### **Functional Characteristics**

The module DMA-004-003 allows you to interface on all dispositives permitting a pilotable varying of luminosity in 0/1 – 10V.

### **Electrical Characteristics**

- Power supply : 100-240VAC / 50-60Hz

### **Temperature Extremes**

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

## **9. WARRANTIES**

### **CONDITIONS OF THE WARRANTY :**

The basic duration of the warranty of the product is 2 years from the date of reception of your order. Whatever the problem may be concerning the article, keep your saes receipt, with the serial number, as this is the sole document validating your purchase.

### **The warranty will not apply under the following conditions :**

- Damages caused by unadapted or abusive use, poor maintenance or non respect of directives given by the manufacturer in the users manual. Any attempts for repairs by the customer or any other unauthorized third party. Damages caused by accidents, natural catastrophies or any other causes for which Domestia cannot be held responsible.
- Defects that do not affect the correct functioning or use of the material.

## **10. STANDARDS (seeUL)**

### **9.1 EMISSION**

- 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

### **9.2 IMMUNITY**

#### **9.2.1 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

#### **9.2.2 Lines AC 230V**

- EN 61000-4-4 burst 2kV en critère B
- EN 61000-4-5 onde de choc 2kV entre phase et terre, 1kV entre phases, tout en critère B
- EN 61000-4-6 signaux induits dus aux champs RF 150kHz-80MHz 3V en critère A ou 10V en critère B
- EN 61000-4-11 creux et coupures de tension 70%U pendant 3 x 0,3s, puis 0%U pendant 3 x 0,1s en critère B.

#### **9.2.3 Tests sector**

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

