

Here is an example of an installation with 48 outputs, i.e. 4 cards (see **Figure C**):

In this example, one card must be configured as the master and the other three as slaves. The master card manages outputs 1 to 12 and runs the slave cards.

N.B.: There can only be one master card per installation!

3.1. Steps to be followed to configure the master card

I. Switch off the electricity supply to the master card.

II. Hold the RIGHT button down while switching on the power supply to the card. LEDs **A, B** and **E** should light up: If that does not happen, use the UP and DOWN button until LEDs **A, B** and **E** are lit up.

III. Using the RIGHT and LEFT buttons and LEDs 1 to 4, select the number of outputs you have on the installation (in this example 4 cards).

Lit LEDs - DMC-012-002	Number of outputs
1	from 1 to 12
1, 2	from 1 to 24
1, 2, 3	from 1 to 36
1, 2, 3, 4	from 1 to 48

IV. Validate using the CENTRE button.

3.2. Steps to be followed to configure the slave card

I. Switch off the electricity supply to the slave card to be programmed.

II. Hold the DOWN button down while switching on the power supply to the card. LEDs **C, D** and **E** should light up: If that does not happen, use the UP and DOWN button until LEDs **C, D** and **E** are lit up.

III. Using the RIGHT and LEFT buttons and LEDs 1 to 4, select the range of outputs you want to have for this card (see **Figure C**).

Lit LEDs - DMC-012-002	Range of outputs
1	from 1 to 12
2	from 13 to 24
3	from 25 to 36
4	from 37 to 48

IV. Validate using the CENTRE button.

Repeat the operation for each slave card.

N.B.: If LEDs **A, B, C, D** and **E** are lit up and LED 1 is blinking, there is a communication error: the master card is not accessible! Please check that you have a configured master card in the installation and the Bus RS 485 is correctly connected (see **Figure C**).

Details on how to reconfigure a master card are set out in Stage 3.1.

4. PROGRAMMING

The programming mode(s) are initiated using the buttons on the master card. Once the mode is established, the slave card buttons are then activated.

Press once on the DOWN button in order to start programming the outputs and identification modules. Led 1 (1st relay) is blinking. (See *2 on **Figure A**).

You can select the programming mode by pressing on the UP and DOWN buttons on any card. (See *1 on **Figure A**).

- LEDs AE lit = Functional Mode
- LEDs BE lit = Remote Control Switch Mode
- LEDs CE lit = Relay Mode
- LEDs DE lit = Timer Mode
- LEDs BCDE lit = Switch On All or Select Mode
- LEDs BDE lit = Switch off All or Select Mode
- LEDs CDE lit = Presence Simulation
- LEDs BCE lit = Group

PLEASE NOTE:
LED E is always lit.
It shows whether the power supply is working.

Select the output by pressing the LEFT and RIGHT buttons on any card. Switch on or off the power supply to the relevant output by pressing on the CENTRE button of any card.

N.B.: Each time you change the programming mode, you have to select again the output that you want to program! By default, the card returns to output 1 whose LED is blinking.

4.1. Relay Mode or Remote Control Switch Mode Programming

Once you have chosen the Relay or Remote Control Switch mode, use the RIGHT and LEFT buttons to choose the output and validate it by pressing the CENTRE button once

the choice has been made. The LED of the chosen output should no longer be blinking.

You then have to go to the room in question and press on the PB that runs this output. By pressing on the selected push button, the power supply is interrupted momentarily at that point, which means that the addressing is recorded. Repeat the operation for each push button that you want to combine at that same point.

When you have selected all the PBs running this output, the addressing is recorded. You can then move on to the next output and repeat the operation.

To leave the Relay or Remote Control Switch mode, press the CENTRE button and then the UP button as many times as necessary to return to the OPERATING mode (LEDs **A** and **E** lit).

4.2. Timer mode programming

The Timer mode programming is identical to the Remote Control Switch programming mode. To access it, press the DOWN button in Operating mode until LEDs **D** and **E** are lit.

If you want to change the time of the timer at the validated output, press once on the DOWN buttons to programme it. LEDs **1, 2, 3, 4, 5, 6, 7** and **8** are lit by default, which means that the timer is programmed for 127 minutes and 30 seconds.

Use the RIGHT and LEFT buttons to change the time. The following table sets out the time value of the LEDs. The times are cumulative.

Lit LEDs - DMC-012-002	Times
1	30 seconds
2	1 minute
3	2 minutes
4	4 minutes
5	8 minutes
6	16 minutes
7	32 minutes
8	64 minutes

Press on the UP button to validate the programmed time.

For example: If you want to programme a light point to be on for 6 minutes and 30 seconds, light up LEDs **1, 3** and **4**.

To leave the Timer mode, press the CENTRE button and then the UP button as many times as necessary to return to the OPERATING mode (LEDs **A** and **E** lit).

4.3. Switch On All or Select Mode programming

4.3.1. Switch On All mode

Starting from the Operational mode (LEDs **A** and **E** lit), press on the DOWN button until LEDs **B, C** and **D** are lit. Then validate using the CENTRE button to activate the outputs.

You then have to go to the room in question and press on the PB that should switch on everything. By pressing on the selected push button, the power supply is interrupted momentarily at that point, which means that the addressing is recorded. Repeat the operation for each push button that you want to combine at that same point.

To leave the Switch On All mode, press the CENTRE button and then the UP arrow as many times as necessary to return to the OPERATING mode (LEDs **A** and **E** lit).

4.3.2. Select Mode

Starting from the Switch On All mode (see above), press once on the DOWN button when all the outputs are activated. At that time, LEDs **A, B, C, D** and **E** are lit, together with all the LEDs from the previous configuration (by default: all).

Use the LEFT and RIGHT buttons to choose the outputs. Press on the CENTRE button to select or deselect an output.

To leave the Select Mode, press once on the UP button to return to the Switch On All mode.

4.4. Switch Off All or Select Mode programming

Programming the Switch Off All mode is identical to programming the Switch On All function. To access it, press the DOWN button in Operating mode until LEDs **B, D** and **E** are lit.

4.5. Presence Simulation Programming

Starting from the Operational mode (LEDs **A** and **E** lit), press on the DOWN button until LEDs **C, D** and **E** are lit. Then validate using the CENTRE button to activate the outputs.

You then have to go to the room in question and press on the PB that should switch on everything. By pressing on the selected push button, the power supply is interrupted momentarily at that point: which means that the addressing is recorded. Repeat the operation for each push button that you want to combine at that same point.

If you want to add or remove certain simulation points, press once on the DOWN button when all the outputs are activated. At that time, LEDs **A, C, D** and **E** are lit, together with all the LEDs from the previous configuration (by default: all). Use the LEFT and RIGHT buttons to choose the outputs. Press on the CENTRE button to select or deselect an output.

To leave the points selection, press the UP button once.

To leave the Presence Simulation mode, press the CENTRE button and then the UP arrow as many times as necessary to return to the OPERATING mode (LEDs **A** and **E** lit).

4.6. Group Programming

Starting from the Operational mode (LEDs **A** and **E** lit), press on the DOWN button until LEDs **B, C** and **E** are lit and that LED 1 or 2 or 3 or 4 are blinking which corresponds to the number of the group. Then validate using the CENTRE button to activate the outputs.

You then have to go to the room in question and press on the PB that runs this group. By pressing on the selected push button, the power supply is interrupted momentarily at that point: which means that the addressing is recorded. Repeat the operation for each push button that you want to combine at that same point.

Press once on the DOWN button to add certain points to or remove them from the selected group. At that time, LEDs **A, B, C** and **E** are lit, together with all the LEDs from the previous configuration (by default: all). Use the LEFT and RIGHT buttons to choose the outputs. Press on the CENTRE button to select or deselect an output. To leave the points selection, press the UP button once.

To leave the Group mode, press the CENTRE button and then the UP arrow as many times as necessary to return to the OPERATING mode (LEDs **A** and **E** lit).

5. TECHNICAL DETAILS

DMC-012-002

- Power supply: 230VAC / 50 Hz +/- 10%.
- Number of outputs per card: 12 8A removable, voltage-free bipolar contacts.
- Identification module bus: 10 VDC on 2 non-polarised wires.
- Communication bus: RS485.
- 5 buttons for programming.

DMI-004-001 (Identification module)

- 2 black wires: Non-polarised bus.
- 4 blue wires: Potential free inputs.
- 1 yellow wire: Common.
- Module identification: Automated identification when activated.

WIRING

- Identification module wiring: 2 non-polarised wires VVT, XVb, VOb, ... (Check the quality of the connection: the section of the identification module wires is 0.6mm²).
- RS485 link between cards in a single box: use VVT, VOb, UTP, ... wires.
- RS485 link between different cards in different boxes: use UTP wires (one pair for A and B and one pair for GND).
- Do not exceed a 1.5mm² section for communication terminals. Do not exceed a 4mm² section for power terminals.
- "Module bus" cable: With respect to the maximum length of this bus and the section of the cable to be used, the modules use current and the maximum resistance must be 55 Ohm.

6. WARNINGS

This product has undergone a series of laboratory tests to ensure it meets the standards included in point 8.

The following rules must be respected so ensure compliance with those standards:

- Do not roll the bus cables (identification bus modules and communication bus) into a loop.
- Do not exceed the maximum power of 8A per output contactor.
- In case of a high inductance load, place a VDR element parallel to the element in question.
- The DMC-012-002 kit is designed to be placed in an electrical box with a DIN rail.
- Make sure you place the electrical box containing the kit so that it is not in direct sunlight. Do not place the box above a heat source (e.g.: radiator). Make sure that there is natural ventilation for the DMC-012-002 card.

Failure to respect the above points results in electrical risks and a loss of guarantee.

7. WARRANTIES

WARRANTY CONDITION:

The basic warranty for your product is 2 years from the date your order is received. Please make sure you keep your invoice, with the serial number safely, as it is the only document that acts as a guarantee in case of any problem.

The warranty does not apply in the following cases:

- Damage caused by inappropriate use, incorrect use, poor maintenance or not respecting the instructions given by the manufacturer. Attempted repairs by the customer or by a non-authorised third party. Damage caused by accidents, force majeure or other causes for which Domestia may not be held responsible.
- Any fault not resulting from the correct operating or good use of the material.

8. STANDARDS

8.1. EMISSION

- EN 55022 class B emission.
- 30-1000MHz radiated emission.
- 230V 150k-30MHz AC conducted emission.
- Disturbing current emission on the 150k-30MHz bus (current tester).
- EN 61000-3-2 Harmonic emission to 2kHz.
- EN 61000-3-3 flicker emission.

8.2. IMMUNITY TESTS

8.2.1. Housing

- EN 61000-4-2 8kV/air electrostatic discharges (insulator part = casing) in criteria B.
- EN 61000-4-3 immunity test on RF 80MHz-2GHz 10V/m fields in criteria B.

8.2.2. 230V AC Lines

- EN 61000-4-4 2kV burst in criteria B.
- EN 61000-4-5 2kV shock wave between phase and earth, 1kV between phases, all in criteria B.
- EN 61000-4-6 induced signals due to RF 150kHz-80MHz 3V fields in criteria A or 10V in criteria B.
- EN 61000-4-11 70%U voltage variations during 3 x 0.3s, then 0%U during 3 x 0.1s in criteria B.

8.2.3. Bus

- EN 61000-4-4 0.5kV burst in criteria A via capacitive clamp.
- EN 61000-4-6 induced signals due to RF 150kHz-80MHz 3V fields in criteria A or 10V in criteria B.

8.2.4. Sector Tests

- 1996 EN50090-2-2 + A1 2002.
- EN 60664 - 1 circuit insulation.