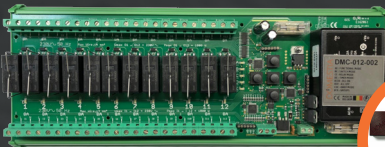


START KIT
DMC/DKS-012-016

GEBRUIKSAANWIJZING

DMC/DKS-012-016 |
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FIGURE A - Motherboard DMC-012-016

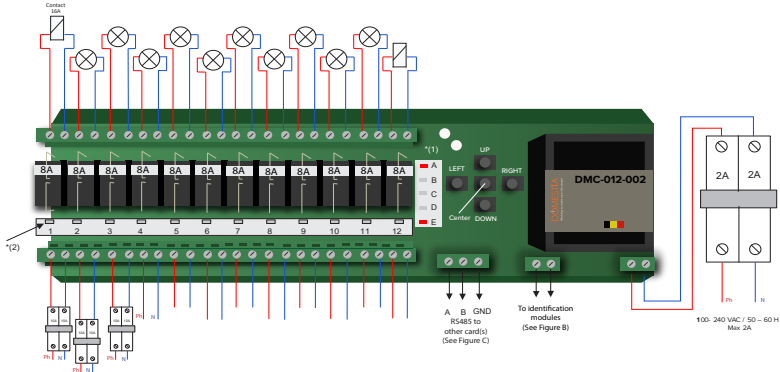


FIGURE B - DMI-006-001 Module

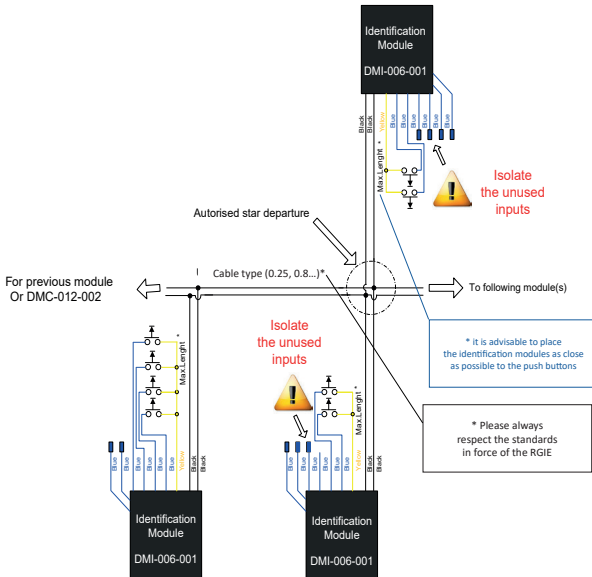
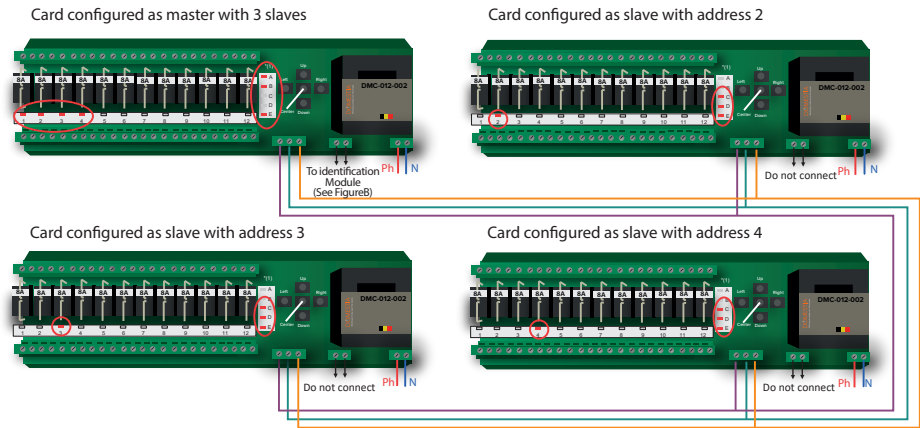


FIGURE C - Linking DMC-012-016 cards - Example of 4 card connection



1. INSTALLATION

At the start of the motherboard, the DMI-006-001 modules are interwired using a twowire cable without polarity. They can be wired in a variety of ways, either as bus-wired, start-wired or both ways simultaneously.

If your installation has more than one card, please refer to **point 3** of this manual.

Attention: The bus for lighting push buttons (DKS-012-016) must be different from the bus for shutter push buttons (DKV-006-002).

When installing with: a DME-LAN-002 (Master control module) the lighting and shutter push buttons can be on the same bus.

2. OPERATING

The system will enable you to manually (using 5 buttons) program (see **Point 4**) the 12 motherboard outputs and to program the functions explained below.

2.1. REMOTE CONTROL SWITCH MODE

This function simulates a traditional command. When you press the pushbutton (PB) once, the contactor is activated and the power is sent to that output. A second press on the (PB) shuts off the power to that output.

2.2. RELAY MODE

This function simulates the contact of a traditional PB. As long as you press the PB, the output is active. Can

also manage signals from detectors.

2.3. TIMER MODE

This function simulates a timer. When you press the PB once, this output is active for the programmed length of time. However, the timer can be stopped before the end of the programmed time by pressing the PB again. In the same context, Push and hold 3.

2.4. SWITCH ALL ON OR SELECT MODE

By pressing on a PB anywhere on the installation, this function allows all the points or a selection of certain points to be switched on.

2.5. SWITCH ALL OFF OR SELECT MODE

By pressing on a PB anywhere on the installation, this function allows all the points or a selection of certain points to be switched off.

2.6. PRESENCE SIMULATION MODE

This function allows certain selected lights to be switched on and off during a prolonged absence. The simulation is carried out by pressing the PB programmed for this purpose. The outputs are activated in a random order, both in terms of choice and duration.

This function allows 4 groups to be created. One press on a PB associated to a group where a point is lit switches off the whole group. One press on a PB associated to a group where no point is lit, activates the sending of power to the whole group.

If an installation has more than 12 outputs (i.e. more than one DMC-012-016 card), you will have to inter-connect the cards as described in **Figure C**.

The factory default configuration of the DMC card is for it to operate alone, without slave(s). You must change the functions of the cards in order to use several DMC cards.

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 connected to the bus per installation!
3.1. Steps to be followed to configure the master card

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-012-016	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 CENTER button.

3.2. STEPS TO BE FOLLOWED TO CONFIGURE THE SLAVE CARD

Warning ! Please note that the configuration of the slave cards will be different when installing with DME-LAN-002. See the user manual of the Master control module for the configuration of slave cards with DME-LAN-002.

- 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-012-016	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 CENTER 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).

- LEDES AE lit = Functional Mode
- LEDES BE lit = Remote Control Switch Mode
- LEDES CE lit = Relay Mode
- LEDES DE lit = Timer Mode
- LEDES BCDE lit = Switch All On or Select Mode
- LEDES BDE lit = Switch All Off or Select Mode
- LEDES CDE lit = Presence Simulation
- LEDES 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 CENTER 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 CENTER 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 associate to 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 CENTER 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 button 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-012-016	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 CENTER 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 ALL ON OR SELECT MODE PROGRAMMING

4.3.1. SWITCH ALL ON MODE

Starting from the Operational mode (LEDs **A and E** lit), press on the DOWN button until LEDs **B, C, D and E** are lit. Then validate using the CENTER 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 All On mode, press the CENTER 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 All On 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 CENTER 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 ALL OFF OR SELECT MODE PROGRAMMING

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

4.5. PRESENCE SIMULATION PROGRAMMING

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 CENTER 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 CENTER 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 left to right, then the CENTER 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 associate to that same group.

Press once on the DOWN button to add certain points to or remove them from the selected group. At this 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 CENTER button to select or deselect an output. To leave the points selection, press the UP button once.

To leave the Group mode, press the CENTER 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

5.1. DMC-012-016

- Power supply: 100-240VAC/50-60Hz.
- Number of outputs per card: 12 unipolar contacts of 16A free of potential and removable.
- Identification module bus: 10 VDC on 2 non-polarised wires.
- Communication bus: RS485.
- 5 buttons for programming.

5.2. DMI-006-001 (IDENTIFICATION MODULE)

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

5.3. 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 maximum length of this bus and the section of the cable to be used, the modules use current and the maximum resistance.

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 contactor parallel to the element in question.

- The DMC-012-016 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-012-016 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-authorized third party. Damage caused by accidents, force majeure or other causes for which Domestia may not be held responsible.
- Any fault other than 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. LIGNES AC 230V

- 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.

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