DOMESTIA

Working to make your life simple

USERS MANUAL

DME-LAN-002
Master control module

www.domestia.be

CONTENTS

1. DESCRIPTION

The DME-LAN-002 is a comprehensive system that integrates the following elements (see Figure A on page 4) :

- Ethernet port (RJ45)
- RS485 communication port (A, B and GND)
- Bus line for identification modules DMI-006-001, DMI-004-001 or DMI-LED-004 (Line
- 1, Line 2, Line 3 and Line 4)
- Bus line for temperature sensors
- 230VAC power input

The DME-LAN-002 allows the following elements on its home-automation system, which will be configured as «slaves» :

- Lighting-management cards (DMC-012-002, DMC-012-016)
- Shutter-control cards (DMCV-006-002)
- 4-output extension modules (DML-004-002, DMA-004-003, DMT-004-003, DMD-004-001
- DMC-004-003 or DMCV-002-003). Please refer to the relevant instruction manuals for more information.
- Collection of information from the temperature sensor(s) (DMCT-001-001)

The Home Manager application is available for free from the Android, Apple and Windows stores.

It loads web pages that the user can open with any Internet browser (Safari, Chrome, Firefox, Internet Explorer, Opera, etc.).

If it is connected to the Internet via its Ethernet port (RJ45), the remote server («Home on Web») allows:

- remote management.
- firmware updates (version of the card's software).
- saving of installation data.
- enrichment of the graphic interface.
- synchronisation of the system's internal clock (automatic switching to summer/ winter time), based on international atomic time.

The DME-LAN-002 has 4 input buses and can manage up to 240 commands[1] via identification modules (DMI-006-001, DMI-LED-006) that are distributed over the 4 buses. We recommend one bus per level, in order to make the installation process easier.

1 Sixty commands are available per bus. This includes unique lighting or shutter/blinds commands (point by point + groups, scenarios).

There are LED indicators (one blue LED and one red LED) next to the line connectors. The blue LED lights up when the pushbutton (PB) for the line is pressed; the red LED lights up when there is a short circuit on the latter.

2. ELECTRICAL CONNECTION

The DME-LAN-002 card is powered directly by the 230 VAC mains. The input voltage range is 100–240 VAC and 50–60 Hz.

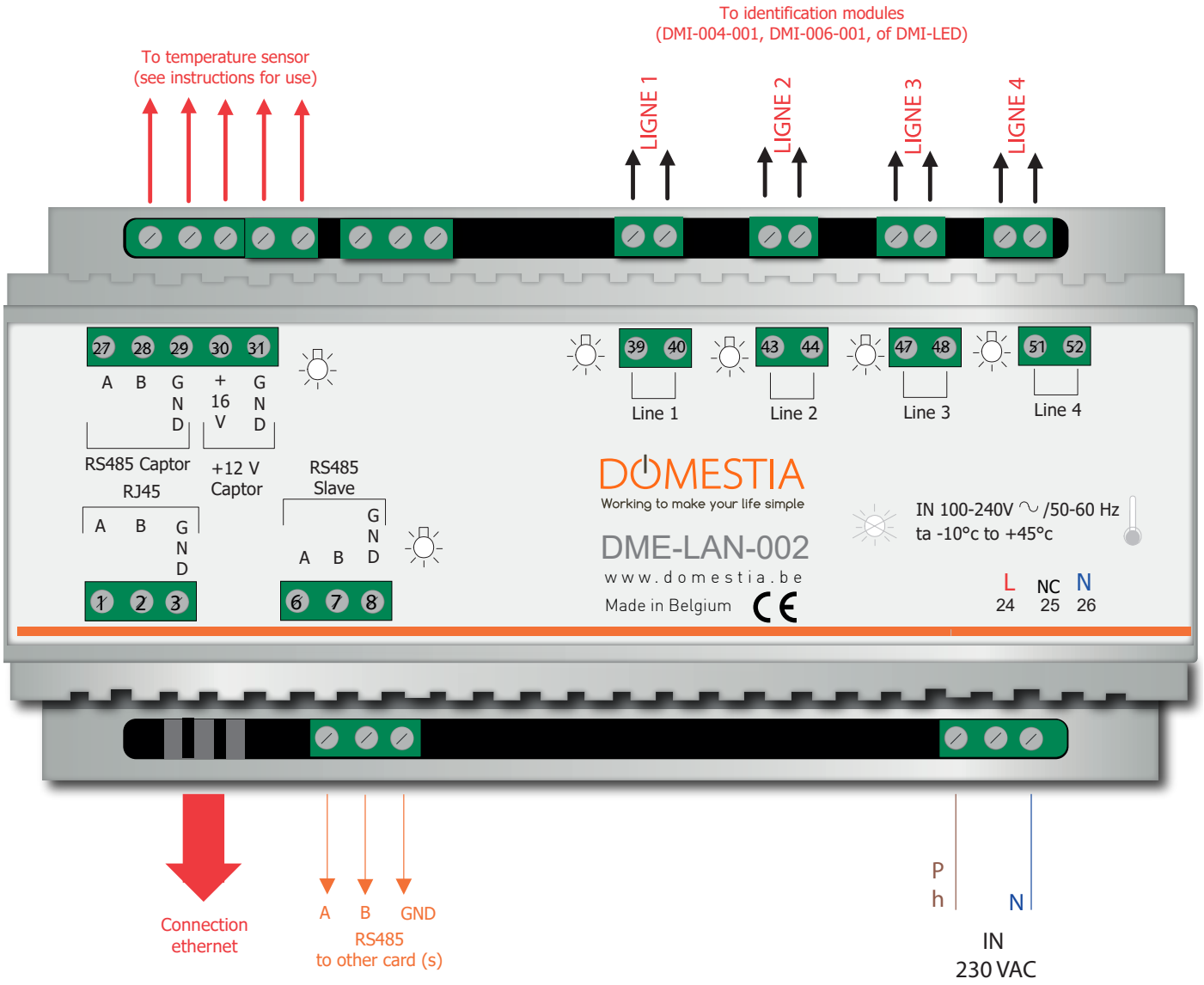
From the DME-LAN-002 card, the identification modules are connected via two wires.

There is no polarity to consider. They can be wired either:

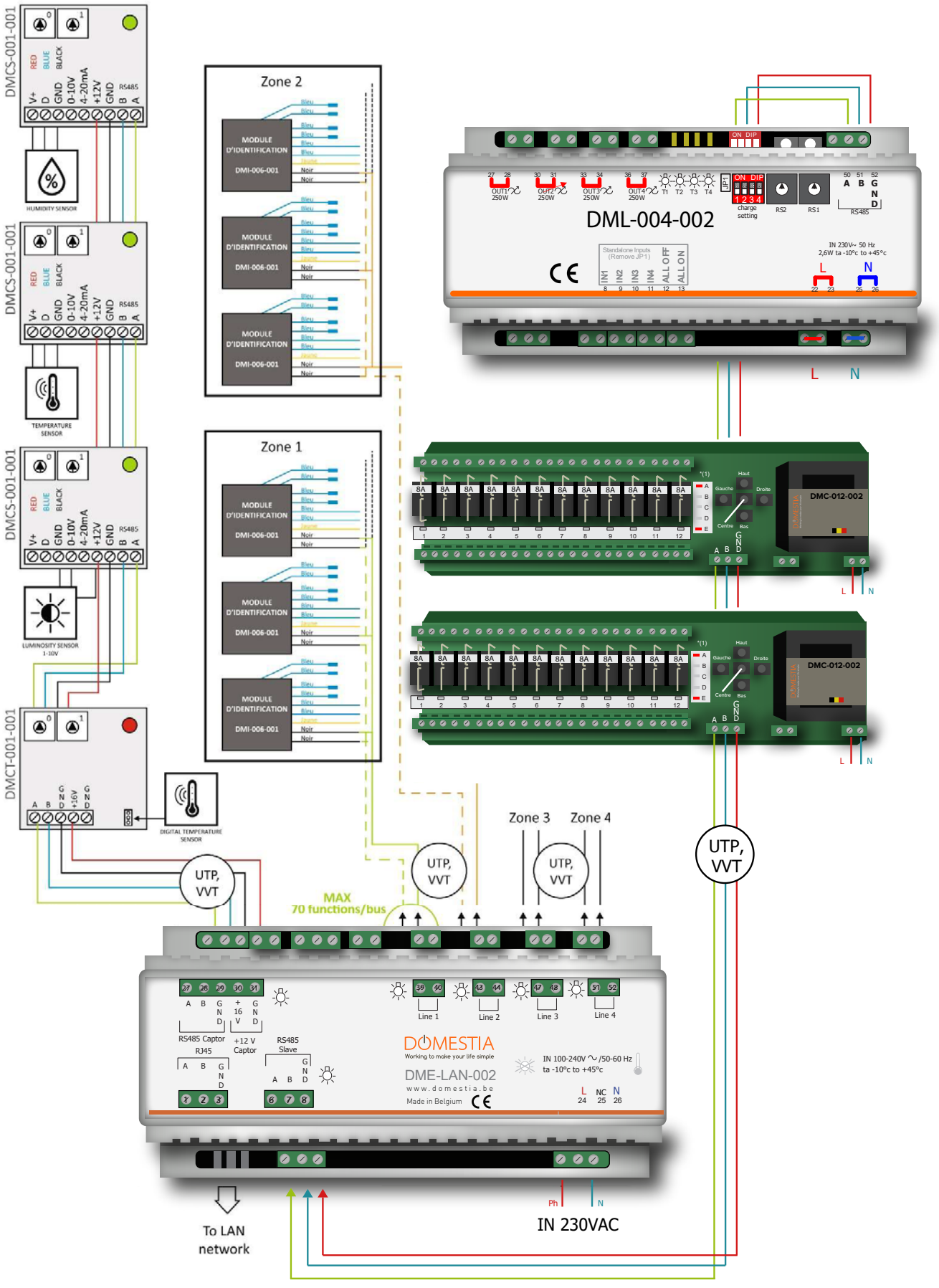
- by bus.
- in a star or triangle configuration.
- both, simultaneously.

Figure A below shows the DME-LAN-002 with the connection principle for the different outputs:

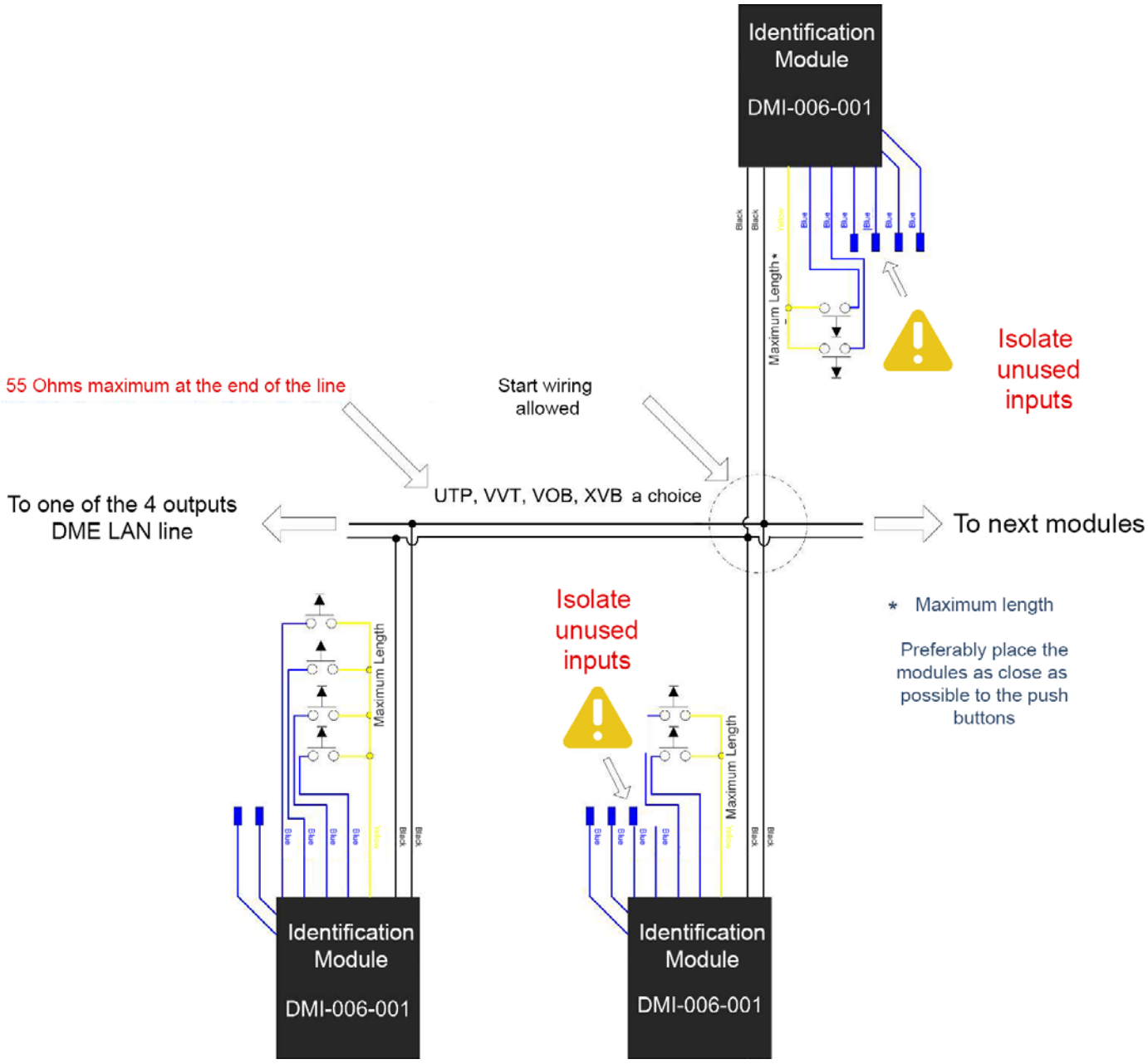
- Slave cards can be connected to the DME-LAN-002, via the RS485 bus to terminals 6(A), 7(B), 8(GND) (**RS485 Slave**). In order to do this, use the UTP cable (recommended), the VVT cable or the VOB cable, etc. To create a link between remote cards in different boxes, it is best to use a UTP cable, with a pair for terminal 6(A) and 7(B) and a pair for terminal 8 (GND).
- Terminals 1, 2 and 3 (**RJ45**) make it possible to connect the DME-LAN-002 card to the Ethernet network directly to a DET-005-002 touch screen, or via a network switch to allow the DET-005-002 touch screen, smartphone or tablet to access the home-automation system. Use a UTP Cat5e cable (minimum).
- The DMCT-001-001 temperature sensors are connected to terminals 27–31 («**RS485 Captor**»and «**16V Captor**». The power supply for the latter is provided by the DME-LAN-002). Use a UTP cable (recommended), a VVT cable or a VOB cable, etc.
- As explained in chapter 2, the identification modules are connected on the «**Line**» inputs. Each «Line» input can be used to program a maximum of 60 different functions. It is preferable to divide the modules into several circuits over 4 lines. Wiring the identification modules: Two non-polarised wires (UTP, VVT, XVB, VOB, etc). (Be careful of the quality of the connection: the cross-section of the identification module wires is 0.6mm^2).
- The 230 VAC power supply is connected to terminals 24(**L**) and 26(**N**)


To identification modules
(DMI-004-001, DMI-006-001, of DMI-LED)
To temperature sensor
(see instructions for use)
LIGNE 1
LIGNE 2
LIGNE 3
LIGNE 4
27 28 29 30 31
A B GND +16V GND
RS485 Captor
RJ45
+12 V Captor
RS485 Slave
A B GND
1 2 3
6 7 8
39 40
43 44
47 48
51 52
Line 1
Line 2
Line 3
Line 4
DOMESTIA
Working to make your life simple
DME-LAN-002
www.domestia.be
Made in Belgium
IN 100-240V ~ /50-60 Hz
ta -10°c to +45°c
L 24
NC 25
N 26
Connection ethernet
A B GND
RS485 to other card (s)
Ph
N
IN 230 VAC

Example of the DME-LAN-002 Connection



Example of the connection for identification modules (see the instruction manual for the DMI-LED-004 identification modules)



3. NETWORK CONNECTION

3.1. CONFIGURATION OF THE IP ADDRESS

When you switch the DME-LAN on, if it is connected to a modem or router, it will automatically adapt its IP address to be compatible with the network used (if it is not connected to a router, it will be configured to IP address 192.168.1.210).

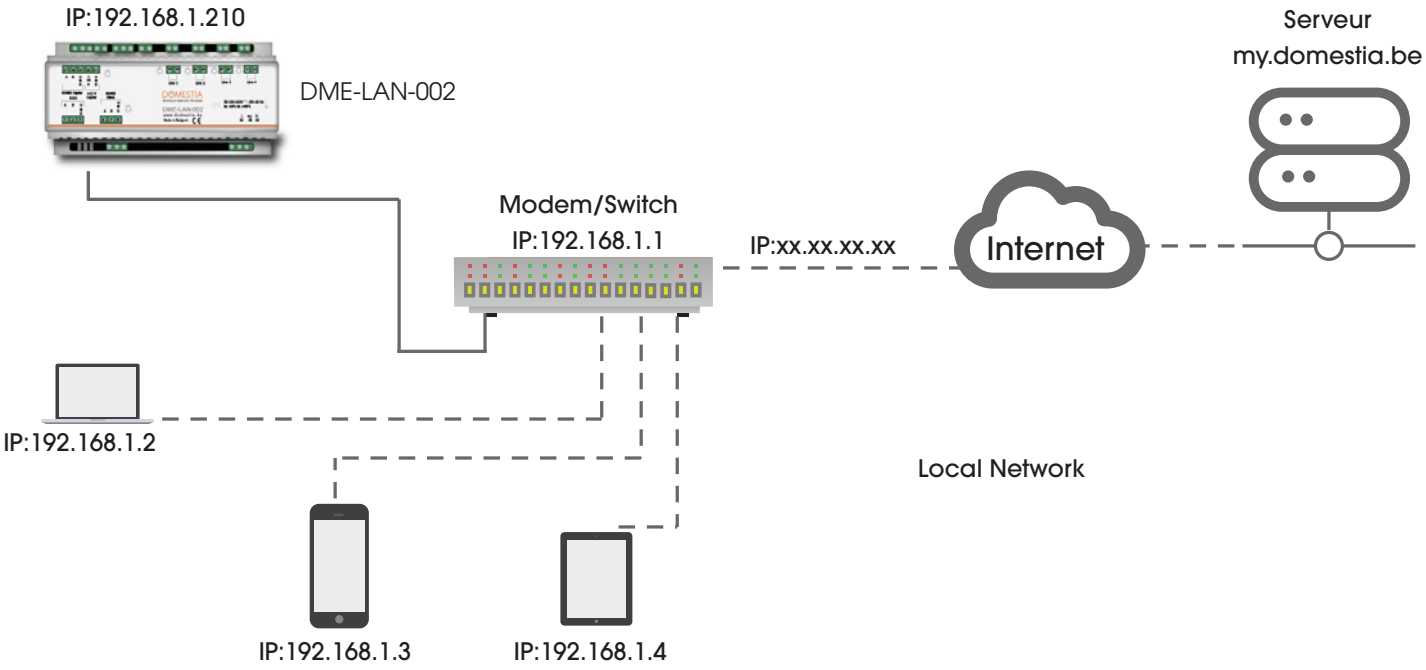
For example:

- For Proximus modems, it will receive the following kind of address: 192.168.1.210).
- For Voo or Telenet modems, it will automatically change to the IP address 192.168.0.210.

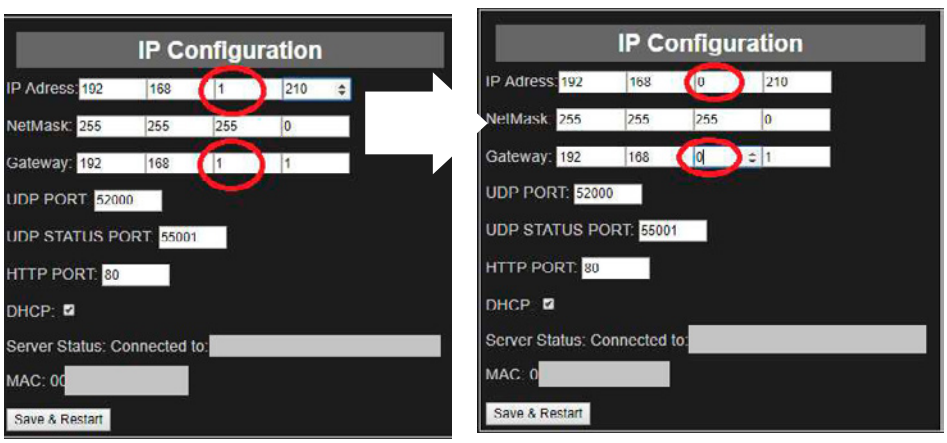
However, it is possible to configure the network parameters of the DME-LAN manually, via the address http://192.168.1.210.

3.2.CREATION OF A NETWORK

No Internet connection is required to configure the DME-LAN. However, you must connect it directly to your PC via a wired network (in this case, the PC's IP address must be configured manually) or via a Wi-Fi router (for example, a DRW-001-001-type router – see point 3.3).



Below: the local page configuration parameters for the DME-LAN-002



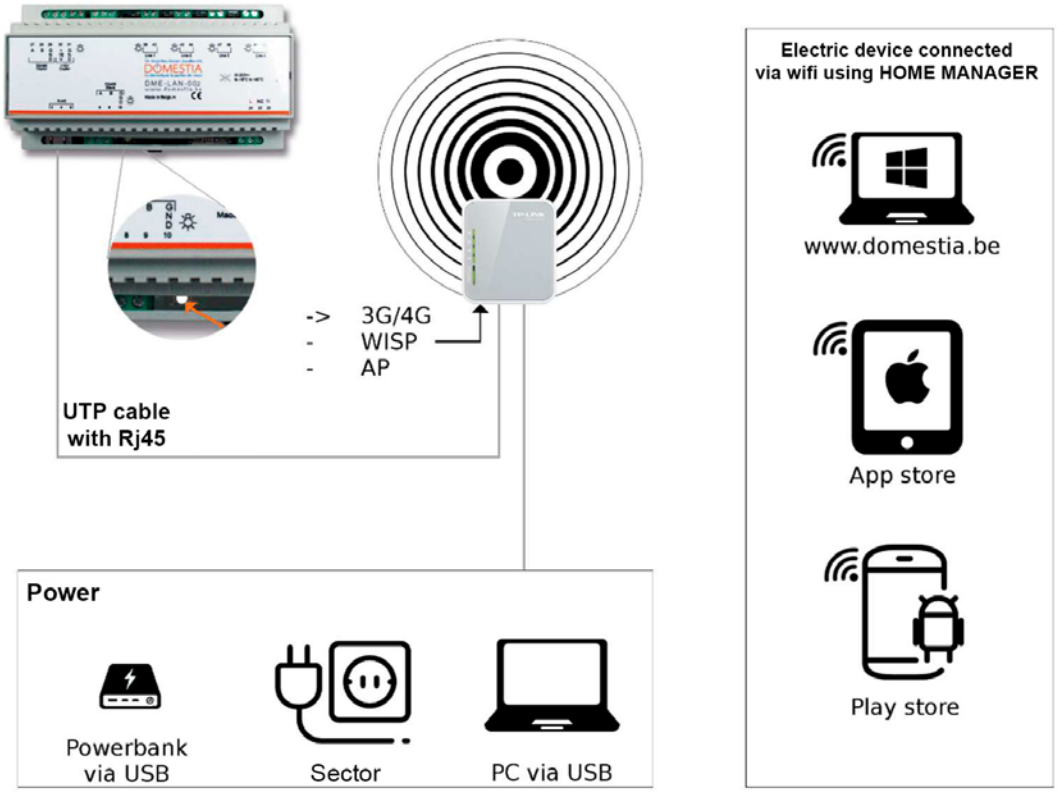
3.3. DRW-001-001 WI-FI ROUTER

The «DRW-001-001» module is a pocket Wi-Fi router. It is specially configured to be connected directly to our supplementary management unit (DME-LAN-002) and can be programmed for Wi-Fi before having Internet access.

Ultra compact and equipped with a mini USB port, this router can also be powered using a laptop, an AC adapter or a Power Bank (1A)

Connecting your DME-LAN-002 to the DRW-001-001 router :

- Connect as indicated in the diagram below.
- Check that the switch is set to «3G/4G» mode.
- Connect your device (tablet/phone/computer) to the network indicated on the router label via Wi-Fi (SSID: «TP-LINK_…»).
- Enter the password indicated on the router label. (Key: «******»).
- Launch Home Manager and click on the magnifying glass in the settings to check for the presence of the management unit (DME-LAN-002) on the network.
- The drop-down list displays the DME-LAN available (connected to the network).
- If you are unable to connect, check your connection by going to your management unit's local page (DME-LAN-002) from your web browser (IP address: 192.168.1.210 or 192.168.0.210).
  - » If the page opens, you can close it, then launch Home Manager again.
  - » Otherwise, check that you are connected to the Wi-Fi «TP-LINK_...» and restart your management unit (DME-LAN-002) using the small white button on the side of the ABGND «RS485 Slave» terminal; one of the two devices is probably not connected properly.

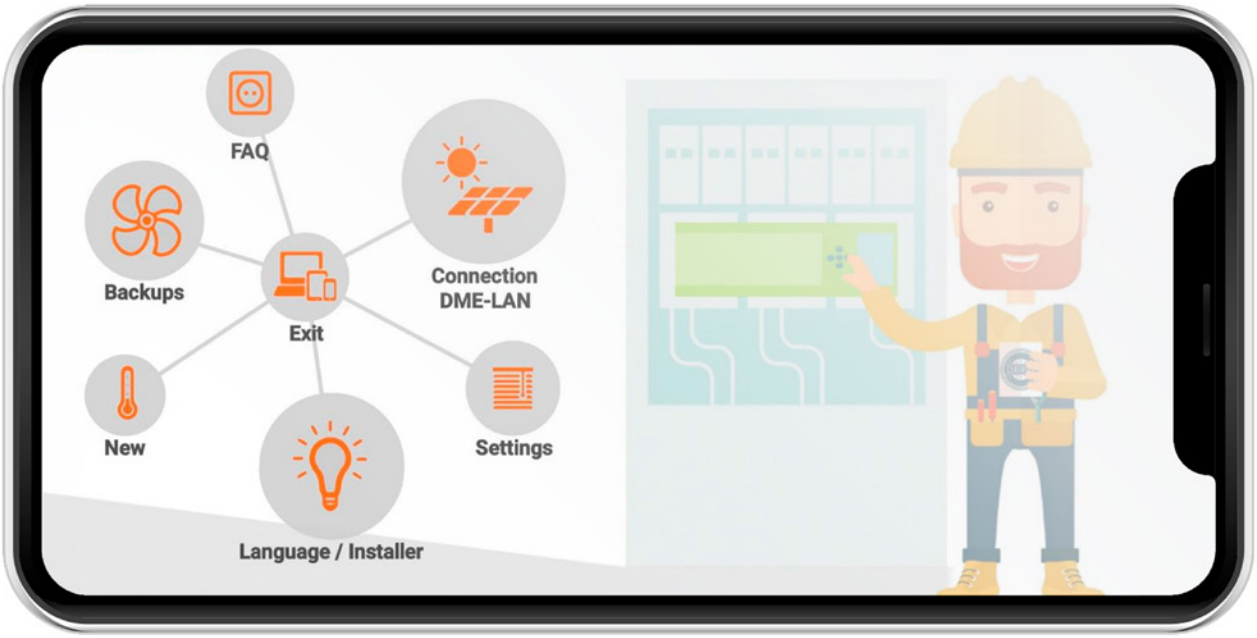


4. LAUNCHING THE INSTALLER APPLICATION

4.1. LAUNCH

Download Home Manager in advance from Apple, iOS, Android or from the downloads page of our website www.domestia.be.

- **Then click on the «Home Manager» icon » > to access these home screens**



4.2. CHOICE OF INSTALLER LANGUAGE

Click on **Language/Installer** (bulb icon).

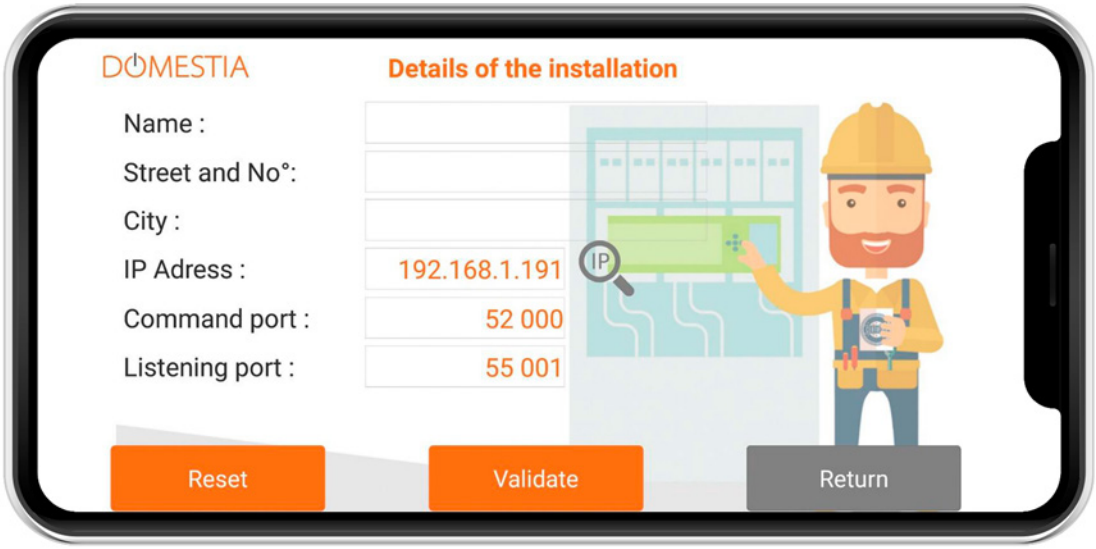
Then click on the corresponding flag to choose your language.

4.3. ENTER YOUR INSTALLER DETAILS

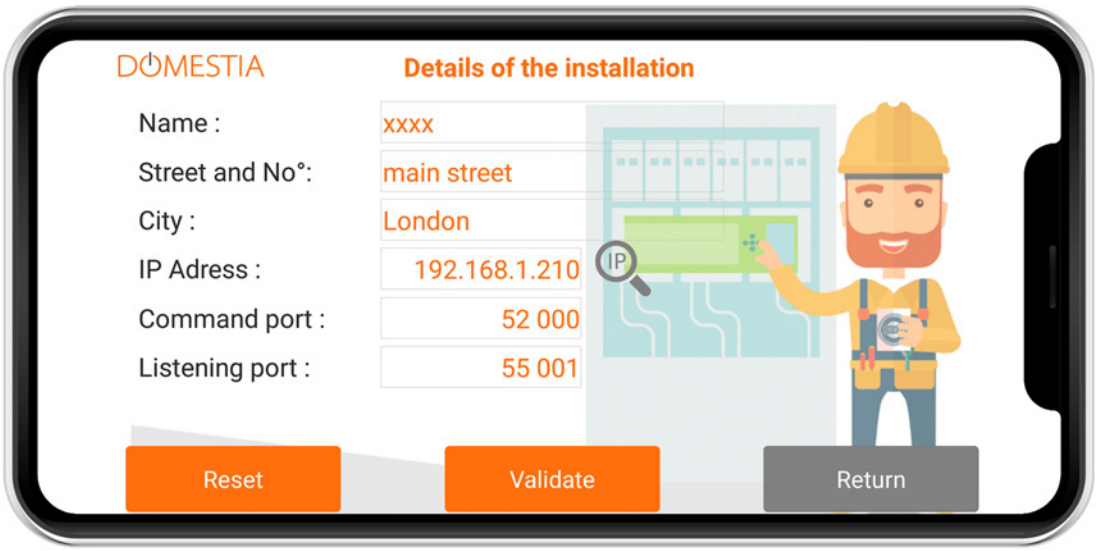
Once your data has been validated, you will return to the home screen by clicking on the (V) icon.

4.4. DETAILS OF THE INSTALLATION

Click on **New** (thermometer icon).
Fill in the details of the installation.

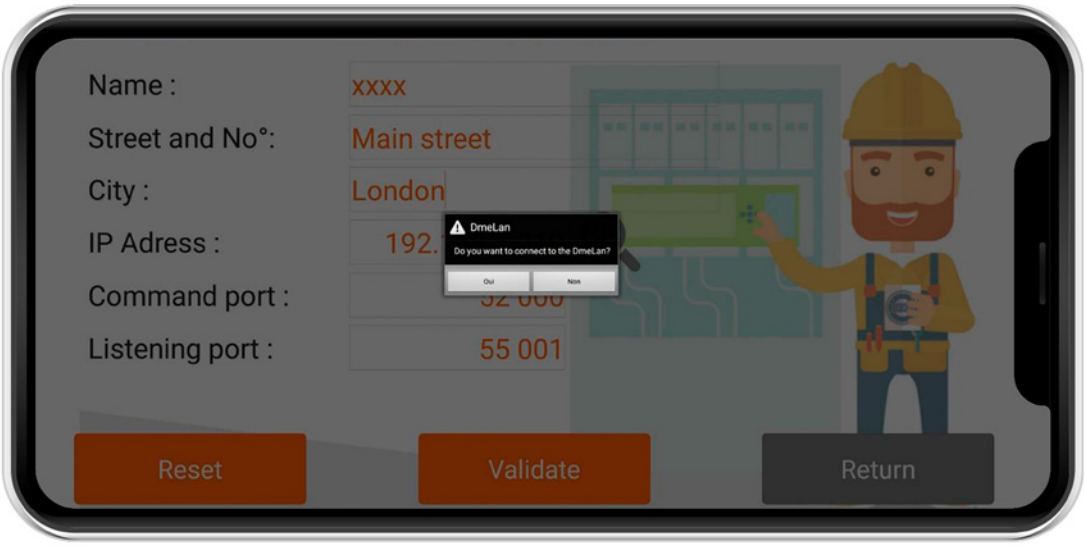


* A magnifying glass icon allows you to configure the IP address automatically. If you see a «No DME-LAN connected» message, refer to **point 3.1**.



Please refer to point 3.1 to change the IP address of the DME-LAN-002.

Save the details by clicking on the floppy disk. Confirm that you want to connect to the DME-LAN.

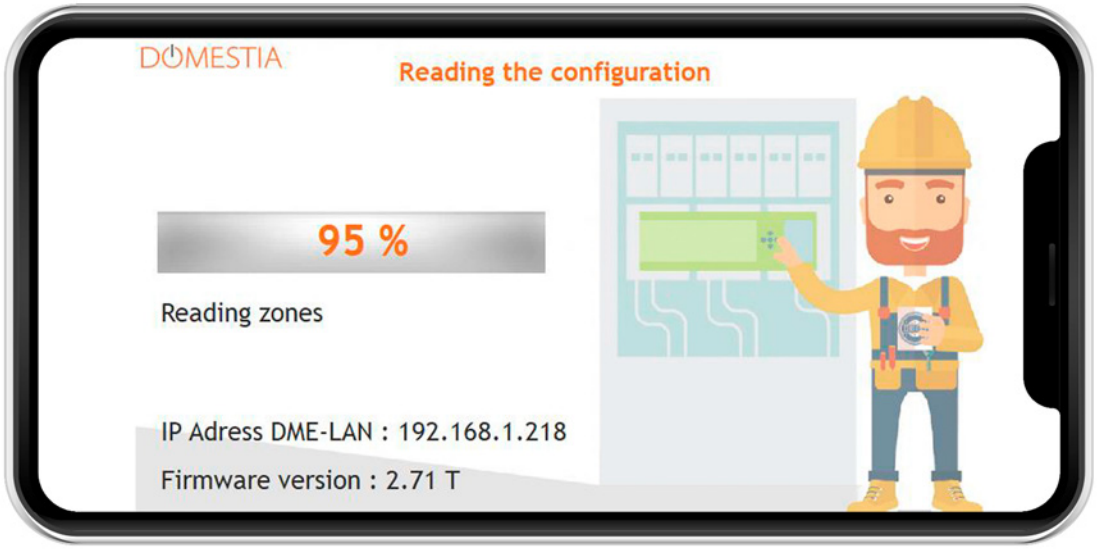


If the connection with the DME-LAN-002 is possible (tablet/computer/smartphone and DME-LAN-002 is connected via a network and the IP parameters are compatible), you will be able to access the installation composition.

4.5. READING THE CONTENT OF THE DME-LAN-002

Click on **DME-LAN connection** (the solar panel icon).

If the connection with the DME-LAN-002 is possible (tablet/computer/smartphone and DME-LAN-002 is connected via a network and the IP parameters are compatible), the application will read the content of the DME-LAN-002.

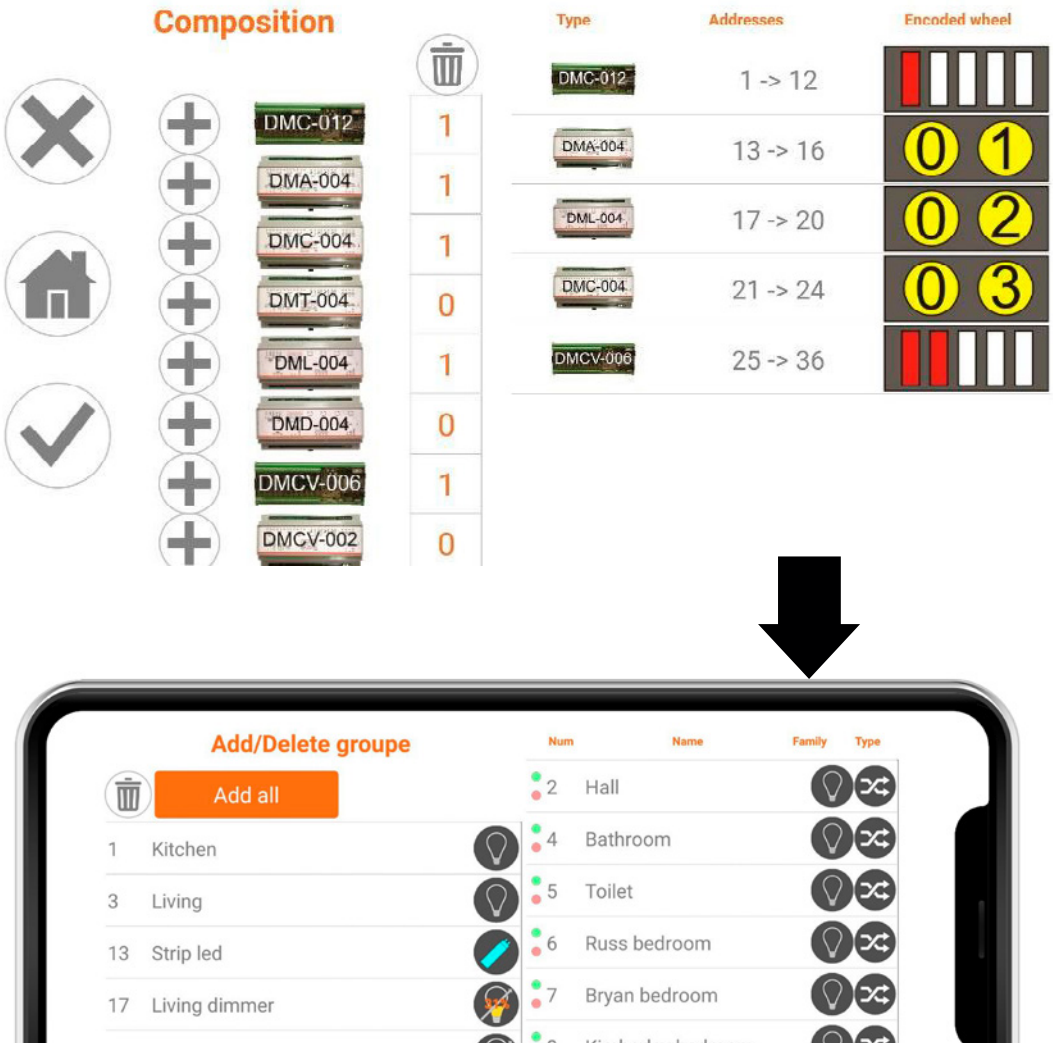


4.6. INSTALLATION COMPOSITION

This screen is used to define the cards installed. The cards appear in the order in which they are added. The table on the right shows the list of cards and the address to be configured on each card. For cards with 12 outputs, the graphic shows the LEDs that must

be lit when configuring the card's address. For cards with 4 outputs, the graphic indicates the numbering to be applied to the encoding wheels.

Add the type and exact number of cards that are included in your installation.



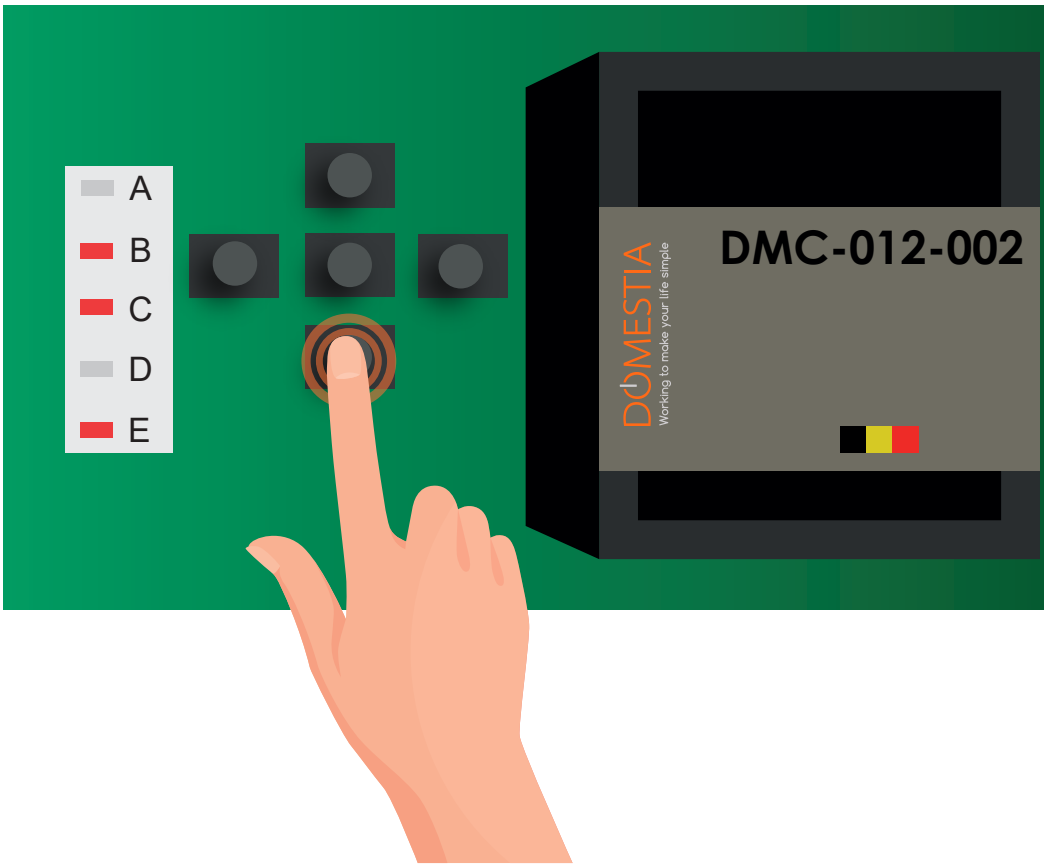
Confirm the composition of your installation by clicking on the (V) icon on the left of the screen.

Careful: do not forget to configure the cards! (See below)

4.7. CONFIGURING THE SLAVE CARDS

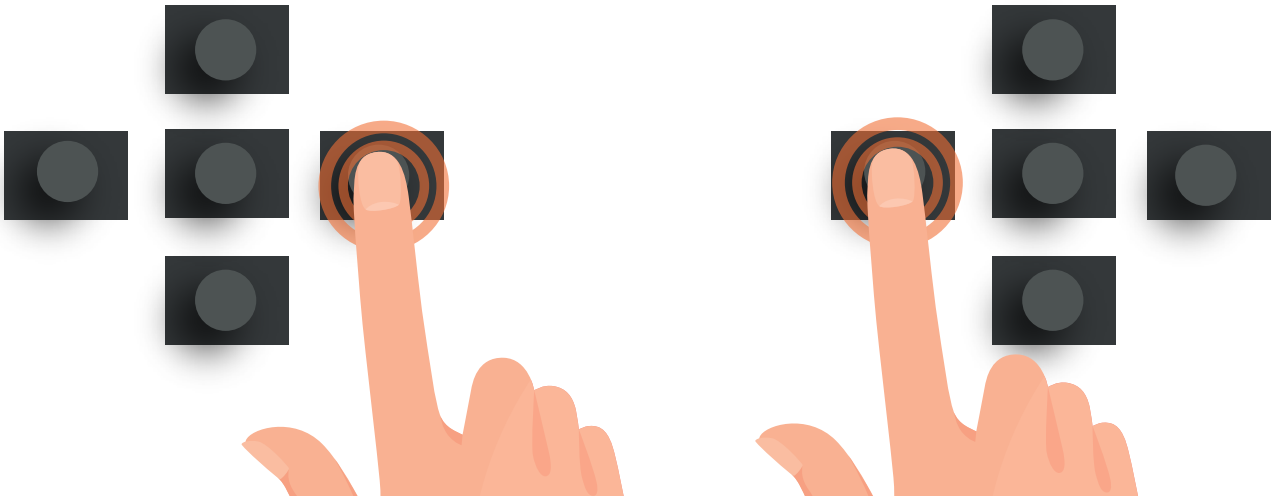
For cards with 12 outputs (DKS-012-002, DKS-012-016, DMC-012-002, DMC-012-016) :

When you turn a card on, you have a few seconds to press the button at the bottom to light the BCE LEDs. If you did not manage to do this in time, cut the power to the card and repeat the action.

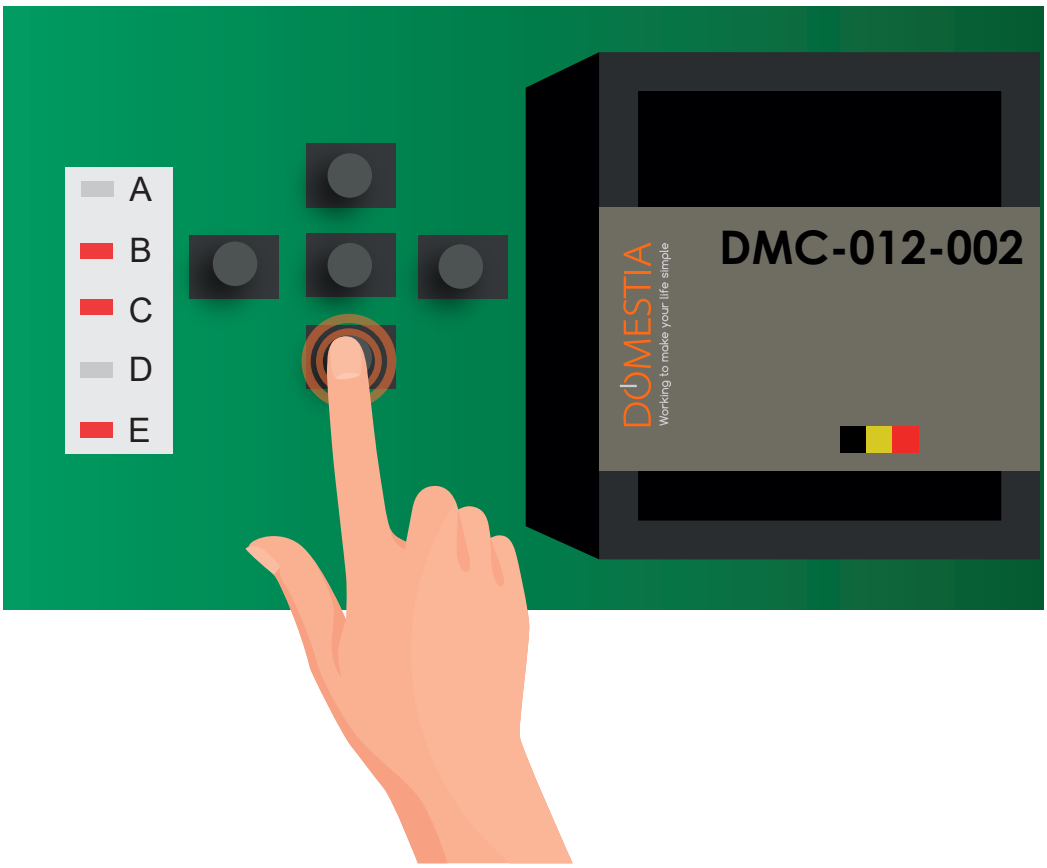


By this stage, you have configured the card as a slave to the DME-LAN-002. All that remains is to establish the address of the card, based on the instructions provided by Home Manager. To do this, you must move to the left or right, depending on the LEDs.

For each card, press the buttons on the left and right until the LEDs light, in accordance with what is shown in the diagram. In the example above, which pertains to the DMCV-006-xx card, press the button on the right until only LED 3 is lit (**see figure 2, page 11**).



When the BCE LEDs and LED 3 for the DMCV-006 card are lit, you have configured your card as a slave to the DME-LAN-002 and the correct address.



You can press the central button to validate and your card will switch into «RUN» mode (LED: AE)

For extensions with 4 outputs (DMC-004-003, DMA-004-003, DML-004-002, DMD-004-00):

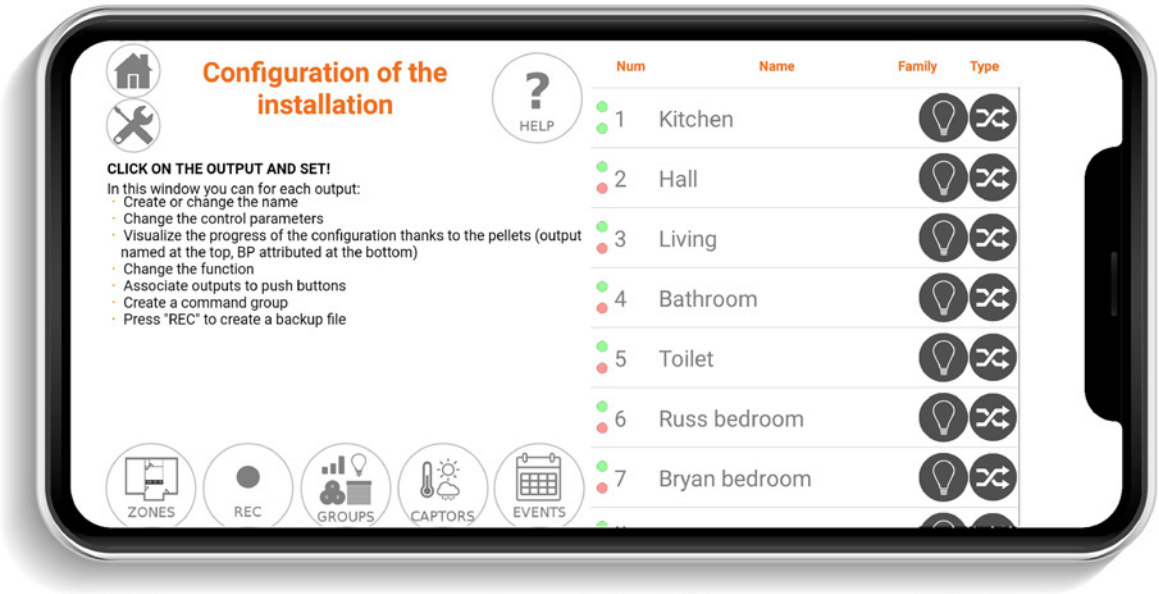
Simply turn the encoding wheels to obtain the code desired (**see figure 2, page 11**).

A help window will appear once you have validated the installation's composition.

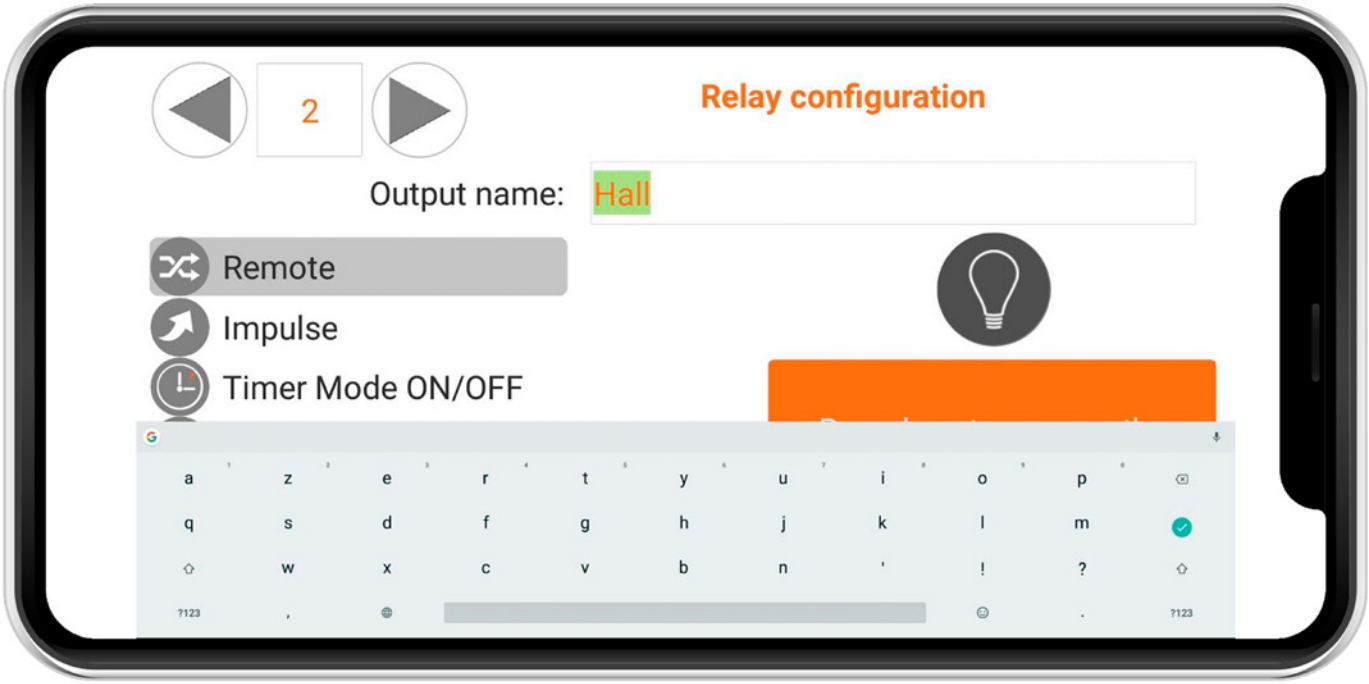
Then press **stop/help.**

You can now start configuring the names of the outputs.

4.8. CONFIGURING THE OUTPUTS



To configure an output, just click on its name. A window will open, allowing the name to be configured. You can enter a maximum of 20 characters (including spaces), its type and a possible timer. You can also test the output by clicking on the bulb icon.



The outputs can be configured in 5 different modes :

Stepping switch: Normal operating mode. Pressing on the button reverses the status of the relays.

Push: The relay is active while the button is pressed and inactive when the button is released.

Shut-off timer: Pressing on the button activates the relay. The relay is automatically deactivated after the configured time. If the button is pressed when the relay is still active, then the relay is deactivated. A long press activates the relay for the maximum possible time (16 hours).

Continuous mode: Each press of the button activates the output for the time configured. A long press activates the relay for the maximum possible time (16 hours).

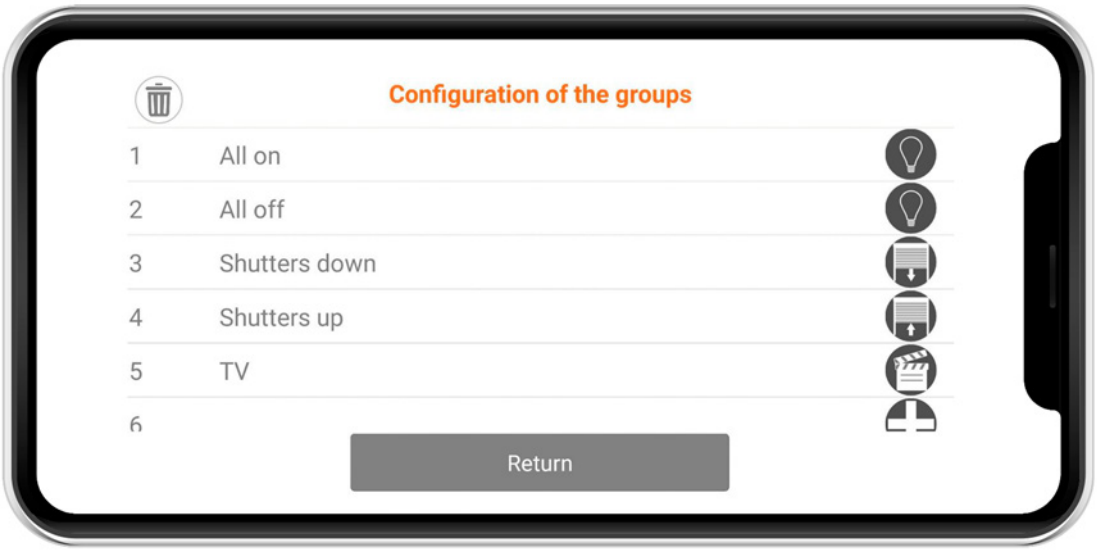
Heating control: The relay is controlled by the associated temperature sensor.

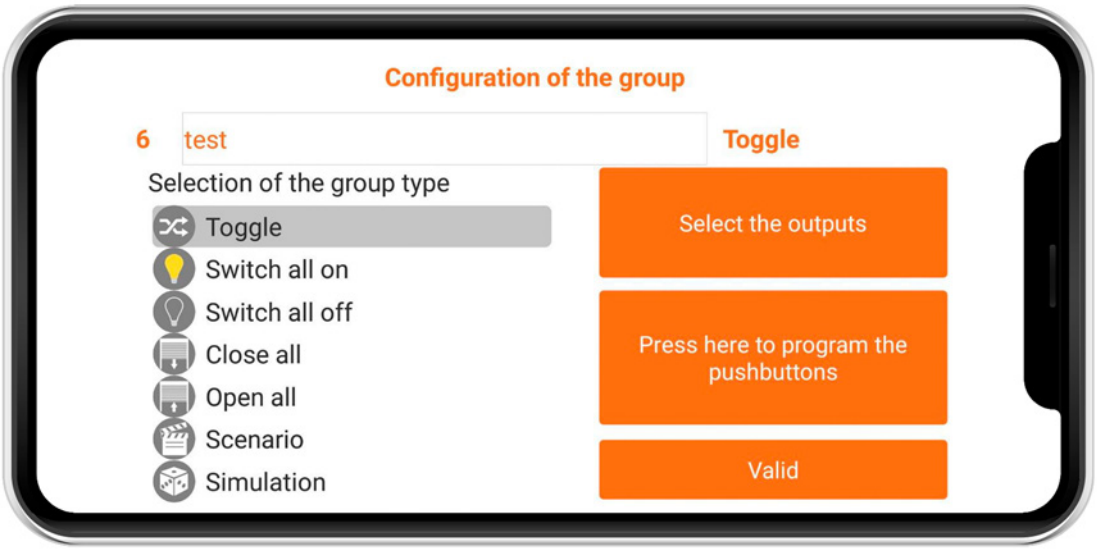
4.9. CONFIGURATION OF THE GROUPS

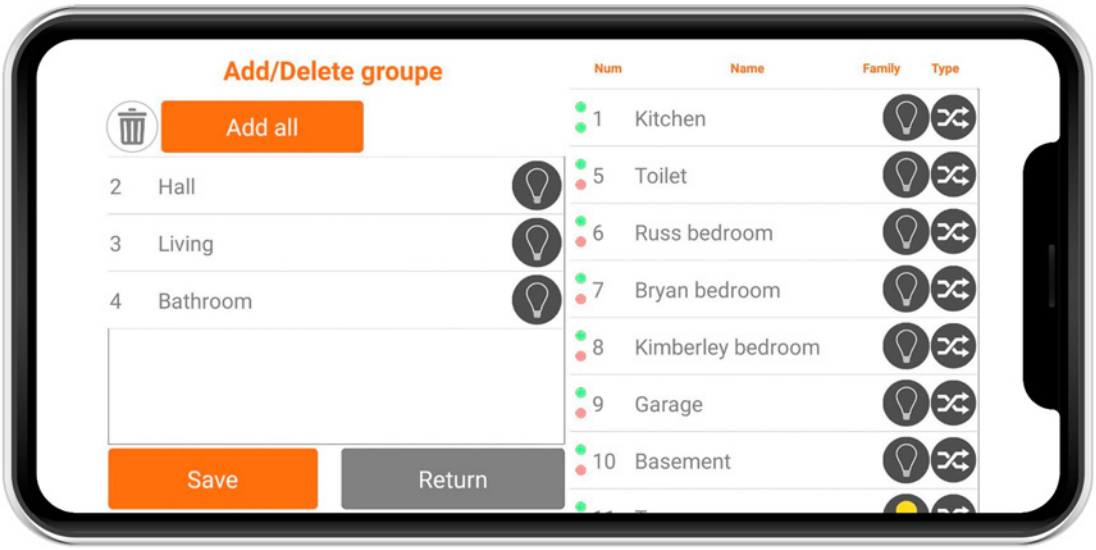
Click on the icon 

The DME-LAN-002 can be used to create up to 60 groups.

To create one or more groups, click on the (+) icon and enter the name of the group by clicking into the name field (see figures 1 and 2 on page 15).


Configuration of the groups
1 All on
2 All off
3 Shutters down
4 Shutters up
5 TV
6
Return


Configuration of the group
6 test
Toggle
Selection of the group type
Toggle
Switch all on
Switch all off
Close all
Open all
Scenario
Simulation
Select the outputs
Press here to program the pushbuttons
Valid


Add/Delete groupe
Add all
2 Hall
3 Living
4 Bathroom
Save
Return
Num
Name
Family
Type
1 Kitchen
5 Toilet
6 Russ bedroom
7 Bryan bedroom
8 Kimberley bedroom
9 Garage
10 Basement

GROUPS

1 «Toggle» or stepping switch group

This group is used to turn lighting outputs on or off and to vary the brightness (dimmer). A short press on the button reverses the status of the outputs. A long press activates the outputs and, in the case of dimmers, varies the brightness.

2 «Switch all on» group

This group is used to light all the lighting outputs. A short or long press on the button activates the outputs

3 »Switch all off» group

This group is used to extinguish all the lighting outputs. A short press deactivates all the outputs selected.

A long press deactivates the outputs after 30 seconds.

4 «Close all» group

This group is used to activate the «close shutters» outputs. A short press activates the outputs for the closure time that has been configured for these outputs. A long press activates the outputs while the button is pressed.

5 «Open all» group

This group is used to activate the «open shutters» outputs. A short press activates the outputs for the opening time that has been configured for these outputs. A long press activates the outputs while the button is pressed.

6 «Scenario» group

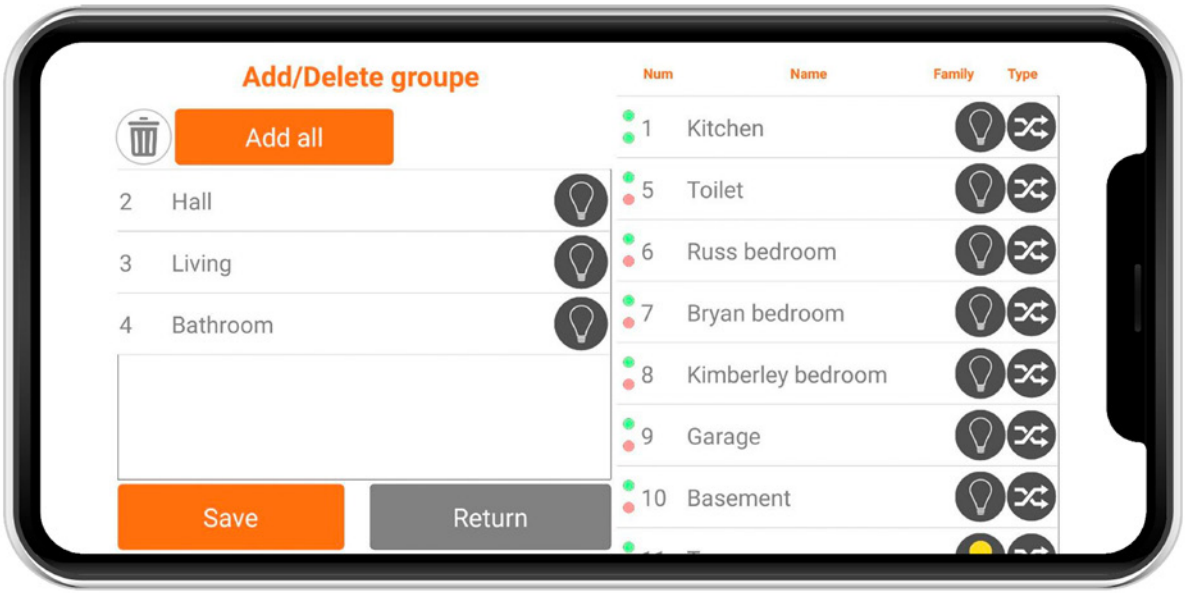
This group is used to define the status of all the lighting or shutter outputs (active, inactive or brightness for the dimmers).

7»Simulation» group

This group of lighting outputs is used to simulate a presence. The group must operate with a switch (contact maintained) and also be activated by an event. When the switch is active and an event activates the «Simulation», then the group's outputs are lit one after another in a random order and for a random period of time (between 1 and 60 minutes).

Then select the outputs that must be part of the group.

An output can be added by clicking on the list on the right. It can be deleted by clicking the bin icon on the left, before and after selecting the outputs concerned.



In the case of a «**Scenario**» group, you must define the status of the output.Click on the output to change its status from active to inactive.

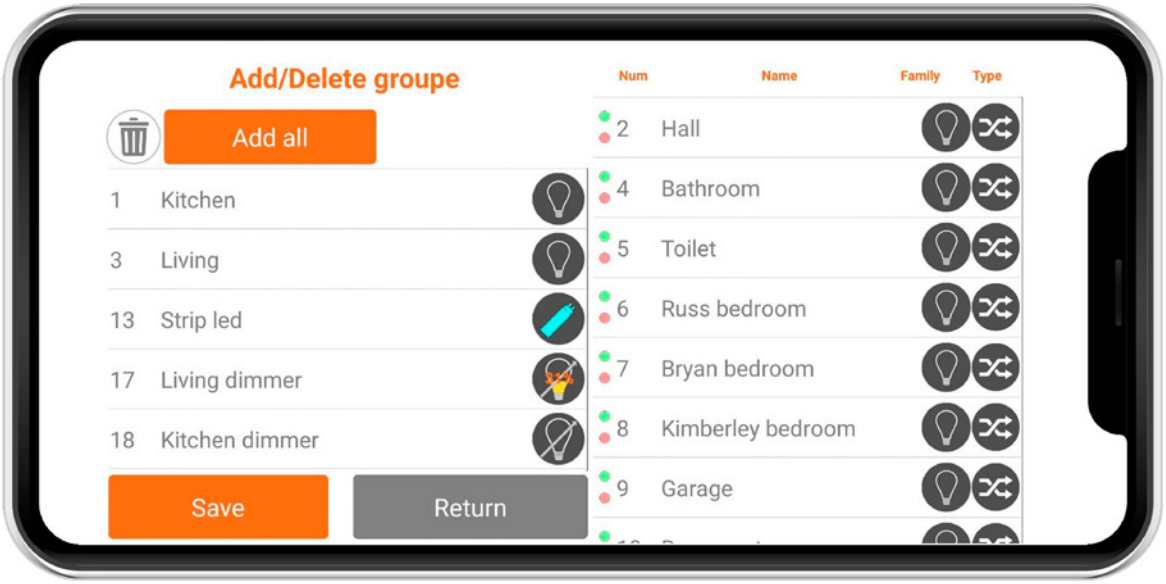
Yellow = ON **Grey = OFF**

Outputs that are not included in the group are listed in the column on the right.

For «**dimmer**» outputs, you can define the dimming level of the bulk between 0–100%.

Note that some LED brands do not vary the brightness in the same way!

For more accurate information, please contact your lighting supplier.



4.10. CONFIGURING AREAS

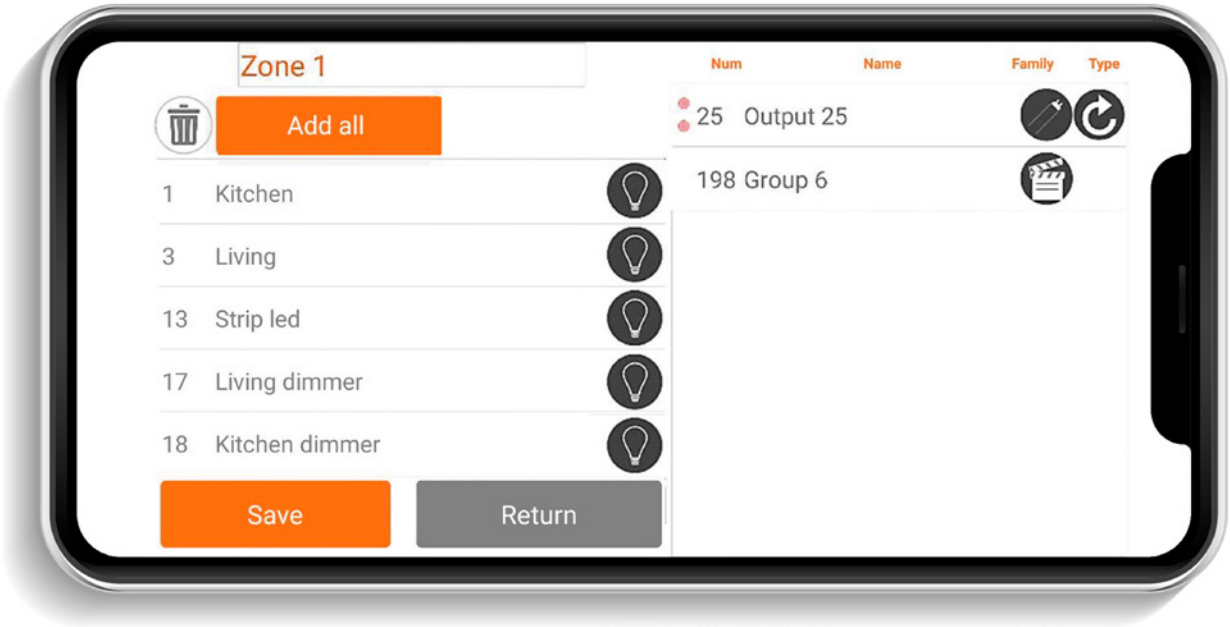
Configuring areas 

The DME-LAN-002 can be used to create up to **60** areas.

The areas are used to organise the outputs for the end user. For example, you can create a «Ground floor» area, an «Upstairs» area or an «Outdoor» area, etc.

Then select the outputs that must be part of the group.

An output can be added by clicking on the list on the right. It can be deleted by clicking the bin icon on the left, before and after selecting the outputs concerned.



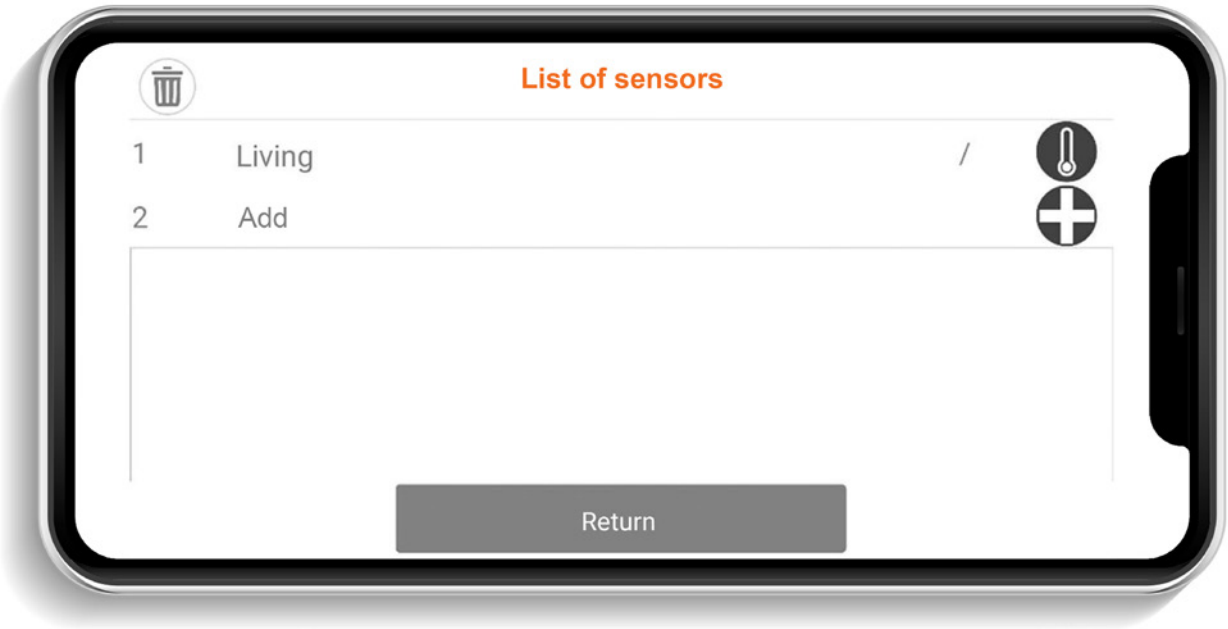
Click on the «Plus» icon to create one or more areas. Only the outputs and groups contained in the areas can be viewed in Home On Web.

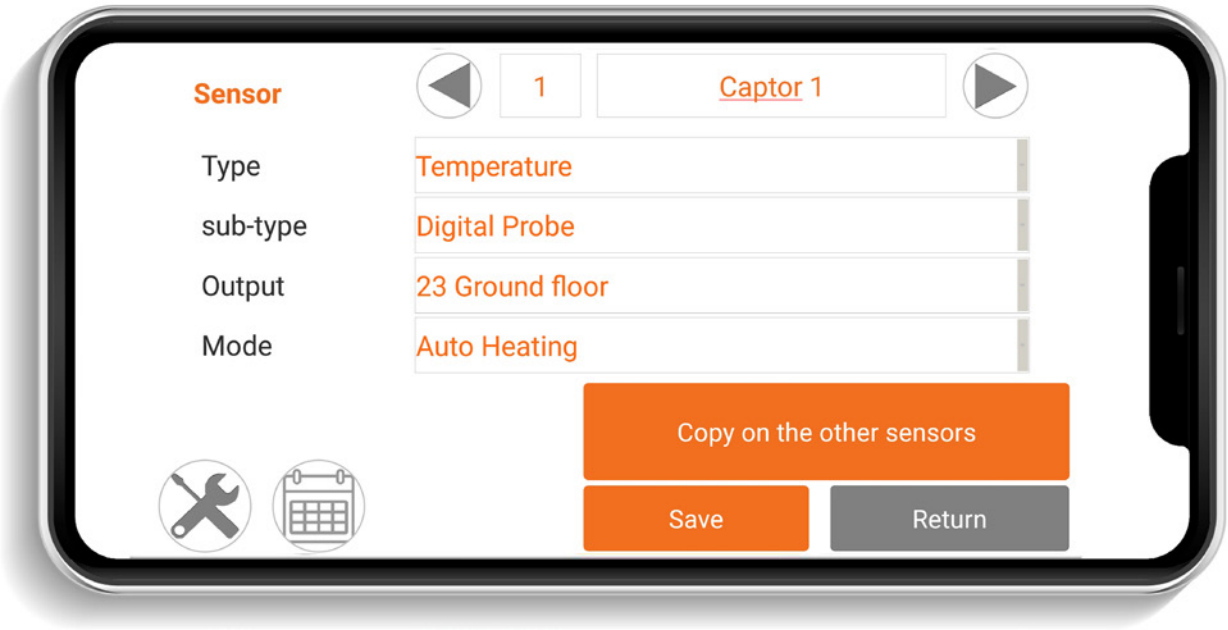
4.11. CONFIGURING TEMPERATURE SENSORS

Click on the icon 

The DME-LAN-002 accepts up to 32 sensors.

By default, the sensors are «Unassigned».



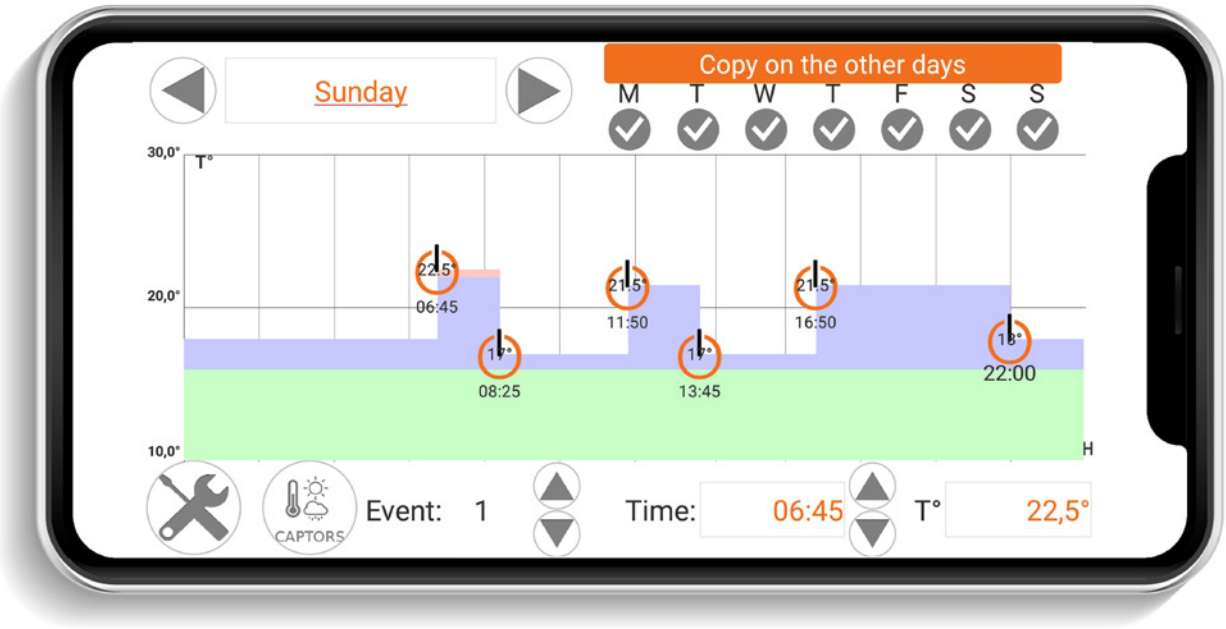


Select a type > subtype > output to be used > mode

The temperature sensor must be connected to a relay (via the configuration menu for relay outputs).

Automatic mode uses the settings programmed by time slots (maximum of six events per day). The settings span **0–50°C** in increments of 0.5°C.

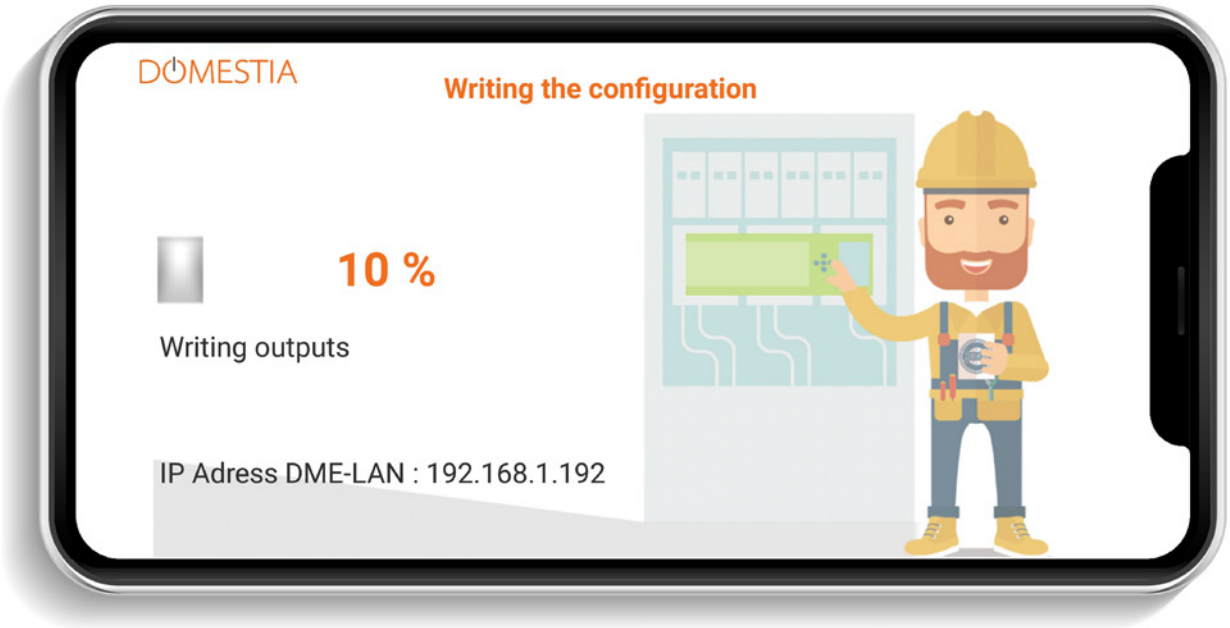
«Override» mode sets the temperature to 5°C.d



4.12. SAVING THE CONFIGURATION IN THE DME-LAN

Press on the icon REC **to save your configuration !**

A progress bar is displayed and the configuration is saved after a few seconds.



4.13. X.X BUS DMX 512

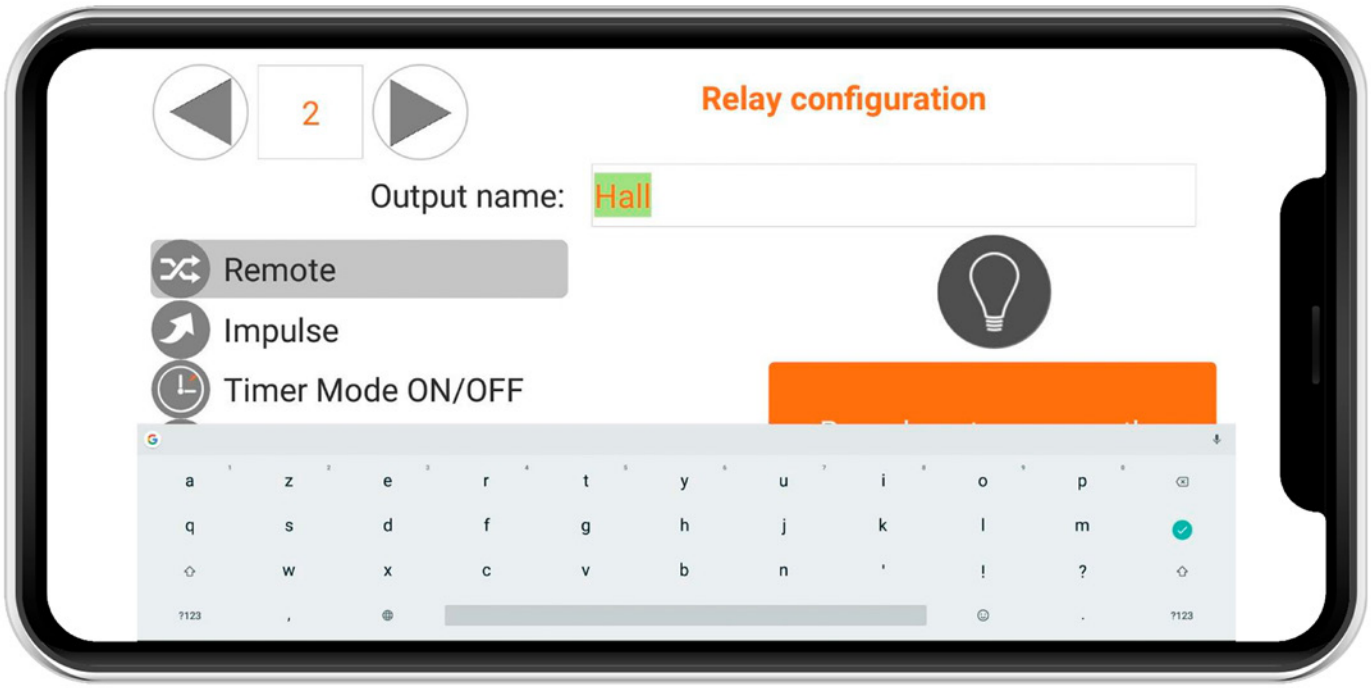
The DME-LAN-002 has a DMX 512 output. This is a communication protocol used by some manufacturers of lighting equipment. The signal emitted by the DMX 512 bus comprises the status of the 192 outputs possible with a DME-LAN-002 (lighting value between 0 and 255).

To use a device that operates using the DMX 512 protocol, you need to add a module with an equivalent function in **the installation composition** (**see 4.6 Installation composition**). If your device is a dimmer, then select the dimmer module (e.g. DML-004-002). The address of the DMX 512 device (see your equipment's installation manual) must correspond to the address of the first module output (address 37 in the following example).

5. PROGRAMMING THE PUSHBUTTONS

5.1. PROGRAMMING OUTPUTS

In order to assign one or more buttons to an output, click on the output to be programmed. The programming window will appear. Next, click on the orange button to activate the programming for this output. The output is activated and you simply need to press the button(s) to assign it/them to this output.

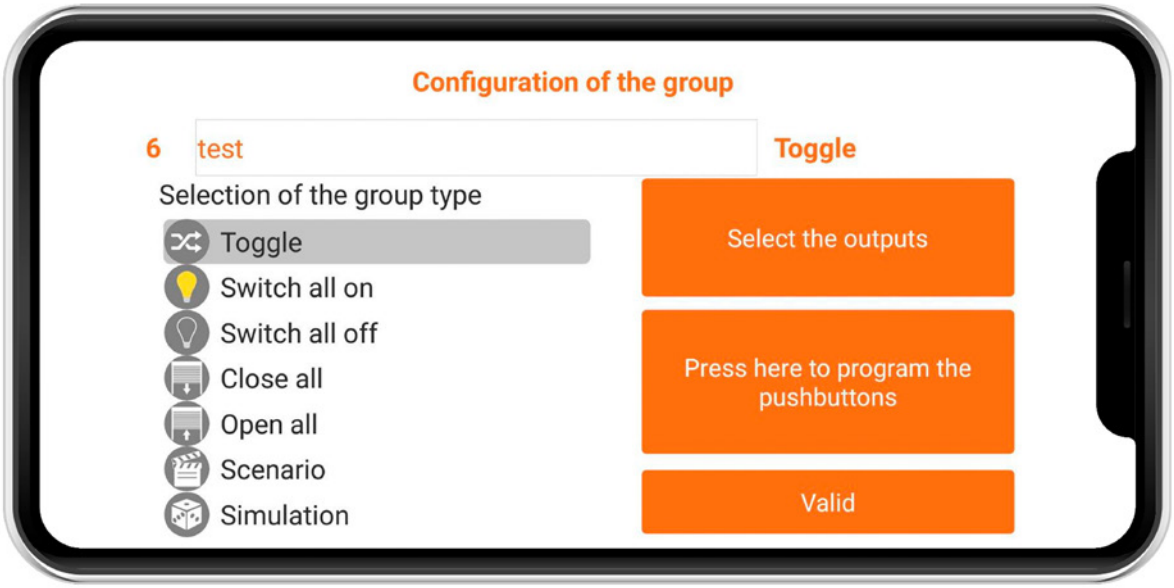


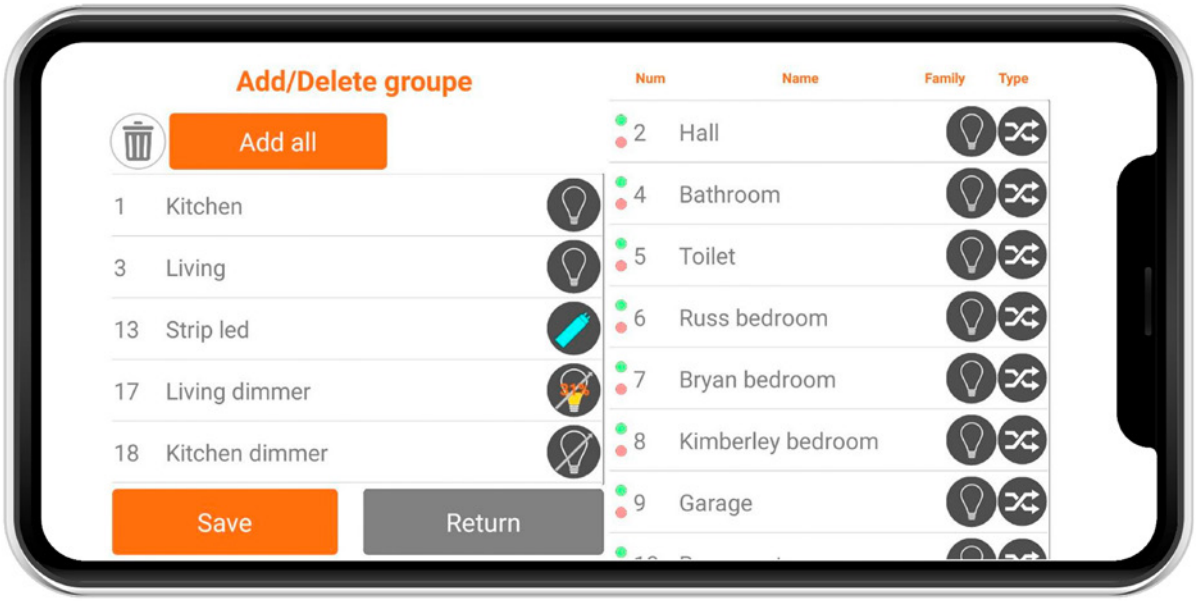
Press the button again to finish.

5.2. PROGRAMMING GROUPS

In order to assign one or more buttons to a group, click on the icon

Then click on the group to be programmed, then on the orange «Click here to program the PBs» button. The outputs assigned to this group are activated and you simply need to press the button(s) to assign it/them to this group.





6. USER INTERFACE (LOCAL)

The user interface can be accessed from a web browser from any platform. For example, a Windows PC, an Android smartphone, an iOS tablet, etc.

However, some browsers are not fully compatible.

In order to access the DME-LAN-002 web interface, you simply need to enter the IP address of the latter in your web browser (by default: **http://192.168.1.210**).

The web interface is divided into four menus: **«Home», «Temperature», «Events» and**

«Parameters».

Simply click on a menu to select it.

6.1. «HOME» MENU

The «**Home**» menu contains the areas.

You can select the area to display from the list on the left. The selected area appears in light grey.

The list on the right contains the buttons for the selected area.

The colour of the button indicates whether the output is active or inactive.

Yellow = active **Grey = inactive**

6.2. «TEMPERATURE» MENU

The «**Temperature**» menu is used to manage the temperature sensors.

The selected sensor appears in a light colour. The colour of the button depends on the status:

Grey = relay inactive
Red = relay active and sensor configured in hot «**Heating**» mode
Blue = relay active and sensor configured in cold «**Cooling**» mode

The current temperature of the sensor is displayed on the button.
If the value is **255°**: the sensor is absent or its address has not been configured correctly.

The first frame is used to configure the sensor's operating mode:

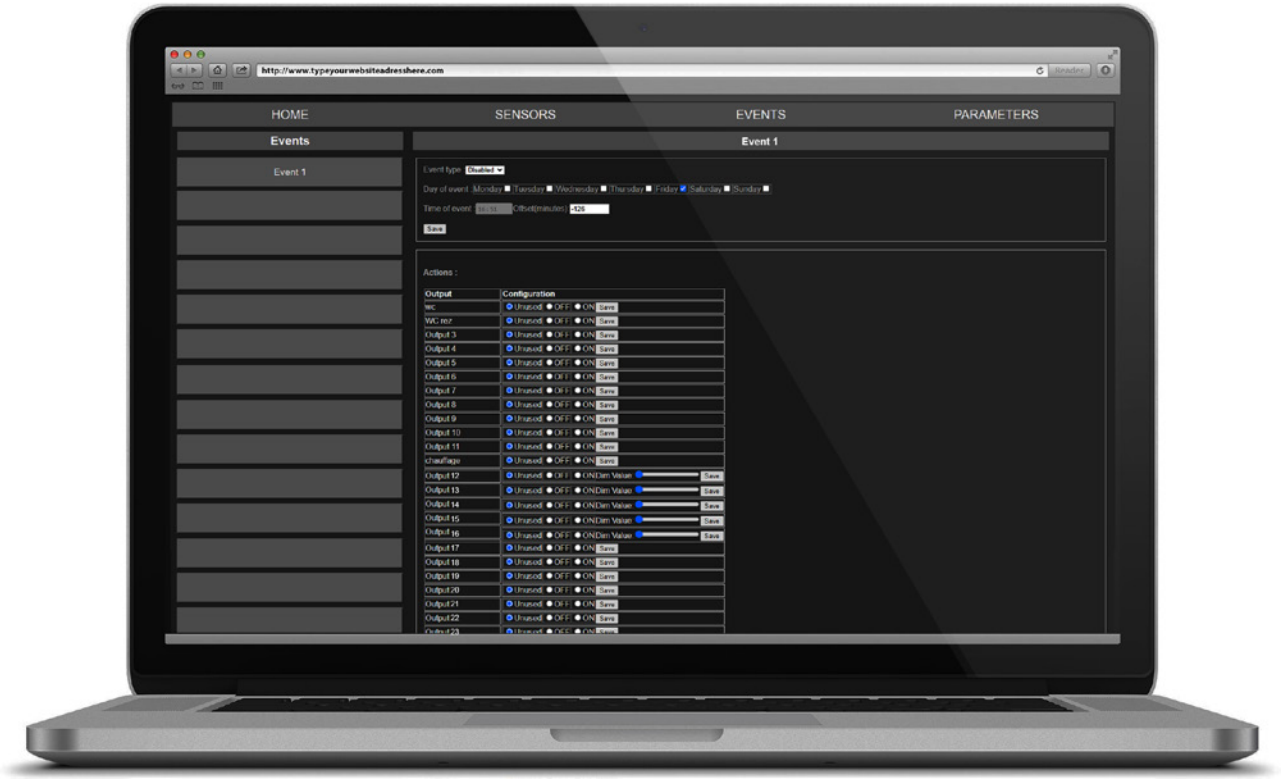
- «**Set point**» indicates the current setting
- «**Set derogated**» is used to modify the setting when in the «**Derogation**» and «**Derogation continues**» modes
- The «**Save**» button is used to save the configuration.

The second frame is used to configure the temperature settings for events.

Select the day to be configured in «**Day**», then configure the events in chronological order. Unused events can be configured to 00:00. Next, press the «**Save**» button to save the day configured.

6.3. «EVENTS» MENU

This menu is used to configure events. Twenty events are available. The visible event is the one for which the button is light grey.

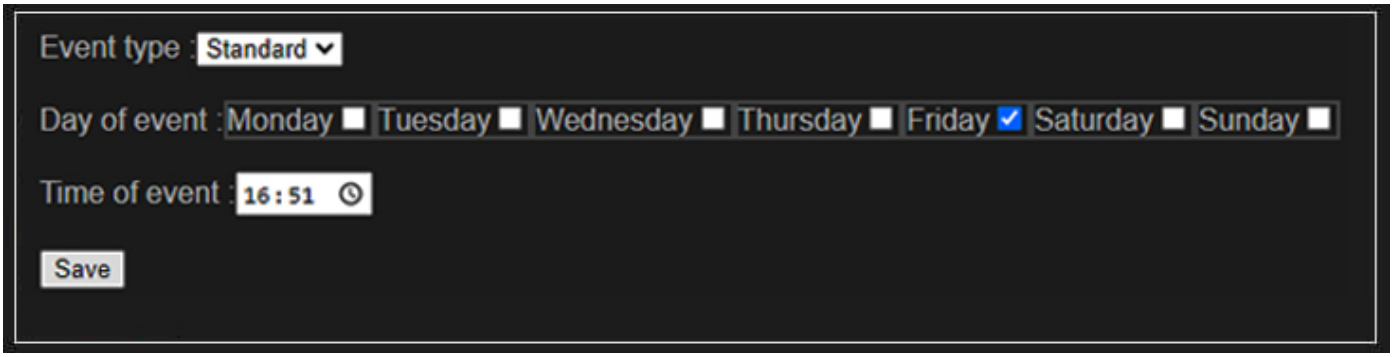


The first frame is used to configure the «Event type», the «event days» and the time at which the event occurs (the «Event time»). The «Save» button is used to save the configuration.

There are three possible event types :

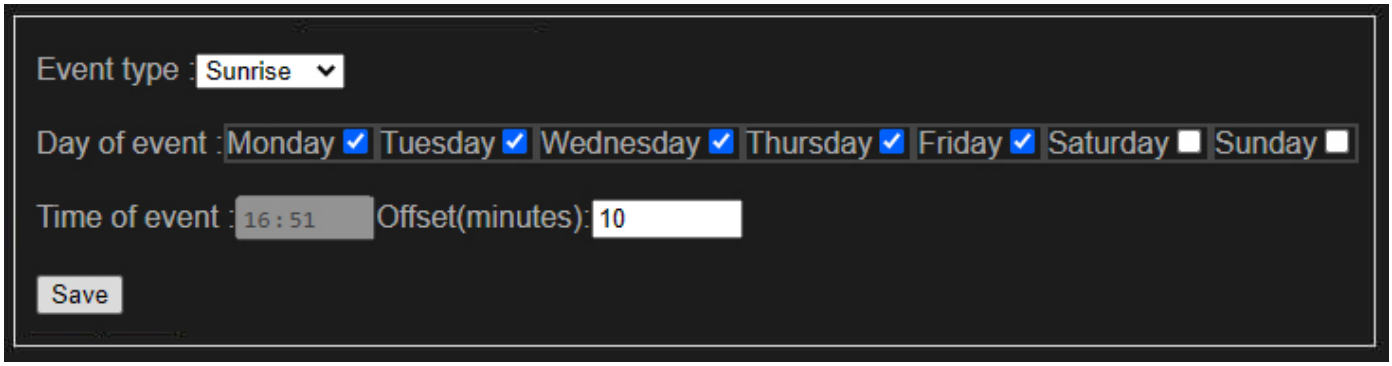
« Standard »

An event that takes place at a set time.



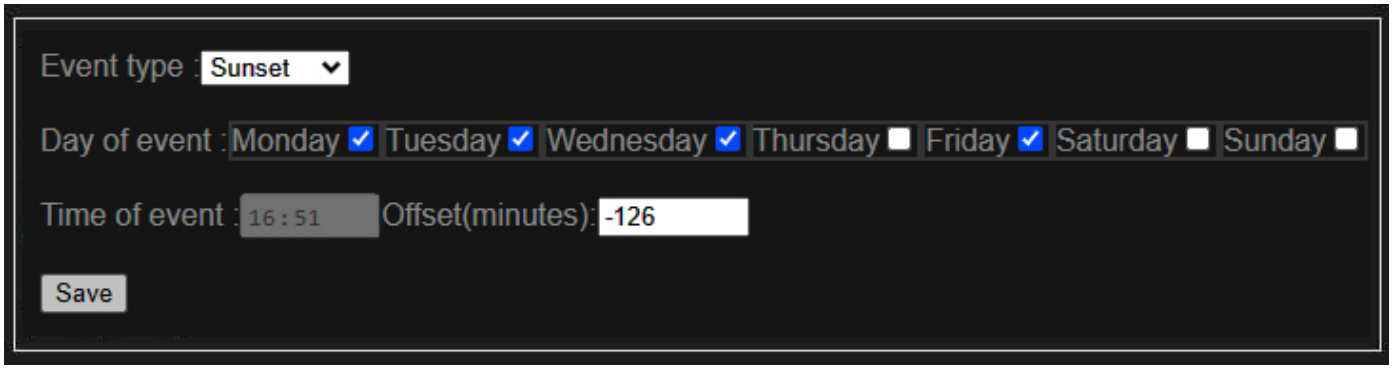
« Sunrise »

The event takes place at sunrise. An offset of between -127 minutes and +128 minutes from sunrise can be defined.

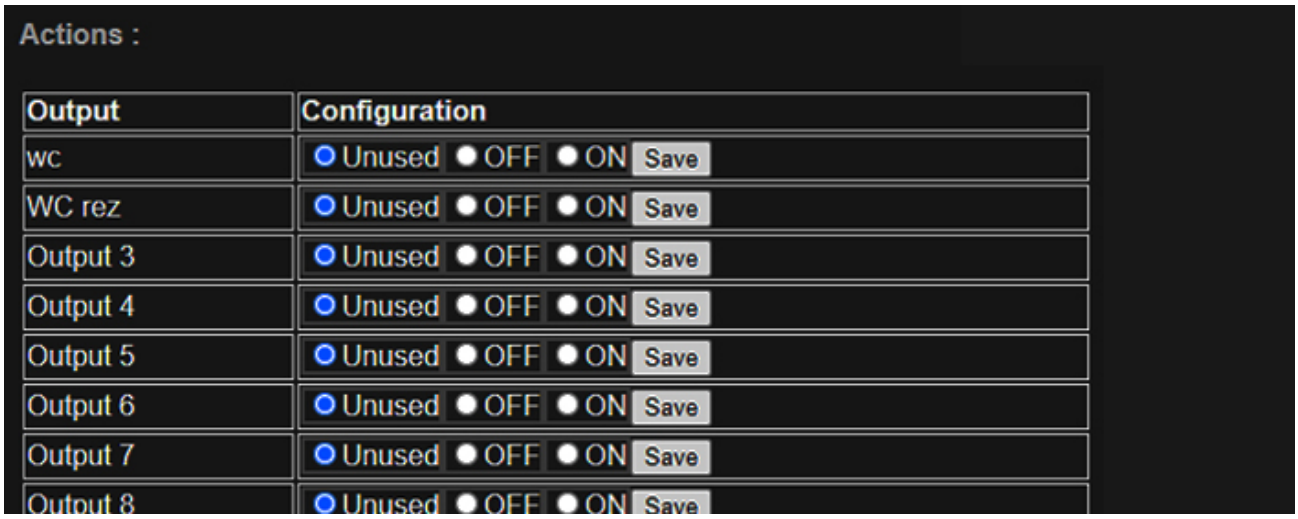


« Sunset »

The event takes place at sunset. An offset of between -127 minutes and +128 minutes from sunset can be defined.



The event takes place at sunset. An offset of between -127 minutes and +128 minutes from sunset can be defined.

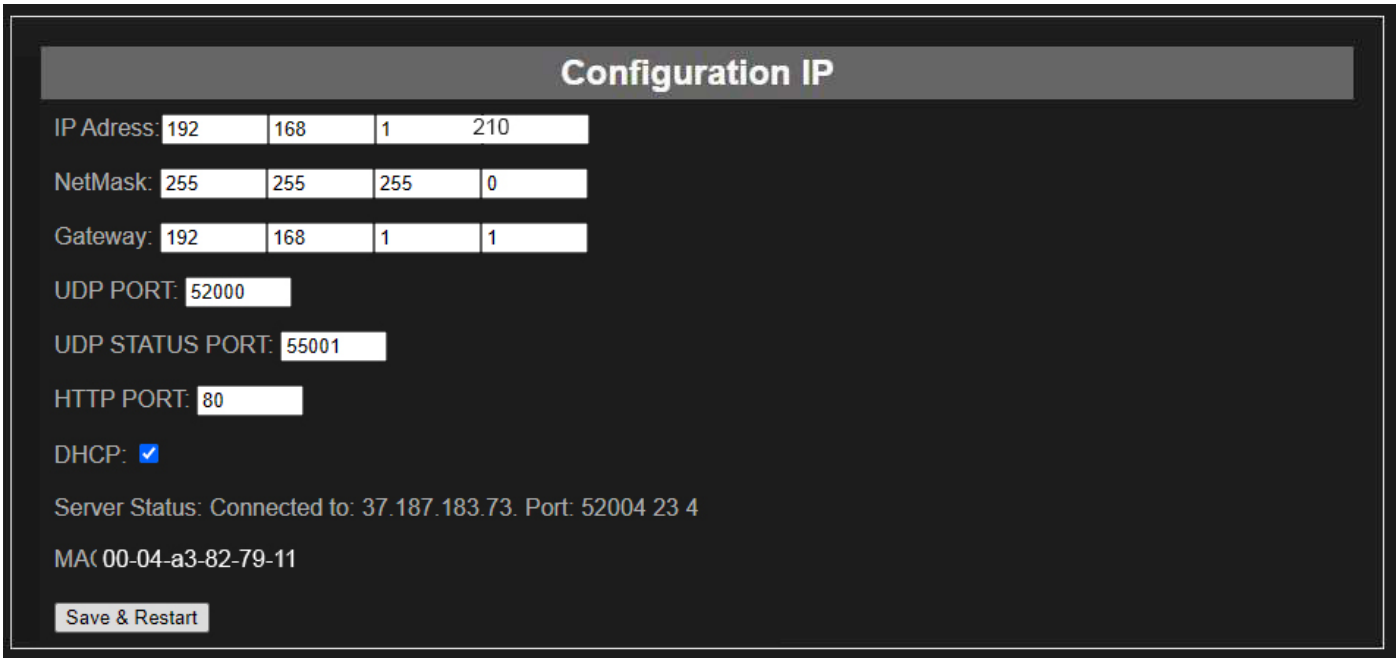


In this example, outputs 1 to 3 are lit and output 4 is off at the time of the event.
The other outputs are configured as "Unused": no action on these outputs.

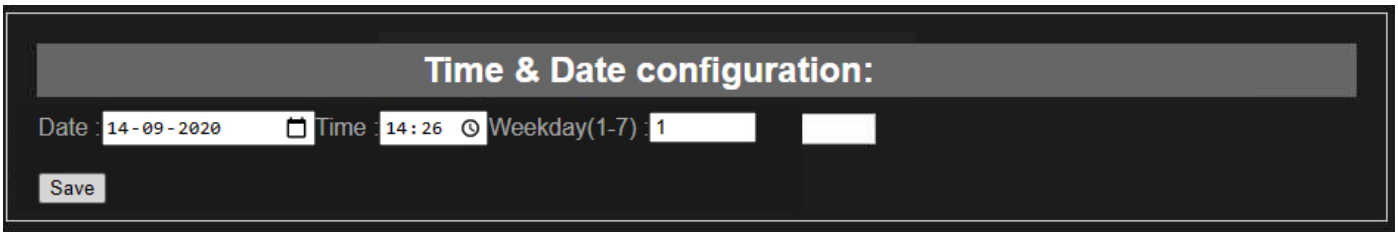
6.4. «PARAMETERS» MENU

The first frame – «IP configuration» – (figure 34) is used to configure the parameters of the DME-LAN-002 network. A restart is required when these parameters are changed (the «**Save and Restart**» button saves the parameters and restarts the DME-LAN-002). The default IP address is 192.168.1.210.

In order to restore this default IP address (if the address is unknown), simply press the reset button on the card five times.



The second frame (figure below) is used to configure the time, date and day of the DME-LAN-002 (this is important for events and temperature sensors).



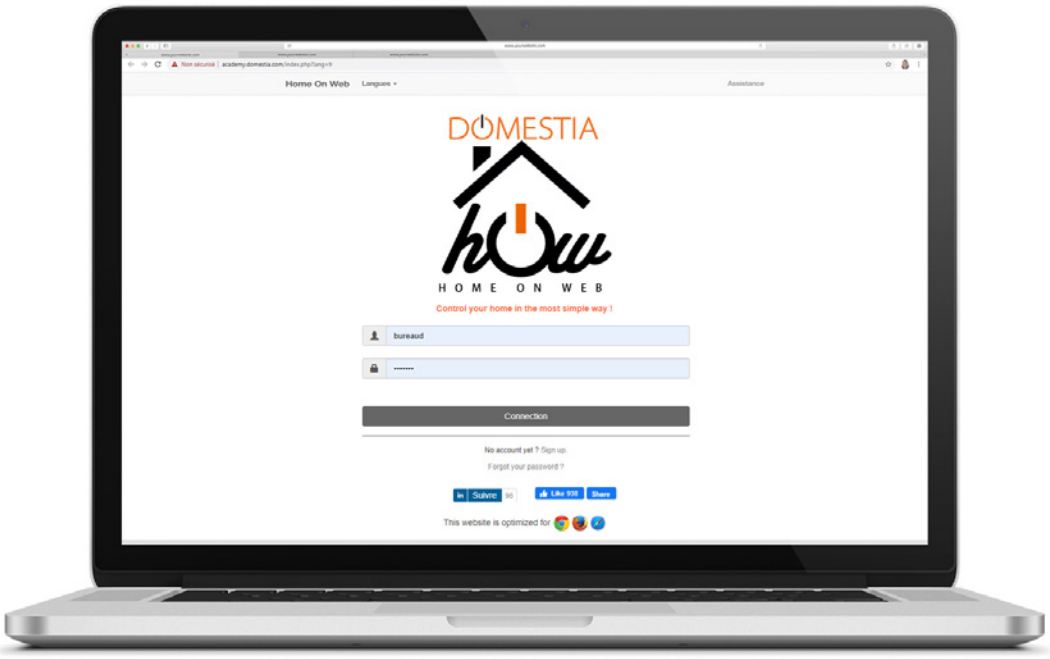
The third frame (figure below) is used to define the location (by default, Brussels) and whether it is summer or winter time (manual change via the «**Summer time**» box). The calculation of sunrise and sunset times is based on this information.

7. USER INTERFACE: HOME ON WEB

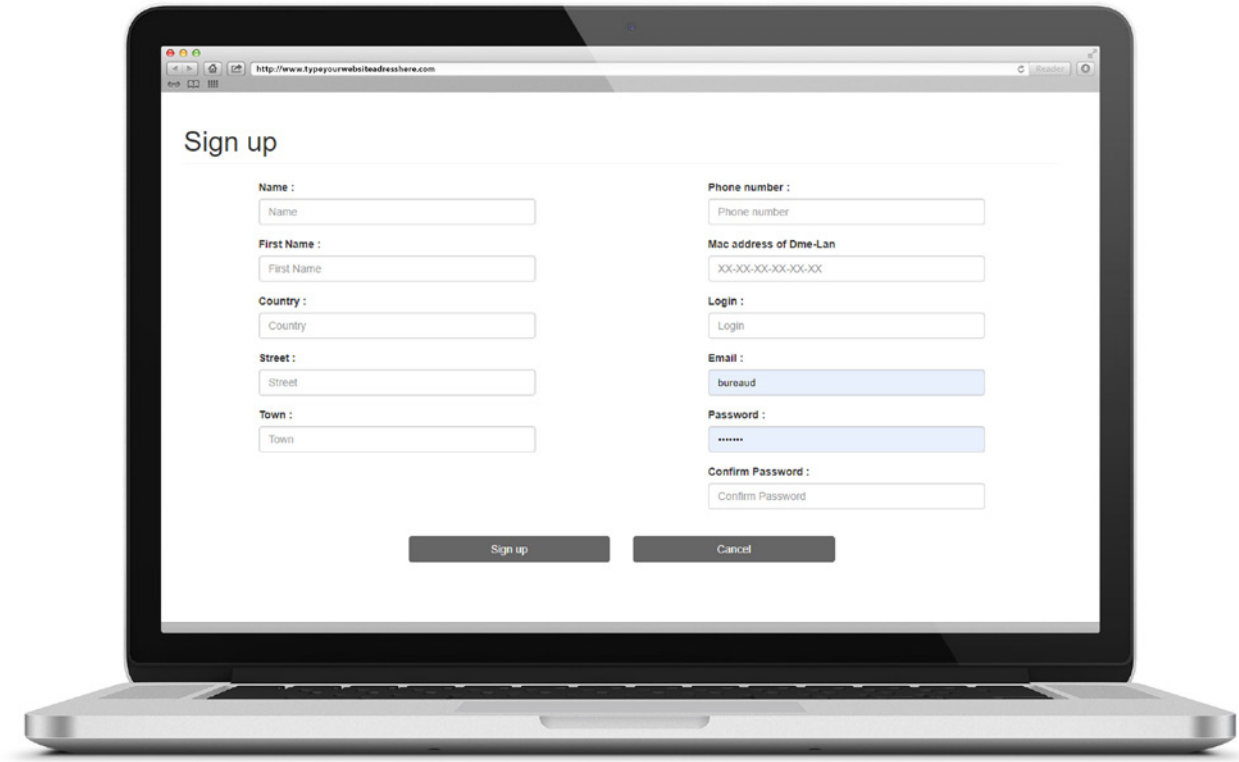
Home on Web offers remote management that lets you manage your installation at any time, from anywhere in the world, via your Smartphone, tablet or PC.

Go to https://my.domestia.com to access Home On Web.

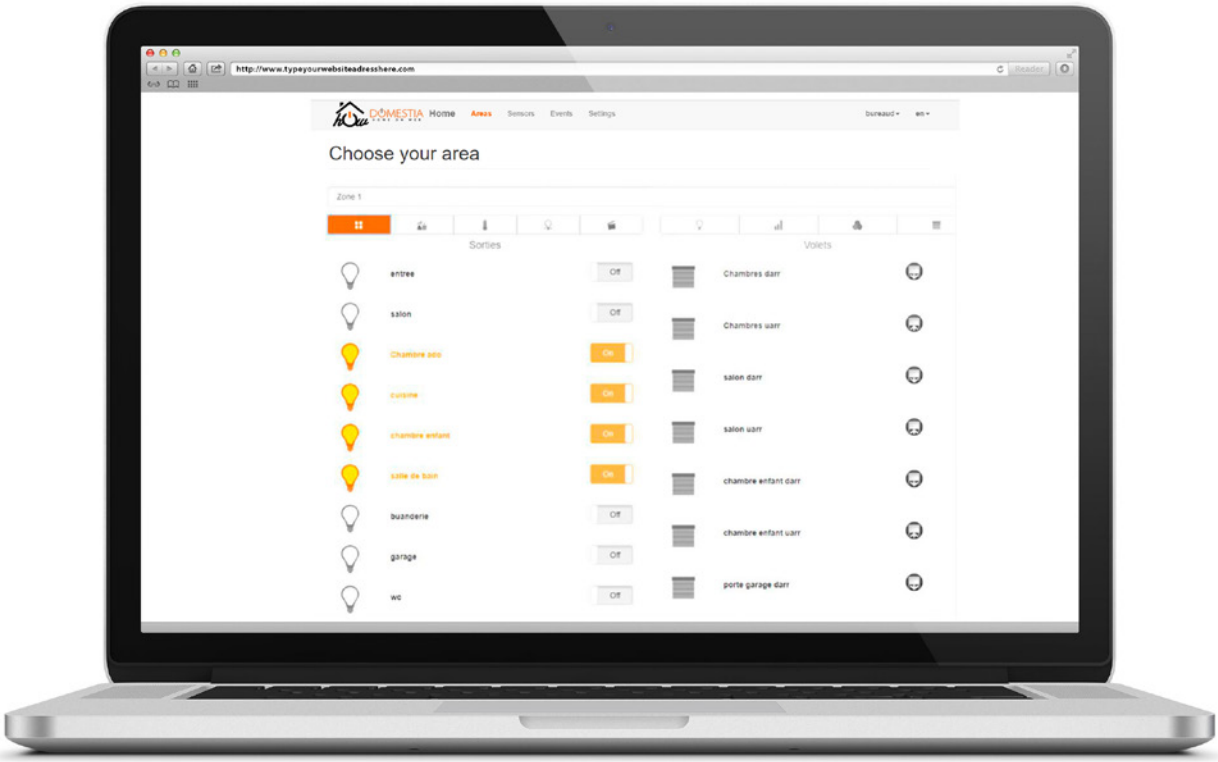
1. When you reach the «Log in» page, click on «**Create an account**»



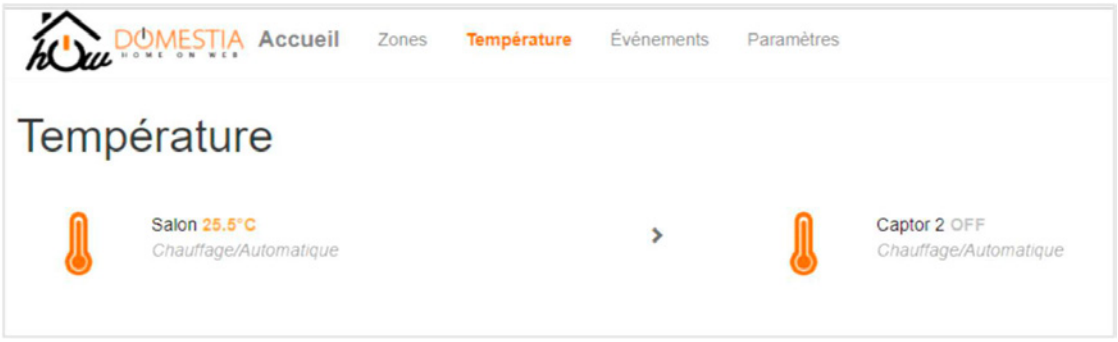
2. When you reach the «Log in» page, click on «Create an account»



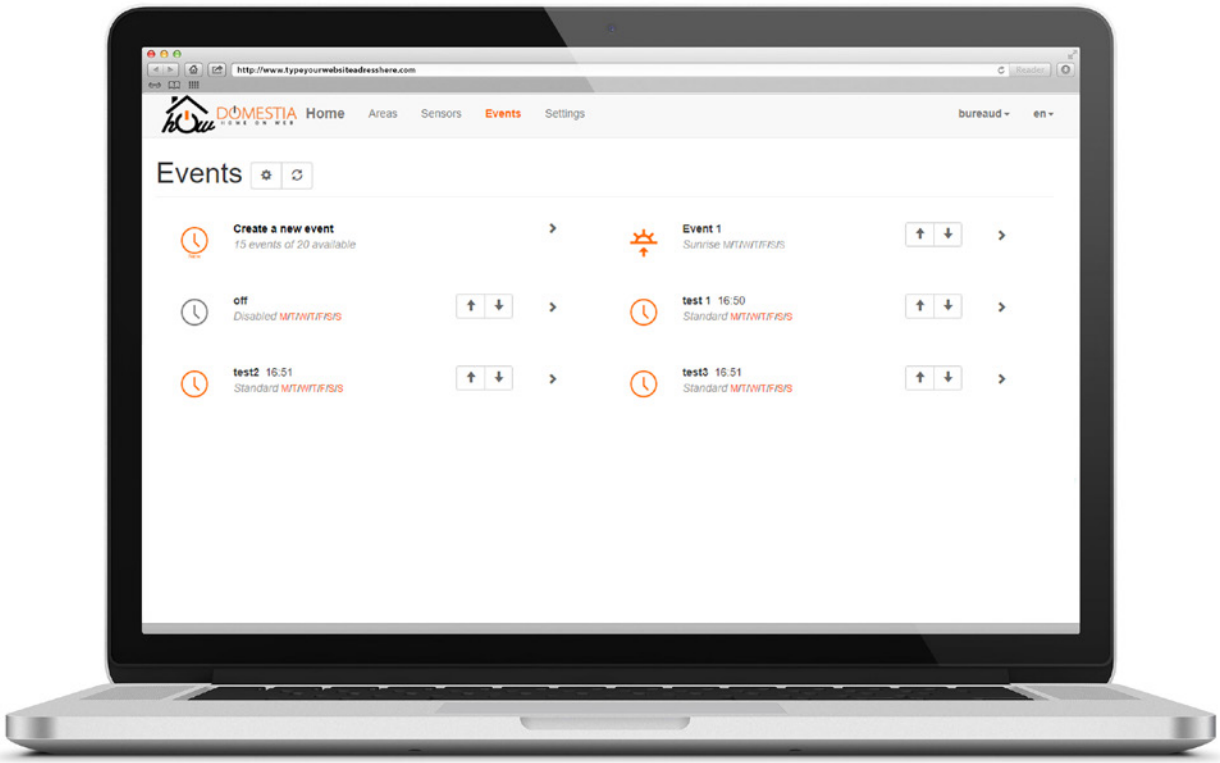
3. You can then manage your different **areas** via this intuitive platform.



4. The **Temperature** tab allows you to automatically adjust your heating remotely and/or to view your sensors.



5. In the **Events** tab, you can determine the actions that will automatically be executed, either at a certain time or at sunrise/sunset.



8. TROUBLESHOOTING

Problems encountered	Possible causes	Solutions
I can't connect the Home Manager application to my DME-LAN-002	Network configuration incorrect	Restart the DME-LAN-002 if it is connected to a Wi-Fi router. The DME-LAN-002 automatically adapts its IP address to the network it is connected to when it is started.
		Reset the IP parameters of the DME-LAN-002 by pressing the reset button 5 times
		Scan the IP address of the DME-LAN-002 via the "Parameters" menu before trying to connect.
		The IP addresses of the DME-LAN and the device (tablet, PC, etc.) cannot be identical. By default, the IP address of the DME-LAN ends in 210.
	The application (tablet, smartphone or PC) is on a different network to the DME-LAN-002	Connect the device or DME-LAN-002 to the correct network.
I am unable to program a pushbutton. The bulb lights in programming mode, but the button doesn't react	The identification module bus is not connected properly	The identification module bus must be connected to the DME-LAN and not to a DMC-012-002 card.
	Too many addresses are already programmed on the identification module bus	You can program a maximum of 70 different functions per bus line. If the maximum threshold is reached, you need to split the bus. (Four bus lines are available on the DME-LAN-002)
	Short circuit on the bus line (The line's red LED is lit)	Find the short circuit

Problems encountered	Possible causes	Solutions
I am unable to program a pushbutton. The bulb is not lit in programming mode	Output cards are not addressed	Address your slave cards
	Bulb is not connected properly or is defective.	Check that the LED that is assigned to the output is lit when in programming mode. If it is, check the connection of the bulb
I've programmed the list of my slave cards correctly. I am trying to activate an output, but it does not light.	Bus RS485 for the slave cards is not connected or is in the wrong place	The slave cards must be connected to the DME-LAN via the "RS485 slaves" port next to the RJ45 connector.

9. WARRANTIES

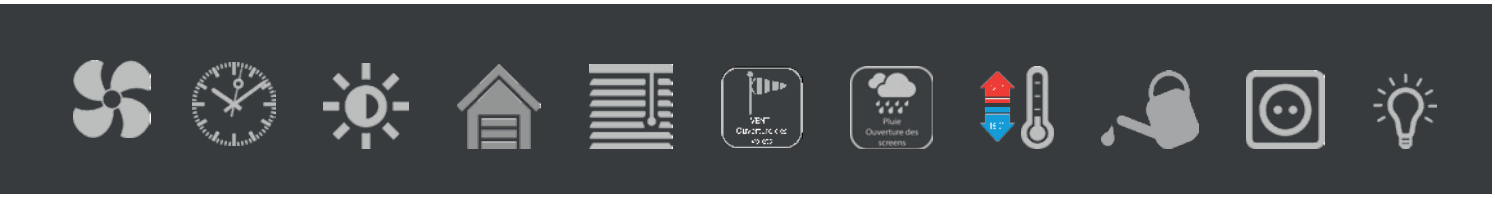
Warranty conditions

The duration of your product's basic warranty is 2 years, starting from the date your order is received.

Please keep your receipt with the serial number, in case of any issues.
This is the only document that can serve as a warranty.

The warranty does not apply in the following cases:

- Damage caused by inappropriate use, improper use, poor maintenance or failure to comply with the instructions issued by the manufacturer in the user manual.
- Repair attempts made by the customer or by an unauthorised third party.
- Damage caused by accident, force majeure or other causes for which Domestia cannot be held liable.
- A fault that does not impair the proper functioning or correct use of the equipment.




DOMESTIA

DOMESTIA

rue Hector Denis 114
4420 Montegnée
Belgium
Tel +32 4 372 07 16
Fax +32 4 372 07 19
info@domestia.be