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DIN Guide module Dimmer Wireless

INSTALLATION AND OPERATION

PROGETTATO E PRODOTTO
INTERAMENTE IN ITALIA



DIN modules by Think Simple are a family of wireless products designed to simplify the work of both the designer and installer. They are particularly useful for installation in existing plants where actuators are installed in electric cabinets or, in case of new plant, when the designer prefers to site the electric power modules in a control cabinet. They can be controlled by creating associations with other Think Simple wireless products.

In particular, they can be associated with Vitrum Satellite, with devices that only require a mains connection, with Vitrum Dimmer or On-Off. Also, if you bought a Home Master router, you will be able to monitor and control them with an iPad/iPhone via the Home Master Application (which is a free download from the Apple AppStore).

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0. BEFORE STARTING

The wireless module that you have purchased is designed for connection to your existing 240V power supply. Before commencing installation, ensure that the mains power supply has been disconnected. Do not re-connect the power supply and start using Vitrum until all connections have been correctly completed and the Vitrum unit has been installed in the wall-mounting box.

IN modules must be installed into cabinets by a qualified professional electrician operating in full compliance with all current safety legislation.

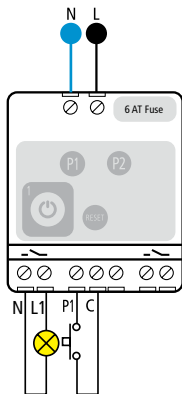
For each device, connect the power supply and the return wire from the actuators as shown in the circuit diagrams printed on the rear of the boxes in the vicinity of the terminal block. Make all connections solely in accordance to the circuit diagrams contained in this manual, especially if connecting the system without an earth wire.

Carefully check that the wires and connectors are securely fastened.

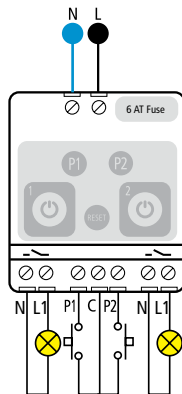
Do not install DIN modules in the vicinity of sources of heat or in conditions of high humidity.

1. ELECTRICAL CONNECTIONS

For all devices, it is important to install in accordance with wiring diagrams on the back of the box near the terminal and with further reference only to the diagrams in this manual.



01D010010



01D020020

The mains must be connected to terminals identified by letters N – L. Connectors identified by symbol $_ _$ must be connected to loads. Incorrect connections may give rise to failures or malfunctioning of the dimmer. To control the module using a push-button, use the connections identified by letters **P1** and **P2**.

IMPORTANT

After connecting, check that the wires are correctly routed inside the cabinet. Think Simple Spa accepts no liability if the device is not correctly installed as described above.

2. ECO-VITRUM

In order to help you save energy every time a light is switched on we have designed the DIN module so that at the first **fingertip touch** the light automatically switches on at about **65% of maximum power**.

This means that the light is a little less bright than it would be at full power and to indicate this ECO mode the module LED glows **GREEN**. Then, with a **second touch**, the light increases to maximum power and the module LED glows **YELLOW**. At the **third touch**, the light switches off and the LED glows **BLUE**, remaining lit for a few moments, after which the switch reverts to “energy saving” mode.



When switching from one mode to the next, the illuminated LED will glow **RED** momentarily. This indicates that module is operating in **STAND ALONE** mode and has not yet connected to your home wireless network.

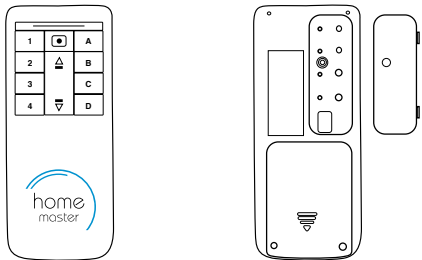
IMPORTANT

If the illuminated LED glows RED and flashes continuously this indicates that the internal safety devices have cut in automatically. This may be caused either by a connection load that exceeds the designed limits that can be handled by the Dimmer or by some other malfunction (see “Safety Devices”).

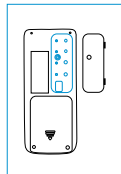
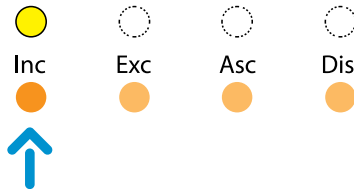
3. VITRUM IS INTELLIGENT

The product that you have purchased can function perfectly well when used **INDEPENDENTLY** of other systems but it also has a hi-tech wireless technological heart. Thanks to “**Z-Wave**” wireless technology, each wireless module unit offers a number of advantages when connected as part of a network; it is possible to associate multiple module and Vitrum units to construct lighting scenarios and to control lights using a remote control unit. If you connect a DIN module into a pre-existing Z-Wave net working with third-party devices please refer to the instructions and procedures pertaining to your remote control. Otherwise proceed as follows to add the DIN module to your home wireless network:

- Open the rear panel of the **HOME MASTER** remote handset



- Press and hold down “**INC**” until the corresponding LED turns yellow, then release the button



- Place the **HOME MASTER** remote handset near the module unit that is to be added to the network. Touch any of the module keys to add the unit to the home wireless network.



- **The DIN module indicates that it has been connected** to the network by flashing the yellow LED three times and switching on all the lights connected to the unit.

- When all the DIN modules/Vitrum units have been added to the network press the “**INC**” key again until the LED switches off. Notice that the illuminated LED near the module touch keys no longer light red when switching from one status to the next.

NOTE

A DIN module unit cannot be added to a network if it has already been added to a different network. In this case, it is necessary to perform the factory reset procedure > see Paragraph 7.

4. TYPE OF LAMP

Low-voltage LED lamps and lamps with built-in adjustable dimmers from 0 to 10V must not be connected to our devices. The DIN module is designed to control most types of lamps – incandescent, halogen, LED spotlights and all lamps powered by 240V AC. However, if the lamp is one of the latest types (such as a dimmable fluorescent lamp or a dimmable LED lamp), you will probably note that it lights intermittently. Should this be the case, proceed as follows:

- Press and hold down the two service touch keys P1 P2 for at least 8 seconds and wait until the BEEP sounds twice to indicate that the system has entered the configuration **MENU**. The touch key LEDs will begin to flash either blue, red, yellow, magenta or green depending on the setting entered.
- Briefly press each of the buttons on the DIN module unit to select the correct operating mode for the type of lamp connected.



BLUE LAMP

Trailing Edge load



RED LAMP

Leading edge load



YELLOW LAMP

Trailing Edge load for LED



MAGENTA LAMP

Leading edge load for LED



GREEN LAMP

Fast switch
(no ramp: directly 100% of power)

Each time the touch key is pressed, the cyclic status is 'toggled':

Leading Edge -> **Trailing Edge** -> **Leading Edge for LED** ...

The DIN module returns to normal operation after 12 seconds of inactivity or if the two service touch keys are pressed briefly (0.5 seconds).

IMPORTANT


The default factory setting is leading edge.


5. DISABLING "ECO" MODE

All DIN wireless dimmer modules are supplied with the ECO function activated. If you wish to disable this setting proceed as follows:

- Press and hold down one of the two service touch keys **P1** or **P2** for at least 8seconds and wait until the BEEP sounds twice to indicate that the system has entered the configuration menu.
- The touch key LEDs will begin to flash either green or blue, depending on the setting entered. The default setting for the flashing light is green since the factory setting is Eco-Mode.

 ECO mode activated

 ECO-Mode deactivated
(last light level stored in memory)

 Touch briefly and the light goes from 0% to 100%; if finger contact is maintained the light will then dim.

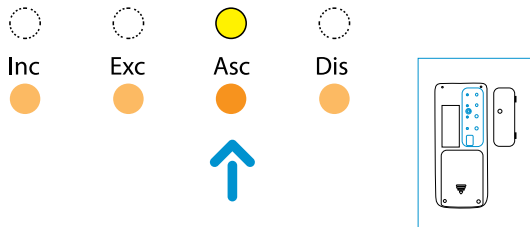
Each time the touch key is pressed, the cyclic status is 'toggLED':

Enabled -> **Disabled** -> ...

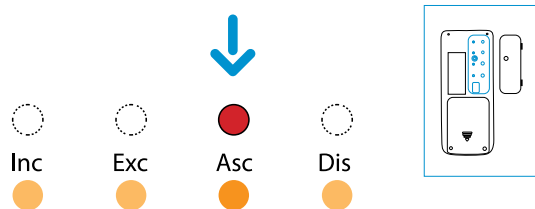
6. ADVANCED FUNCTIONS: CREATION OF CONTROL LOGIC

On all DIN module units it is possible to create control logic processes that associate the button on one DIN module to other buttons on **OTHER** Vitrum modules . Every DIN wireless dimmer module supports a number of groups equal to the number of the device's channels (= device's buttons) and every single button/channel of a DIN module has its own group association. To create a control logic, the modules must first be added to the home wireless network (see paragraph 4). Then proceed as follows:

- Set the HOME MASTER remote handset to **association** mode by pressing and holding down the **"ASC"** button until the yellow LED lights. Then release the "ASC" button.



- Press the button corresponding to the button/channel of the module unit to which the lights that are to be controlled are physically connected. The LED s corresponding to the selected button/channel will flash magenta until the association process has been completed.
- On the HOME MASTER remote handset, press the association touch key briefly ; the LED will light red.



- Press the touch key on the Vitrum unit that will control the lights connected to the buttons/channels of the DIN module device(s) selected previously. In this case, too, the corresponding LED will light magenta.

When carrying out these operations, it is important that the remote handset is within range of the wall units.

IMPORTANT

Associations are possible only between separate modules. A touch key on a Vitrum device can be associated with a maximum of other devices as indicated below. So the total number of touch keys that you can control is variable and depends on the kind of association you make. For example, associating a touch key to 10 Vitrum I means that you can control up to 10 other touch keys; but associating a touch key to 10 Vitrum IV means that you will be able to control up to 40 other touch keys.

Vitrum touch keys will glow **red** if the limit is exceeded.

In order to cancel associations that have been entered, simply perform the same procedure but press the **"DIS"** key on the HOME MASTER remote handset instead of **"ASC"**.

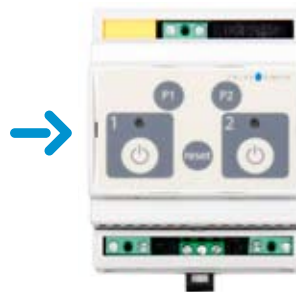
Model	DIN1	DIN2
Max nr. of associations*	10	10

* If you are using a Router Home master, you have to decrease numbers by one unit.

7. FACTORY RESET

Proceed as follows to reset the DIN module unit to the original factory settings:

- A. EXCLUSION** from the home network using the HOME MASTER remote handset.
- Press **"EXC"** on the HOME MASTER remote handset and wait until the yellow LED lights.
 - Press and hold down the left touch key on the module unit for at least 8 seconds.



- The DIN module will flash red three times and sound an acoustic signal to indicate that the original factory setting has been restored.

B. **FACTORY RESET** using the reset button

- Press the Reset button and hold down for at least 3 seconds. The DIN module will flash red three times and sound an acoustic signal to indicate that the original factory setting has been restored.

WARNING: Use of the RESET button should be as a line of last resort if the recommended method (outlined above) cannot be used.

8. PROTECTIVE DEVICES

The DIN module unit is fitted with electronic protective devices that intervene in the event of malfunctions caused by factors such as:

- Short circuits.
- Current overload.
- Incorrect association between the setting entered on the Vitrum unit and the type of light

If one of these malfunctions should occur, the DIN module unit will **flash red**. If the problem is caused by a current overload, the DIN module unit will not resume operation until normal working conditions have been restored. In the event of a short circuit, the DIN module will disconnect the power supply to the actuators to which it is connected. However, the buttons will remain operative so that once the cause of the short circuit has been identified and rectified the lights can be switched on again.

In the event of incorrect association between the power supply mode and the type of light, the DIN module will automatically attempt to set the correct mode; if the problem persists when switching on again, please contact your local service centre.

9. SUPERVISION



If you have decided to activate the **HOME MASTER** supervision apps for iPhone® or iPad® you will find the **“identification”** function featured in every Vitrum unit to be extremely useful. **“Identification”** status is indicated when all the illuminated rings glow magenta and begin to flash. This functional status is created directly by the supervision app as soon as the corresponding command is entered.



The free **Home Master App** for your iPad® can be downloaded from the **Apple Store**.

10. COMPATIBILITY



All Vitrum wireless devices are tested and certified to **Z-Wave** specifications and are designed to interact with certified Z-Wave products marketed by other manufacturers. Certified Z-Wave devices of different types or designed for other applications may be added to your home network and if they support the function they can also be used as repeaters to communicate with your Vitrum wireless units. In this way, your system can easily be extended to operate with different applications and thus to adapt to your specific needs.

11. COMPLIANCE WITH EC DIRECTIVES

All Vitrum wireless units are built in compliance with the following European directives: T.2006/95/CE, E.M.C.:2004/108/CE, R&TTE:1999/5/CE

The manufacturer assumes no responsibility for any use not indicated in this manual.

Think Simple reserves the right to modify its products at any time and without notice in order to better their quality and functionality. Therefore, all the information given in this datasheet may be subject to possible modifications. For these reasons we invite you to check for updates of the Vitrum users guide at www.vitrum.com/eng/content/download

MAIN TECHNICAL SPECIFICATIONS

DIN Dimmer Wireless Module

	Modulo DIN2
Power supply	240V/50Hz
Energy consumption	<6 w
Operating temperature	-10 +45° C
Relative humidity	MAX 90%
Temperature range	-40°C / +55°C
Total load capacity	
TRAILING EDGE mode (resistive loads)	10 A
Wireless Z-wave modem frequency	868,4 MHz
Z-Wave modem open air range of communication	20 mt
ECO-switch operating mode	YES
Short-circuit protection	YES
Overheating protection	YES
Automatic Trailing Edge/Leading Edge selection in case of thermal overload intervention	YES
Protection Rating	IP 20

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