

Universal Dimmer D1-R

Radio linked with power consumption measurement



Specifications

The universal dimmer D1-R is a radio controlled dimmer with integrated power consumption measurement. In the current DIN-rail version, it is compatible to standard fuseboxes and fully integrates into the rest of your smart home. It is not only suitable for new buildings, but also for existing buildings, because retrofitting has, due to use of radio technology, no special requirements to the electrical installation. The system can gradually be extended by adding new components. The universal dimmer D1-R offers full functionality when combined with other components of the ubisys smart home product line and allows for example:

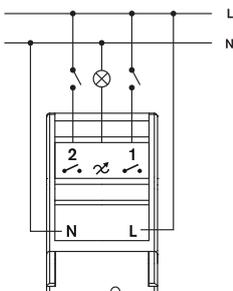
- Freely configurable assignments between control elements and consumers
- Scenes and group controlling
- Time and event controlled actions
- Continuous metering
- Surveillance
- Control via smartphone and tablet using the ubisys app, or as usual via buttons or switches

More information about the features of the ubisys smart home product line can be found at www.ubisys.de.

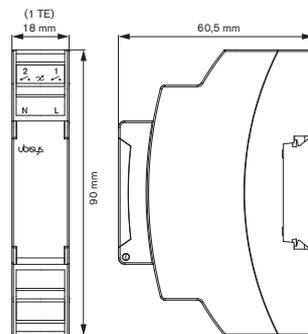
Installation

The universal dimmer D1-R meets the requirements of DIN 43880 and is designed for installation in fuseboxes, mounted on cap rails according to EN50022.

Leads:



Dimensions:



During installation, the general risks of household voltage networks have to be noted!

Zigbee Initial Commissioning (Brand New Device)

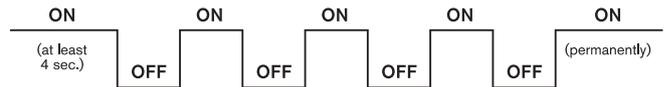
1. Connect the unit to a power source (according to the connections).
2. Open a Zigbee network: when using the ubisys gateway, tap **Configuration** -> **Basic Configuration** -> **Open for new devices** in the ubisys app (if you are using third-party gateways or apps, follow the corresponding procedure).
3. The Zigbee network is open and the device joins.
4. The device appears in the component list: **Configuration** -> **Basic Configuration** -> **Components**.

Factory Reset

Power-Cycle Sequencing Factory Reset: It is possible to instigate a factory reset using a special power-cycle sequence without having access to the device itself (only to its power supply). The only requirement is a simple on/off sequence in a 1-second rhythm:

1. The device has to be powered up for at least 4 seconds.
2. Power off for a second.
3. Power on for a second.

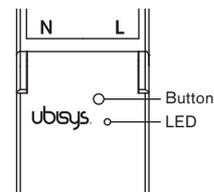
Repeat steps 2.-3. in the aforementioned **1-second rhythm** another 3 times, and with the last sequence keep the device powered up (see illustration).



4. The device will automatically reboot to the original factory settings.

Factory Reset via Button: To reset the device to its factory fresh settings (e.g. in order to join it to another network afterwards), press the button in the larger of the two holes on the front for more than 10 seconds until the LED starts flashing rapidly.*)

Only use the electrically isolated tool provided with the device to press the button in the hole.



*) If the device has legacy firmware this feature might not be available. In this case, keep the button pressed for one second, until the LED flashes three times and then blinks once every second. Then press the button four times for less than a second, until the LED flashes five times, followed by a pause, then flashes five times again, followed by a pause, etc. In this state, keep the button pressed for more than a second until the LED starts flashing rapidly.

Configuration

Upon delivery the factory settings of universal dimmer D1 has switching input 1 assigned to the corresponding switching output. So it can initially be operated autonomously without a radio network. Input port 2 is not configured by default.

For integration into the smart home radio network, the universal dimmer D1-R has to be configured first. Direct access to the universal dimmer D1-R is not necessary for configuration. That means that network configuration can also be done after successful electrical installation. It is best to hold the 16 digit serial number of the universal dimmer D1-R in the construction plan during installation. This allows you to allocate the device at a later point.

When connected to power, the universal dimmer D1-R automatically logs into the Zigbee network. After that it can be configured via the electrician's installation software (ubisys Network Manager) or smartphone app. More information about adding and configuring ubisys smart home components can be found in the ubisys Smart Home app manual.

Preconfiguring the dimming mode

It is possible to preconfigure the dimming mode to leading or trailing edge by using a slightly different power-cycle sequence. More information can be found in the technical reference manual of the D1(-R) (chapter 6.1.1.) at www.ubisys.de.

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Technical information

Rated voltage	230 V ~, 50 Hz
Dimming	Phase angle (L) and phase trailing edge (R, C) 0 – 100% Automatic selection of method through load detection (R/L/C) or explicit demand (e.g. for dimmable Retrofit-LEDs)
Max. switching power	500 VA
Bulb load	500 W
High voltage halogen	500 VA
Low voltage halogen, wound transformer with at least 85% rated load	500 VA
NV halogen switch transformer	500 VA
Dimmable LED	250 VA (10%)
Dimmable ESL	50 VA (10%)
Own consumption	0.3 W
Radio technology	Zigbee 3.0 in 2.4 GHz ISM band, IEEE 802.15.4 channels 11-26, 0...5dBm transmitting power *)
Environment temperature	-20°C - +45°C

*) More information about radio technology can be found at www.ubisys.de.

Certifications and Environmental Contribution



Caution
Subjecting the inputs (white, grey) with voltage without correct connection of L, N will destroy the device.

Caution
Subjecting the inputs (white, grey) with a phase different from the operating voltage's one (L, brown) will destroy the device.

Caution
Even unconnected ports can carry threatening voltages.

Hazard notes
Installation should only be performed by a qualified electrician. Wrong wiring from not following instructions can cause unforeseen behavior, such as fire or destruction of the device. There is a risk of electric shock. Electrical shock can result in death. Prior to installation, disable voltage and cover live parts. Opening the unit or other devices voids the warranty.

Conformity

This device complies with the applicable directives and standards of the EU match.

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