

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. For new buildings and renovations, it helps reducing both planning and cabling costs. The system can gradually be extended by adding new components. Determine scope and timing at any time by yourself.

The universal dimmer D1-R offers full functionality when combined with other components of the ubisys smart home product line and allows for example:

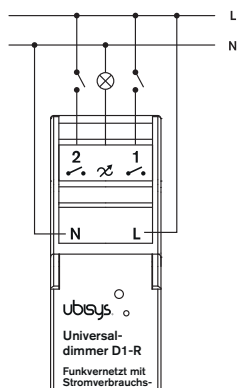
- Freely configurable assignments between control elements and consumers
- Scenes and group controlling
- Time and event controlled actions
- Continuous metering
- Surveillance
- Controlling via smartphone app or, as usual, via button or switch

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

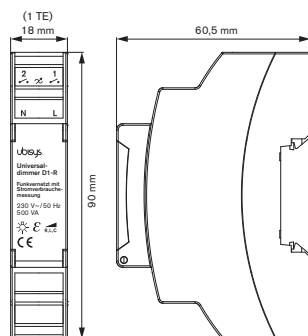
Installation

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!

Basic ZigBee Commissioning

The device joins an open ZigBee network when it is factory new and power is applied.

Factory Reset

Power-Cycle Sequencing Factory Reset: It is possible to instigate a factory reset using a special power-cycle sequence. This is equivalent to selecting menu item #5, with the advantage that you need no access to the device itself (only to its power supply).

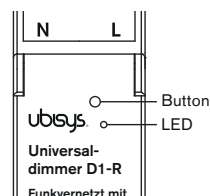
1. Power the device for at least four seconds.
2. Interrupt the power supply for at least a second.
3. Reapply power for less than two seconds but more than half a second. Notice that at the end of this cycle, the device is off and should remain off for at least a second.
4. Repeat the previous step two more times, for a total of three short power cycles.
5. Apply power to the device and leave it powered on. The device will now factory reset and reboot.

Note: 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.

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 Installation manual.

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

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Low voltage halogen, wound transformer with at least 85% rated load	500 VA
NV halogen switch transformer	500 VA
Dimmable LED	50 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.

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, enable 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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