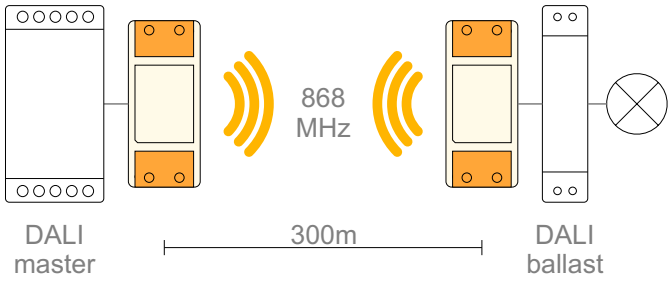
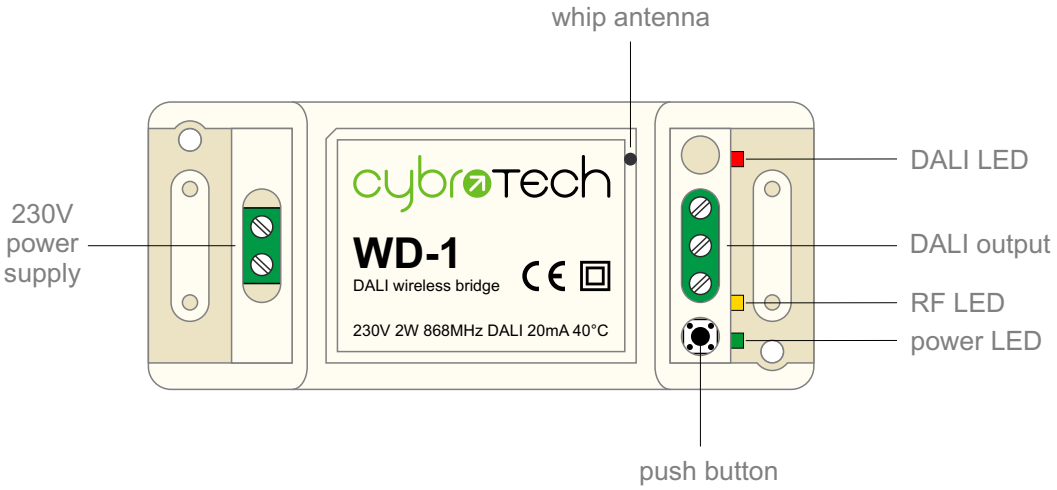
WD-1

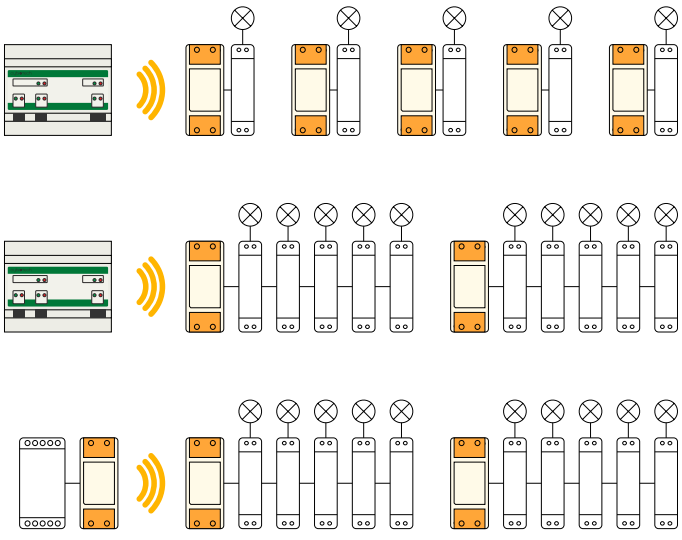
Wireless DALI-to-DALI bridge

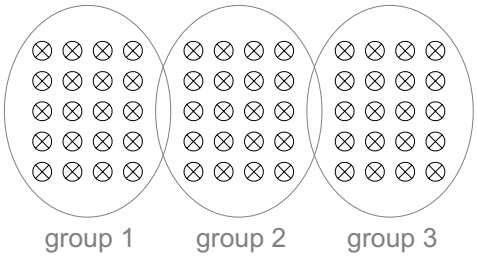
Features

- replacement for DALI wiring
- wired/wireless combinations
- multiple ballasts per bridge
- internal DALI power supply
- very long range, no hopping
- protected private connection
- multiple addressable groups









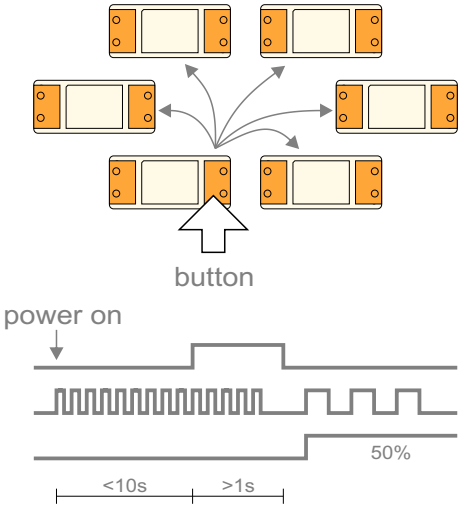
For a system with more than 64 ballasts, create two or more wireless groups. Groups are fully independent, each has a separate DALI master. Group can be created only at power-on, few seconds later all devices are securely locked. CybroDaliConfigurator must be used to discover and configure devices. Once ready, any DALI master may be used.

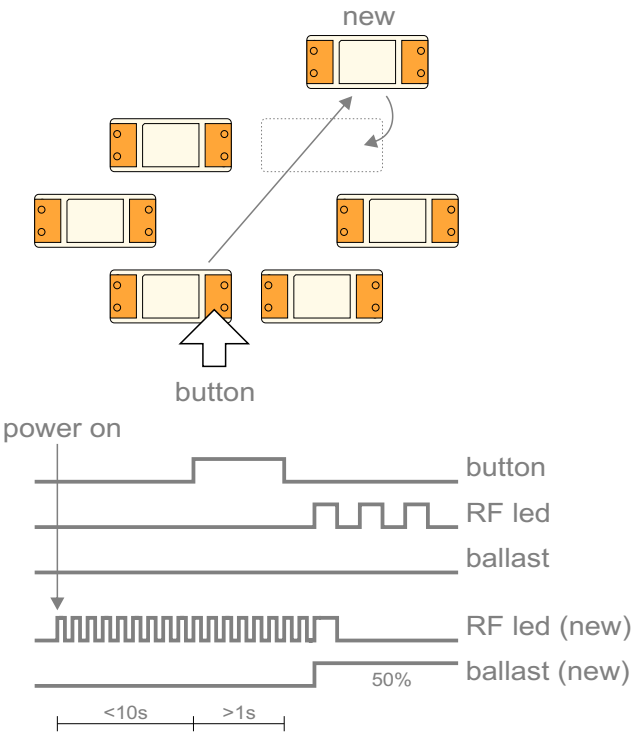
Radio configuration

Create a new group

- turn on all devices at the same time
- within 10 seconds, while RF led is still blinking, press and hold button on one of the devices

After about a second, the new group address is randomly generated and sent to all devices. RF led will blink 3 times, and all ballasts are set to 50%, to confirm the new address.





Add new device to the group

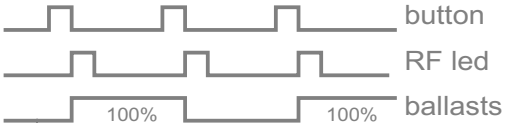
- turn on new device
- within 10 seconds press and hold button on one of the existing devices

After about a second, the existing group address is sent to the new device. RF led will blink 3 times. New ballast is set to 50%, to confirm the address.

Connection check

- press the button shortly

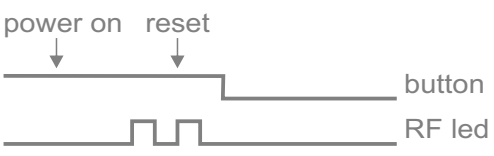
All ballasts will toggle between 0 and 100%.



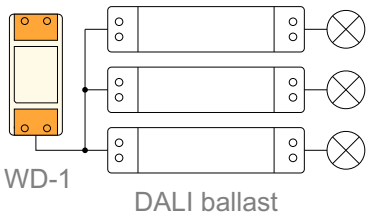
Factory reset

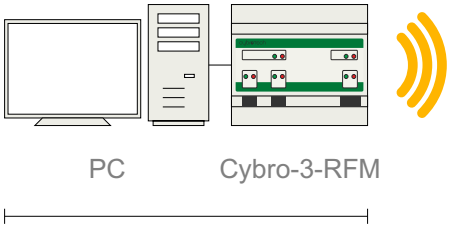
- hold the button and turn the device on

RF led will blink twice. Group address is now reset to default. Other devices are not affected.

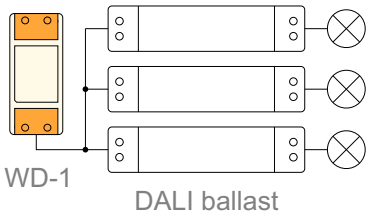


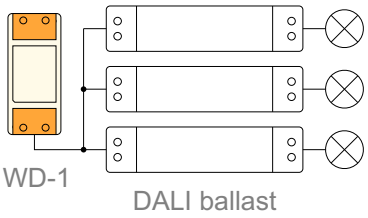
DALI configuration

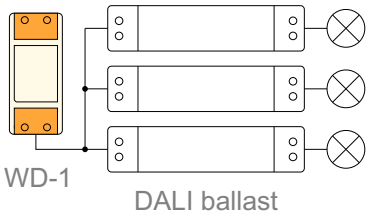




Cybro controller with configurator program and mini scada, is used to configure addresses and groups.





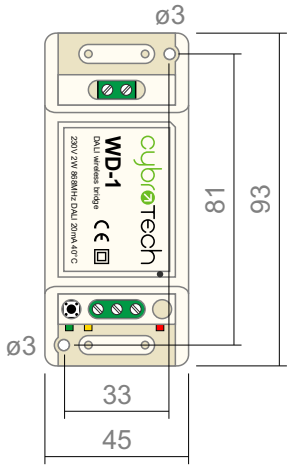


Frequency subband

865.0-868.6	868.7-869.2	869.3-869.4	869.4-869.6	869.7-870.0
1% 25mW	0.1% 25mW	1% 10mW	10% 500mW	100% 5mW

Device uses L subband, which allows 1% utilization and 25mW output power

Mounting



Device should not be installed inside the metal cabinet. Distance from antenna to the nearest object should be at least 10cm.

Technical specifications

DALI

DALI power supply	internal, 18V 20mA
Ballasts per adapter	5 (2mA) or 10 (1mA)
Bus length	50m max.
Galvanic isolation	4kV DALI to mains (SELV)
230V tolerance	no

Radio

Frequency band	868MHz (EU)
Subband	L 866.8MHz, 1% utilization
Modulation	FSK, 160kHz bandwidth
Group address	32-bit, automatically generated
Connection time	10s power-on to network ready
Output power	25mW
Minimum distance	3m between devices
Operating range	300m with optical visibility

General

Power supply	230V, 50..60Hz, 2W
Terminals	0.25..1.5mm2
Operating conditions	-20..+40°C, 0..85% rh nc
Storage temperature	-40..+85°C
Dimensions	93x45x27mm, 86mm antenna
Weight	80g
Degree of protection	IP20
Standards	EN 60730-1, EN 300 220-2, EN 301 489-1, EN 301 489-3

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