Built-In 1-10 V Radio Control Unit

Order No.: 0865 00

Function

This 1-10 V radio control unit is a component of the radio bus system. It facilitates the switching and dimming of electronic ballasts or transformers provided with a 1-10 V interface once it has received a certain radio telegram.

The radio control unit switches (short-time key actuation) or dims (long-time key actuation) the lighting, respectively. It is operated via a hand-held, wall-mounted or universal radio transmitter. The desired switch-on brightness can be stored (memory function).

You can assign up to 30 different radio channels to the radio control unit.

When receiving a signal from the radio detector, the radio control unit switches on for a follow-up time of approx. 1 minute.

Lightscapes

The radio control unit can be integrated into lightscapes. You can call these with the hand-held or wall-mounted radio transmitter.

For this purpose, just assign to the radio control unit the desired lightscape key of the hand-held or wall-mounted radio transmitter.
Up to five different lightscapes can be stored in the memory.

ALL ON / all off

When a channel is assigned to the radio control unit, the ALL-ON key of the hand-held radio transmitter or the ALL OFF key of the hand-held or wall-mounted radio transmitter, respectively, is automatically assigned at the same time.

Depressing the ALL-OFF (ALL-ON) key of an assigned hand-held or wall-mounted radio transmitter causes the load to be switched off (on).

Fitting

Safety instructions
Attention: Electrical equipment must be installed and fitted by qualified electricians only.

Installation

The distance to electrical loads (e. g. Tronic transformer, electronic ballast, TV) must be at least 0.5 m. Note the technical connection conditions of the power stations.

Check the electronic ballast for suitability prior to installation.
Use electronic ballasts and fluorescent lamps or transformers, respectively, of the same manufacturer, type and power level.

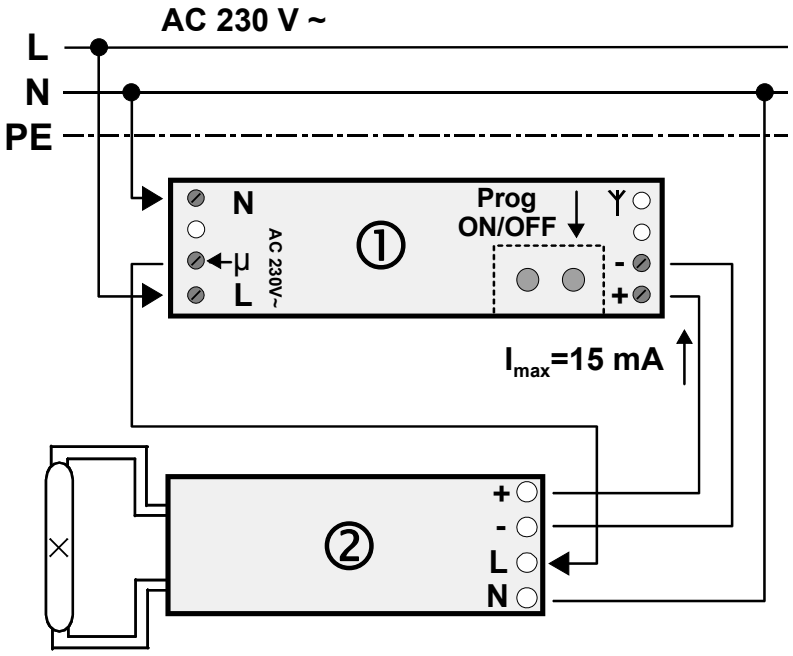
Only use electronic ballasts or transformers provided with standardised 1-10 V interfaces as per DIN EN 60928 (electrical isolation between mains supply and 1-10 V input).

Important:
Some types of electronic ballasts bring the fluorescent lamps to maximum brightness for a short time after the supply voltage has been applied. Only after this period has lapsed, such electronic ballast responds to the control voltage applied and sets the brightness of the lamp correspondingly.

Run the control wiring (type, wire cross section) in accordance with the VDE regulations for 250 V lines. The load and control lines must not be run within a common cable.

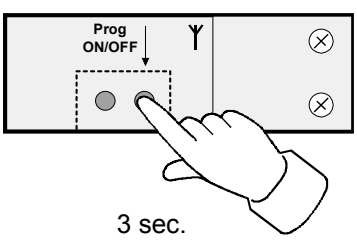
The maximum number of electronic ballasts or transformers, respectively, triggered by the radio control unit results from the maximum connected load (refer to 'Specifications'). A total control current of I = 15 mA must not be exceeded (refer to the specifications of the electronic ballast or transformer manufacturers, respectively).
To protect the device series-connect a 10 A automatic cut-out.

Connect radio control unit ① and electronic ballast ② as shown in the illustration below.



Assigning Radio Transmitters and Radio Receivers

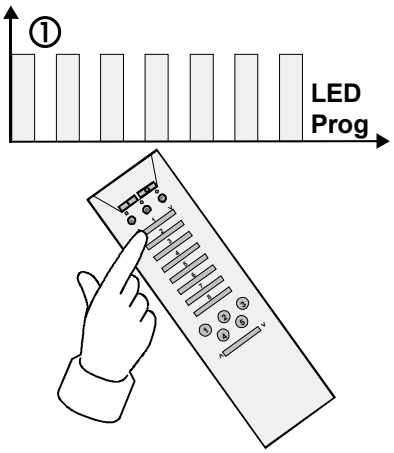
Note:
During the assigning procedure, the sensitivity of the radio receivers of approx. 100 m (in the free field) is reduced to some 5 m.



Procedure

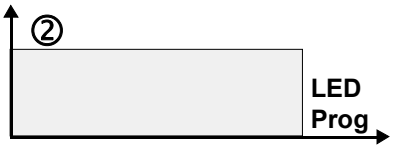
1. Switch off the lighting connected to the radio control unit by shortly (< 1 s) depressing the **ON/OFF** key.

2. Depress the **ON/OFF** for at least 3 s.



The red **Prog** LED blinks (duration approx. 1 min) ①. During this time, one radio channel can be assigned.

3. Initiate a radio telegram at the selected radio transmitter within this time (refer to "Radio Transmitter" Operating Instructions):
   Assigning a Channel
   Depress the channel key for longer than 1 s.
   Assigning a Lightscape Key
   Depress the lightscape key for longer than 3 s.
   Assigning a Radio Detector
   Trigger a movement within the detection field of the radio detector.



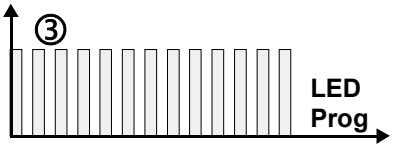
4. The 1-10 V radio control unit confirms the storage by the red **Prog** LED being permanently lit ②.

5. You will automatically exit the programming mode after approx. 1 min., or by depressing the ON/OFF key. The radio control unit will then be in the service mode.

Important:
When a channel is assigned, the ALL ON or ALL OFF key, respectively, is automatically stored in the radio control unit.

If all 30 memory locations are occupied, you will have to clear a radio transmitter already assigned to be able to program a new channel.

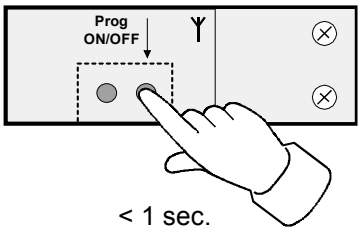
Clearing a Channel Assignment



Any new assignment of the same lightscape in the radio control unit will clear the existing assignment.
Any new assignment of the same channel in the radio control unit will clear the existing assignments of the channel and the ALL-ON or ALL-OFF keys, respectively.
All channels and lightscape keys must be cleared individually.
Successful clearance is indicated by the red **Prog** LED blinking more quickly ③.

Operation

The radio control unit can be operated directly on the device, or by receiving a learned radio telegram from a hand-held, wall-mounted or universal radio transmitter.



On the Radio Control Unit

By pressing the ON/OFF key for less than 1 s, the radio control unit is permanently turned on or off, respectively (alternating operation).

Memory Function

You can store the adjusted dimming value (brightness value) in the radio control unit. This memory value can be recalled by a short key depression.

Procedure

1. Switch on the light with the desired brightness.

2. Depress the **ON/OFF** key for at least 3 s.
   This is confirmed by a "soft start", i.e. the light is switched off and dimmed brighter, up to the stored memory value.

When the lamp is switched on next time by a short key depression, this stored value is recalled.

Maximum brightness is the default memory value.

With Radio Transmitter

Switching on or dimming, respectively, is effected with the aid of the hand-held, wall-mounted or universal radio transmitter.

When an assigned telegram from a radio detector is received, the radio control unit will switch on for about 1 min.

Lightscape

The data of a lightscape (brightness and lighting) is stored in the radio control unit. You can alter a lightscape any time by storing new data.

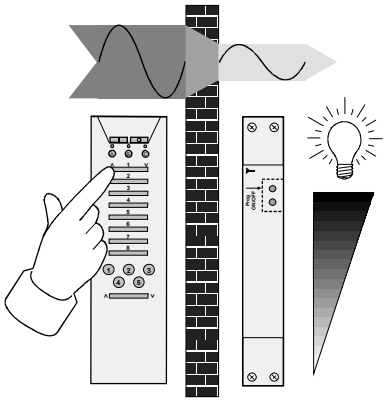
Before you can store or recall a lightscape, respectively, you must assign the latter to a lightscape key of a hand-held or wall-mounted radio transmitter (refer to "Assigning a Lightscape Key").

Storing a Lightscape

Procedure
1. Adjust the desired brightness of the lighting.

2. Depress the desired lightscape key of the radio transmitter for at least 3 seconds.
   Important:
   The previous lightscape is recalled first (do not release the key).
   After approx. 3 s, the new lightscape is activated and stored.

Radio Transmission



Radio transmission takes place on non-exclusive frequencies. Therefore, interference cannot be excluded. This type of radio transmission is not suitable for safety applications such as emergency shut-off or emergency calling functions.

The range of a radio transmitter (100 m max. in the free field) depends upon the local conditions of the building:

Dry Material	Permeability
Timber, gypsum, gypsum plaster boards	ca. 90 %
Brickwork, particle boards	ca. 70 %
Reinforced concrete	ca. 30 %
Metal, metal grating, aluminium overlay	ca. 10 %

Specifications

Power supply:	230 V AC, 50/60 Hz
Control voltage:	1 – 10 V
Control current:	15 mA max.
Electrical isolation for 1-10 V:	2 kV base isolation
Switching contact:	µ-relay contact
Connected load	
Resistive load:	1800 W max.
Electronic ballast, transformer:	type-dependent
Automatic cut-out connected in series:	10 A
Number of radio transmitters:	30 max.
Receive frequency:	433.42 MHz, ASK
BZT approval:	LPD-D
Dimensions (LxWxH):	187 x 28 x 28 mm
Temperature range:	0 to +55 °C

Acceptance of guarantee

We accept the guarantee in accordance with the corresponding legal provisions.

Please return the unit postage paid to our central service department giving a brief description of the fault:

Gira
Giersiepen GmbH & Co. KG
Service Center
Dahlienstrasse 12
D-42477 Radevormwald

CE The CE sign is a free trade sign addressed exclusively to the authorities and does not include any warranty of any properties.

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