

## Wireless actuator

Controller FSG70/1-10V for  
electronic ballast units 1-10V

valid for devices from production week 35/12  
(see bottom side of housing)

Dimming actuator 1 channel, 1 NO contact not potential free 600VA and 1-10V control output 40mA. With adjustable minimum brightness and dimming speed. With switching operation for light alarm clocks, children's rooms and snooze function. Bidirectional wireless and with repeater function. 1.7 watts standby loss.

Mounting in the 230V power supply cord, e.g. in false ceilings. 100mm long, 50mm wide and 31mm deep.

Starting in production week 35/2012 with **bidirectional wireless**; in addition, a **repeater** function can be switched in. Every change in state and incoming central command telegrams are confirmed by a wireless telegram. This wireless telegram can be taught-in in other actuators, in the FVS software and in FUA55 universal displays.

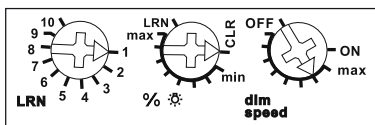
State-of-the-art hybrid technology combines advantages of nonwearing electronic control.

**Zero passage switching to protect contacts.**

The brightness level is stored on switch-off (memory).

In case of a power failure the switch position and the brightness stage are stored and may be switched on when the power supply is restored.

## Function rotary switches



The **minimum brightness (fully dimmed)** is adjustable with the **% dim speed rotary switch on the side**. In the setting LRN up to 35 wireless push-buttons can be assigned, of which one or more central pushbuttons.

The dimming speed is adjustable using the **dimming speed rotary switch on the side**.

The load is switched on and off by a bistable relay at output EVG. Switching capacity for fluorescent lamps or LV halogen lamps with EVG 600VA.

**By using a bistable relay coil power loss and heating is avoided even in the on mode.**

After installation, wait for short automatic synchronisation before the switched consumer is connected to the mains.

**The pushbuttons can be taught-in either as direction switches or universal switches:**

**As a direction switch**, press up is brighter and press down is darker respectively above short pressing means switch ON and below short pressing switch OFF. A double click above activates automatic updimming until full brightness with dim speed. A double click below activates snooze function. The children's room function will be realized with the upper switch.

**As a universal switch**, change the direction by briefly releasing the pushbutton. With switching operation for children's rooms and snooze function.

**Switching for light alarm clocks:** A wireless signal of a time clock which was taught-in accordingly starts the wake up function by switching on the light at the lowest brightness level and dims up slowly until the maximum level is reached. Dependent on the set dim speed the wake up time is between 30 and 60 minutes. The dimming process is stopped by tapping briefly. The contact of the timer must connect terminals +12V and LW at least 0.2 seconds.

**Switching operation for children's rooms:**

If the light is switched on by holding down the pushbutton (universal switch or direction switch above), it starts at the lowest brightness level after approx. 1 second and dims up slowly as long as the pushbutton is held down. The last saved brightness level is not modified.

**Snooze function** (universal switch or direction switch below): With a double impulse the lighting is dimmed down from the current dimming position to the minimum brightness level and switched off. The current dimming position as well as the adjustable minimum brightness level determine the dimming time (max. = 60 minutes) which can be reduced as required. It can be switched off at any time by short-time control commands during the lighting is dimmed down.

**The LED on the side behind the LRN rotary switch** performs during the teach-in process according to the operation manual. It shows control commands by short flickering during operation.

**Technical data**

Fluorescent lamp or low voltage halogen lamp with electronic ballast units	600VA
Standby loss (active power)	1.7W

**Teaching-in wireless sensors in wireless actuators**

**All sensors must be taught-in in the actuators so that they can detect and execute commands.**

**Teaching-in actuator FSG70/1-10V**

Also the mains connection N/L is required for teach-in.

The teach-in memory is empty on delivery from the factory. If you are unsure whether the teach-in memory contains something or not, **you must first clear the memory contents completely:**

Set the middle rotary switch to CLR. The LED flashes at a high rate. Within the next 10 seconds, turn the left rotary switch three times to the right stop (turn clockwise) and then turn back away from the stop. The LED stops flashing and goes out after 2 seconds. All taught-in sensors are cleared.

**Clear individual taught-in sensors** in the same way as in the teach-in procedure, except that you set the middle rotary switch to CLR instead of LRN, and operate the sensor. The LED previously flashing at a high rate goes out.

**Teaching-in sensors**

- Set the left rotary switch to the required teach-in function:
  - timer as wake-up light;
  - teach-in 'central off';
  - universal switch on/off and dim;
  - teach-in 'central on';
  - teach-in direction switch: top 'switch on and dim up', bottom 'switch off and dim down';
 Positions 6 to 10 are unassigned.
- Set the middle rotary switch to LRN. The LED flashes at a low rate.
- Operate the sensor to be taught-in. The LED goes out. As universal switch, teach-in either the top and bottom pushbutton or as direction switch, operate only top or bottom.

To teach-in further sensors, turn the middle rotary switch briefly away from position LRN. Continue the procedure from pos 1.

After teach-in with the left rotary switch, activate the required function:

- Pos. 1: without switching function for children's rooms and snooze function
- Pos. 2: with switching function for children's rooms
- Pos. 3: with snooze function
- Pos. 4-10: with switching function for children's rooms and snooze function

Use the middle rotary switch to set the minimum brightness.

Use the right rotary switch to set the dimming speed.

**Switching on/off repeater:**

Set the middle rotary switch to LRN. Switch on supply voltage. The repeater is switched on or off. When the power supply is switched on, the LED lights up for 2 seconds = repeater off (as-delivered state) or 5 seconds = repeater on to indicate the state.

**Teaching-in feedback of this actuator in other actuators or FVS software:**

Use the right rotary switch for turning on and off and simultaneously transmitting of the confirmation telegram.

**Teaching-in feedback of other actuators in this actuator:**

'Switch on' will be taught-in in position 'central ON'.

'Switch off' will be taught-in in position 'central OFF'.

After teach-in the desired minimum brightness will be set.



When an actuator is ready for teach-in (the LED flashes at a low rate), the very next incoming signal is taught-in. Therefore, make absolutely sure that you do not activate any other sensors during the teach-in phase.

**Important note!**

**Only skilled electricians may install this electrical equipment otherwise there is the risk of fire or electric shock.**