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Eltako ELECTRONICS

Wireless Powernet repeater CE
FPR12-12 V DC

Wireless Powernet repeater for the Powernet connectors FPV12 and the Powernet meter connectors FPZ12.
Only 0.7 watt standby loss.

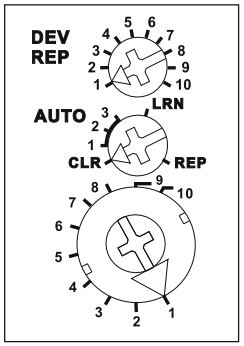
Modular device for DIN-EN 60715 TH35 rail mounting.
2 modules = 36 mm wide, 58 mm deep.

The 12 V DC power supply is provided by a switching power supply unit SNT12-12 V DC that is only 1 or 2 modules wide. With a power consumption of 12 W or 24 W, it can also power actuators as a rail mounted device.

The length of the 230 V transmission line between the input Powernet connector and the repeater can be up to 300 metres. It is dependent on the contact resistance of the intermediate connections and the cable layout. The repeater also lengthens the distance by up to 300 metres.

Up to 10 FPZ12SO devices can be taught-in for up to 30 meters. Two connected FPV12 devices require no teach-in since the rotary switch settings are sufficient for this.

Up to 24 consecutive incoming wireless telegrams are buffered and pushbutton signals are transferred as first priority. Transmission takes place in compliance with CENELEC B in the range from 95 to 125 KHz at up to 2.5 Kbps.

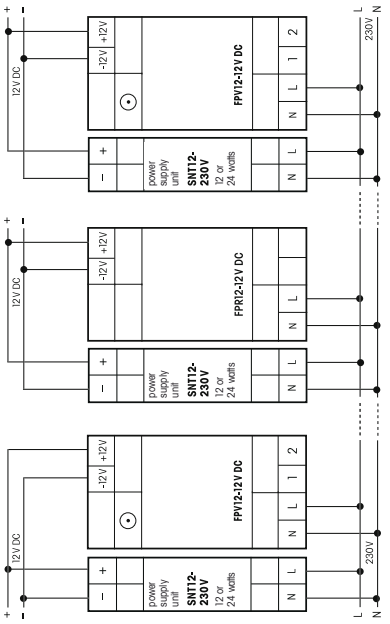


Initialisation: Initialisation starts after the power supply is applied, after the address is changed (top rotary switch) or after the group is changed (bottom rotary switch). The green LED lights up for 2 s and the red LED lights up for 10 s. During initialisation, telegrams continue to be received and buffered. On completion of initialisation the data is sent. In case of extreme faults on the network, the FPR12 automatically performs an initialisation.

Every FPR12 receives a unique device address 'DEV' 1..10 and AUTO 1.

The **green LED** under the bottom rotary switch accompanies the teach-in process according to the operating instruction and indicates incoming Powernet telegrams in operation by blinking briefly.

Typical connection



Teaching-in wireless sensors in wireless actuators

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

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 **delete the memory contents completely:**

Set the middle rotary switch to CLR. The green LED flashes at a high rate. Within the next 10 seconds, turn the upper rotary switch three times to the right stop and then turn back away from the stop. The LED stops flashing and goes out after 10 seconds.

Delete individual FPZ12SO devices (meters):

1. Set the middle rotary switch to CLR. The green LED flashes very rapidly.
2. Set the bottom rotary switch to the FPZ Group 1 to 10.
3. Send a teach-in telegram using the FPZ12SO. The green LED goes out.
4. After deletion, set the middle rotary switch to AUTO1.

Teaching-in FPZ12SO (meter) in the FPR12:

Up to 10 FPZ12SO devices (30 meters) can be taught-in.

1. Set the middle rotary switch to LRN. The green LED flashes slowly.
2. Set the bottom rotary switch to the FPZ Group 1 to 10.
3. Send a teach-in telegram using the FPZ12SO. The green LED goes out.
4. After teach-in, set the middle rotary switch to AUTO1.

Operational settings
Powernet repeater for FPZ12 devices

Set the middle rotary switch to AUTO1.
Set the upper rotary switch to its unique device address (DEV) 1..10.
Set the bottom rotary switch to FPZ Group 1 to 10 to which the FPR12 device belongs.

FPV12 devices require no teach-in in the FPR12.

Operational settings
Powernet repeater for FPV12 devices

Set the middle rotary switch to 'REP'.
Set the upper rotary switch to 'REP' 1..6.
1: Links FPV1 to FPV2
2: Links FPV1 to FPV3
3: Links FPV1 to FPV4
4: Links FPV2 to FPV3
5: Links FPV2 to FPV4
6: Links FPV3 to FPV4
Set the bottom rotary switch to the FPV Group 1..10 to which the FPR12 belongs.

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.

06/2011 Subject to change without notice.