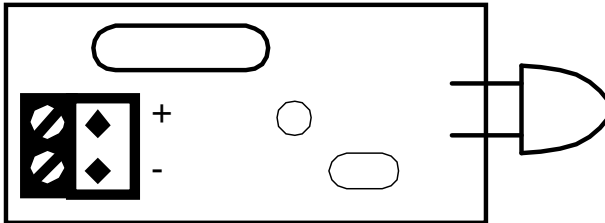


Comfort IR Transmitter Modules

There are 3 types of Infrared Transmitter modules which can be used with Comfort; IRM01 for longer range (up to 8 meters), IR01W and IR03W for shorter range transmission (up to 1 meter)

IRM01 Infrared Transmitter Module



The IRM01 is meant for longer range infrared transmission up to 8 meters range for line of sight. It is suitable to controlling multiple devices within its angle of sight and range. This includes a 100 ohms series resistor and a series resettable fuse protection against overcurrent. Do not permanently turn on the output connected to the IRM01, otherwise the infrared led may be damaged, or the life may be reduced. Only infrared signals should be used with the output.

Specifications:

Angle: 45 degrees cone

Distance: 8 Meters line of sight

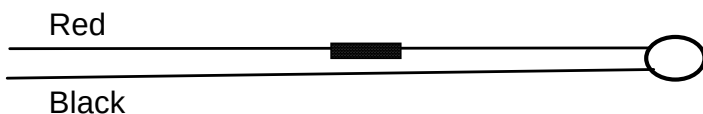
Current: 120 mA pulsed

Series Resistance: 100 ohms 2W

Connections

The JP1 2 pin terminal block is connected to any output of Comfort. Observe the polarity. The (+) terminal should be connected to the center (+12V) terminal of the Comfort output 3 pin terminal block, while the (-) terminal should be connected to the output terminal which is at either end of the Comfort 3 pin terminal block

IR01W Infrared Assembly (round)



IR01W consists of a round infrared transmitter led connected to a cable assembly with integral series resistor. This is designed for short range transmissions up to 1 meter distance. Because of higher series resistance, turning on the output connected to the infrared led will not damage the transmitter.

Specifications:

Angle: 45 degrees cone

Distance: 1 Meter line of sight

Current: 25 mA pulsed

Included Series Resistance: 470 ohms 0.5 W

Connections

Connect the red wire to the positive 12V (centre) pin of the Comfort output, and the black wire to the negative (side) pin of the Comfort output 3-pin terminal block.

Use twisted pairs (CAT 5 is recommended) between the IR transmitters and Comfort. DO NOT run IR cables side by side as it is possible for IR signal from one wire to be induced into another cable which is close by.

IR03W Infrared Assembly (flat)



IR03W consists of a flat infrared transmitter led with double-sided tape which can stick on the surface of the appliance IR receiver. It is connected to a cable assembly with an audio 3.5 mm plug. It has an inbuilt visible red LED to give an indication of the IR signal sent to it. **The IR03W does NOT come with a series resistor, so a 1K ohms resistor should be connected between the Comfort output and the IR03W**

Specifications:

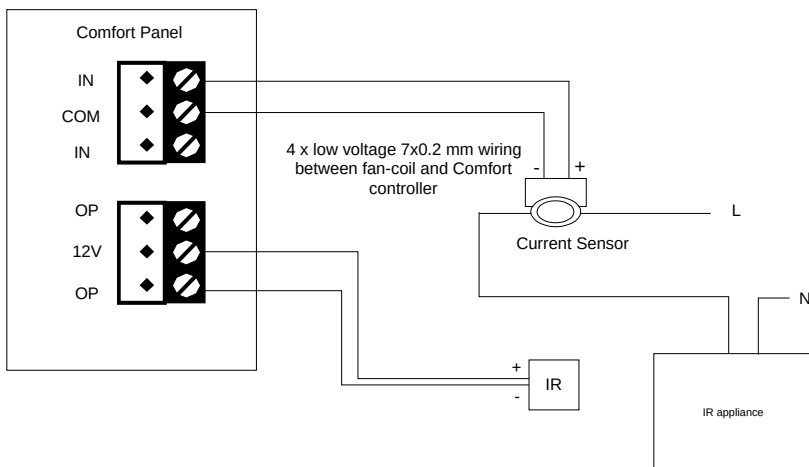
Angle: direct

Current: 25 mA pulsed

Recommended Series Resistance: 1K ohms 0.25 W

Use twisted pairs (CAT 5 is recommended) between the IR transmitters and Comfort. DO NOT run IR cables side by side as it is possible for IR signal from one wire to be induced into another cable which is close by.

Application



Many appliances which have remote control (e.g. TV, hi-fi and other home entertainment equipment) accept the same IR code to switch on and off the equipment. This means Comfort would not know if the appliance is being switch on or off. In such cases, it is advisable to install a Current Sensor Module (CSM01) as shown above to sense the mains current driving the appliance. The Current sensor terminals should be connected to an Input of Comfort.

Programming

Use Action 129 to send IR signals to any Comfort Output

e.g.

129, irno, output sends IR Code *irno* to Output number *output*.

Where *irno* is 1 to 25 for FS17 systems and 1 to 32 for FS18 systems

Output number can be 1 to 64 depending on the number of Outputs in the system

The IR number is programmed from the Configurator IR codes screen.

If a current sensor is connected, program the zone as a normally open switch (Zone Type 8). Set the shunt for the zone to the lower position (2-3) for No End of Line resistor.

This input zone number should be programmed in the appropriate location corresponding to the Control Key (See Worksheet Table 26). This allows Comfort to announce the ON/OFF state of the appliance controlled, based on the feedback input

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