



Flood Level Warning System

RKIT

Installation and Operation Manual

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Description Of Operation

The RKIT1 Flood Level Warning Kit provides a visible and audible high level alert using a REKA capacitive water sensor.

A power switch enables or disables the system and a green power lamp confirms that the system is active. Upon the sensor becoming immersed in water a flashing red warning light alerts the user to a potential flood event and is accompanied by a repeating buzzer.

The capacitive sensor can be mounted onto any outdoor structure such as an outside wall or steps, or a point near a water course to provide an early warning of a potential flood event. Early warning is intended to maximise the time available to install flood defences, activate drainage pump systems, move vehicles and objects of value.

Models

| | |
|-------|--|
| RKIT1 | 10m cable, 230VAC sensor voltage |
| RKIT2 | 40cm cable, 230VAC sensor voltage ¹ |
| RKIT3 | 10m cable, 110VAC sensor voltage ² |
| RKIT4 | 40cm cable, 110VAC sensor voltage ^{1,2} |

| | |
|-------|---|
| RKIT5 | 10m cable, 24VDC sensor voltage ³ |
| RKIT6 | 40cm cable, 24VDC sensor voltage ^{1,3} |

¹40c cable lengths for installations using alternative cable supplied by the installer.

²RKIT3 and RKIT4 are dual input voltage 110VAC or 230VAC

³RKIT 5 and RKIT6 are 24vdc supply and sensor voltage and suitable for vehicular or marine use

Installation

Safety Precautions

Mains Voltage – There are exposed electrical conductors inside this appliance. This appliance must be installed and serviced by a competent electrical technician to the current requirements of BS7671 and IEEE recommendations. Before servicing this appliance, normal safe isolation procedures should be implemented.

Do not touch any mains voltage connection terminals while energised.

Do not attempt to service this item when wet, or in a wet or high humidity environment.

If the housing of the control panel becomes damaged, you must shut down and securely isolate this appliance immediately.

Included Components

RKIT Control Panel
Attached power supply cable
REKA capacitive level sensor

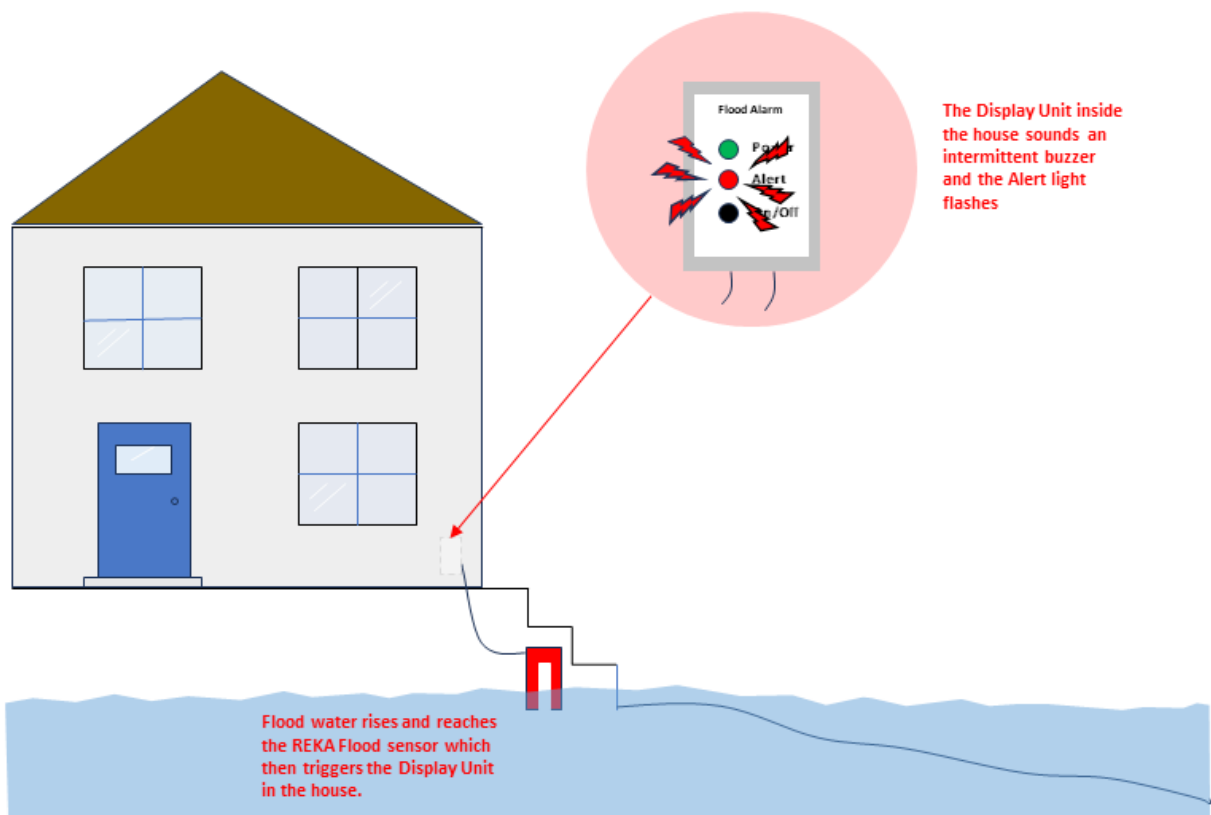
Layout

The control panel cannot be mounted outside, it is not fully weather resistant nor can it be submerged, but can be installed in sheltered outdoor locations (barns, covered areas, etc).

Suitable circuit protection must be installed and should include as a minimum a suitable earth, overcurrent protection, and residual current protection at 30mA, in accordance with BS7671 and applicable regulations.

Ideally the circuit supplying this warning system should be IP68 rated, particularly where wiring is installed at low levels to prevent failure of the supply circuit during a flood event.

3P Technik Flood Level warning Kit

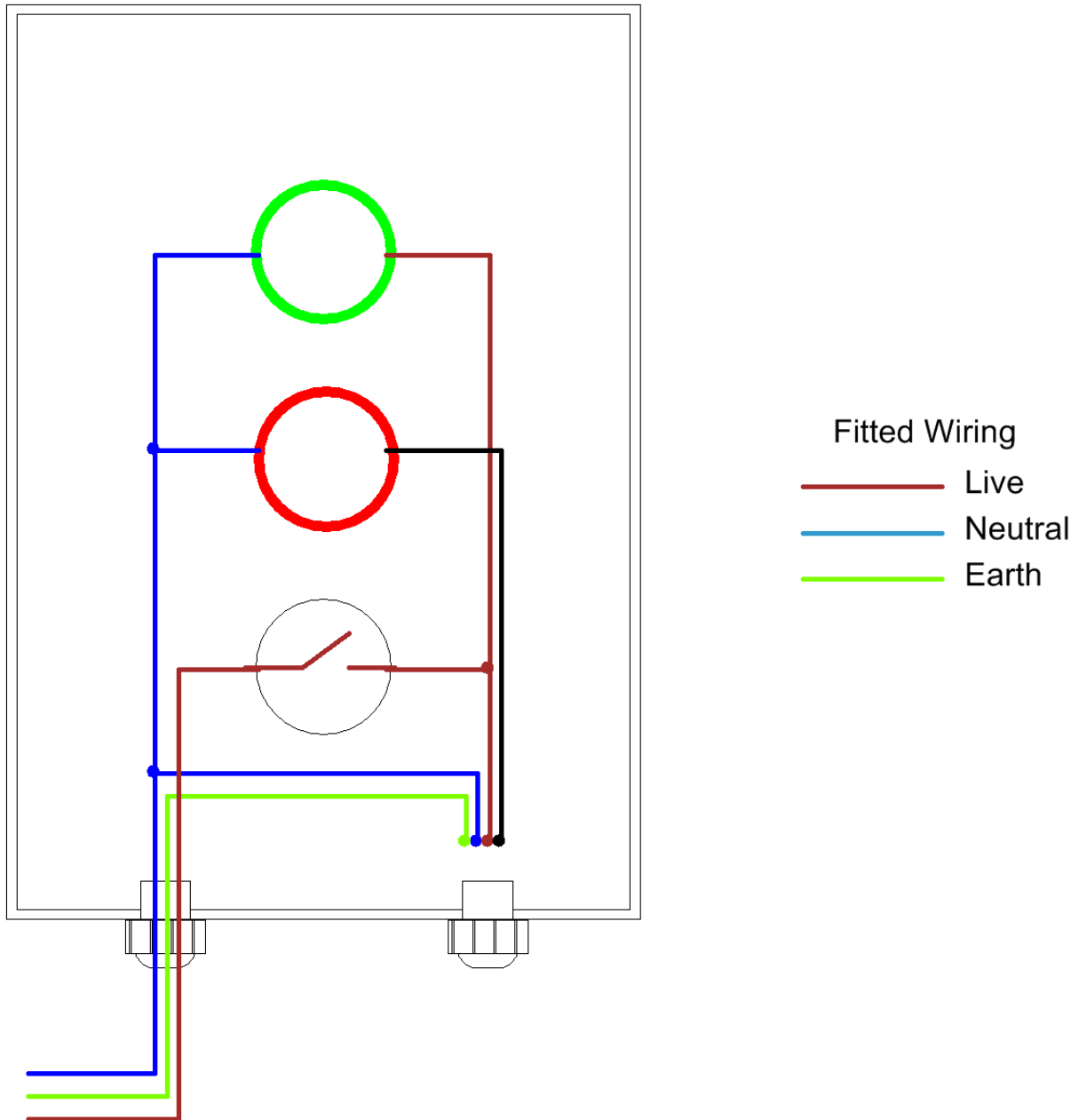


Control Panel Mounting

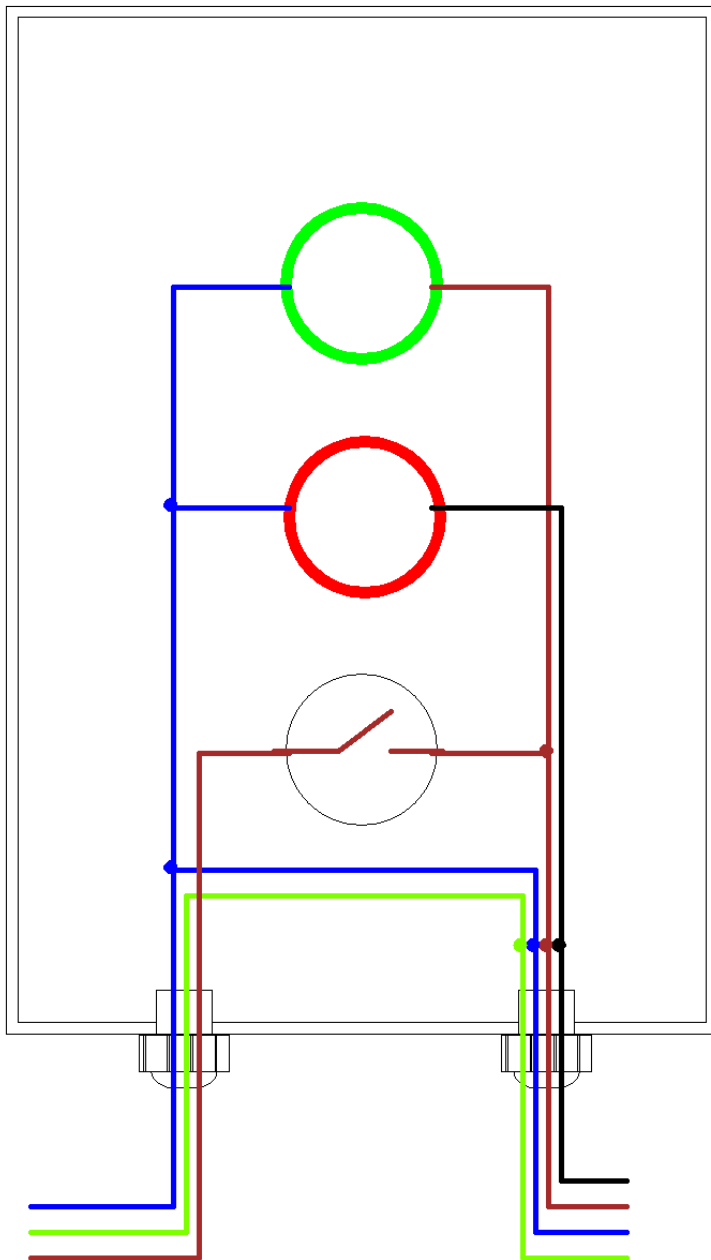
Open the cover of the control panel. There are 4 recesses, one on each corner of the panel. Drill through at these locations and attach to the wall or a suitable support, taking care not to damage cabling inside the panel. Fixings are not included and should be selected to suit the material to which the panel will be mounted.

Wiring

RKIT1/2/3/4



The control panel is supplied with wiring installed in the drawing shown above. The level sensor needs to be fitted as shown in the next diagram.



- Fitted Wiring
- Live
 - Neutral
 - Earth
- Sensor Cable
- Live
 - Neutral
 - Earth
 - Live Return

Connections

Note that the black wires is live.

Note the green/yellow earth connection is provided for circuit protection and must be connected to the REKA level sensor.

RKIT5/6

Connect the 4 wires of the REKA sensor to the corresponding wire colours inside the controller using the pre-fitted grey and orange snap terminals.

Black to black, green/yellow to green/yellow, brown to brown, blue to blue.

Note that on 24vdc REKA sensors blue is 0vdc, all other colours are 24vdc. There is no earth nor should any wiring colours be confused with mains electrical wiring standards.

Operation

Safety Precautions

Mains Voltage – There are exposed electrical conductors inside this appliance. Before servicing this appliance, normal safe isolation procedures should be implemented.

Do not attempt to operate the control panel item when wet, or in a wet or high humidity environment.

If the housing of the control panel or attached wiring becomes damaged, you must shut down and securely isolate this appliance immediately.

Usage

The control panel is activated by use of the switch on the front panel. Turn the switch to the ON position to enable flood water level monitoring, the green lamp will illuminate indicating that the control panel is functioning.

When the level sensor becomes immersed the red warning lamp will flash, accompanied by a buzzer. To silence the alarm the panel is switched off using the switch on the front panel.

If the control panel itself becomes immersed, or any exposed wiring supplying the control panel (domestic junction boxes etc) then it should be isolated at the consumer unit by switching off the entire circuit. If the consumer unit becomes immersed it should not be touched until declared safe by a qualified electrician.

Specifications

| | |
|-----------------------|----------------------|
| Dimensions | 180mm x 110mm x 90mm |
| Enclosure Material | Polystyrene |
| Ingress Protection | IP66 |
| Electrical Protection | Class 2 |
| Voltage RKIT1-4 | 230VAC 1~ |
| Voltage RKIT5-6 | 24VDC |