

USER MANUAL FOR WATCHPOST SYSTEM

Edgarsson Security Designs 95 West Street Dunstable Beds LU6 1SE
Tel 01582 600886 Fax 01582 601061

email info@edgarsson.co.uk web pages at www.edgarsson.co.uk



WATCHPOST 240

WATCHPOST SYSTEM

The Watchpost security system is a portable, battery powered, radio-linked, passive infra-red intruder detection system. The system is easily put into place, and easily moved to a new location if desired. There is no wiring involved in setting up the system.

WATCHPOST - COMPONENT PARTS

Each Watchpost has two main parts, the base and the tube. Accessories include a battery charger, spare battery and small red disk-shaped magnetic switches to enable an internal beeper to aid positioning of Watchposts.

THE BASE

The base should be handled carefully since it is greased on its raised cylindrical centre section. This grease is important and should not be removed as it is necessary for a smooth fit for the tube when it is put into the base. This silicon grease should be renewed from time to time.

Looking from above, you will see a red cap in the slope of the base. This can be removed if required to allow the base to be filled with sand to provide extra weight in extremely windy conditions. Watchposts bases are normally heavy enough to deal with most conditions, but this facility is there if needed.

On top of the central section of the base is a connector. This is where the tube and base are connected together - see below in the second paragraph of the section entitled `THE TUBE, AND ASSEMBLY OF THE WATCHPOST'.

Underneath the base are three adjustable feet. These can be screwed up or down as required when Watchposts are deployed on uneven surfaces.

On the underside of the central section of the base is a keyswitch. Insert the key provided to switch the Watchpost ON and do the reverse to switch it OFF.

There is also another connector next to the keyswitch. This is for recharging the Watchpost's battery without removing it from the Watchpost. The battery is enclosed in the base central section and the connector from the battery charger is inserted here for charging.

The battery can be removed by pulling on the small tab between the keyswitch and the connector under the base when the battery will slide out. In this way a fully charged battery can be brought to the Watchpost and exchanged with the discharged one, rather than taking the Watchpost to the battery charger.

An optional vibration detector can be fitted under the base which gives a tamper alarm should the Watchpost be moved.

THE TUBE, AND ASSEMBLY OF THE WATCHPOST

The Watchpost tube contains sophisticated sensors and a radio transmitter and although built for rugged use, should not be handled carelessly or roughly. It has a `window' near the top behind which are the sensors. This window is made of tough but thin material, necessary for penetration by infra-red and handling it should be avoided. It should also be kept clean - a gentle wipe with a damp cloth is adequate and an occasional wax polish to prevent a film of water forming during rain.

At its lower end is a length of wire with a connector on the end. Lie the tube with this lower end resting up on the base. Take the connector from the bottom of the tube and plug it into the connector on top of the base with a push followed by a screwing action - note that there is no need to screw very tightly for a good connection and screwing too tightly might also damage the connectors.

With the connection secure, hold the tube upright making sure that any wire from the tube to the connector is accommodated easily inside the bottom of the tube and push the tube on to the base, using a twisting motion back and forth if necessary. It is a fairly tight fit and the silicon grease ensures that it is a smooth fit. The Watchpost is now assembled and ready to be put into position.

WARNING When carried as a full assembly ensures that the assembly is horizontal not vertical as the heavy base is a push fit and could slide off.

POSITIONING OF WATCHPOSTS

Watchpost sensors can detect a man up to 40 metres away, so should not be more than 80 metres apart.

To position Watchposts along the boundary to be protected, simply place at intervals of 80 metres with the window of the first Watchpost facing directly towards the second and so on.

To ensure that the window is facing correctly and thus the Watchpost is pointing in the right direction, two quick methods are used. First, use the sight at the top of the tube - simply look along the groove which is in line with the Watchpost's window, making sure that it is aimed directly at the next Watchpost. Next, place the small round red magnet on top of the Watchpost so that the dot marked on it is next to the dot marked on the top of the Watchpost. Put a hand in front of the window and the siren inside the tube will be activated for 2.5 seconds.

WALK TEST

With the Watchpost in position and the magnet set to activate the siren, walk across the zone to be protected by that Watchpost. The siren will be activated when the narrow detection area between the Watchposts is crossed.

If the walk test is performed at a distance greater than 40 metres from the Watchpost, no siren will

sound as this is beyond the sensor's range. Walk across within range and the siren will activate.

The siren in the Watchpost is enabled by the magnet being placed on top and swivelled to the correct position as mentioned but use of the sirens in intruder detection is optional. Some users prefer to leave the magnets on at all times to provide a deterrent - the intruder will hear the siren as soon as he crosses the protected zone. Other users prefer to use the magnets and sirens only for setting up and positioning of Watchposts. Operation is then silent and the intruder has no knowledge that his presence is detected and a response is on the way.

To ensure correct testing and appreciation of the system, a little explanation follows on the nature of a Watchpost detection zone.

Detection is carried out by the sensor equipment behind the Watchpost window searching along two narrow areas which start at zero width at the Watchpost and go out to a combined width of 2.5 metres at 40 metres away from the Watchpost. An intruder walking across this area will be detected.

TAMPER ALARMS

If a Watchpost is tampered with it will give a tamper alarm. It has a tilt sensors in the tube to detect movement of the assembly through greater than 35 degrees.

RADIO TRANSMISSION

A detection by the infra-red sensor causes a radio message to be transmitted to the message pager.

The WP also contains a tamper movement / tilt detector to sense when the unit is being moved. Tamper messages are sent in the same way to the message pager.

The WP will sense when the battery voltage has fallen to 11 Volts and transmit a low battery warning message.

<u>Radio range testing</u> can be undertaken using the radio test rotary switch next to the charger connector. When switched to the on position the unit will sen a radio test message roughly every minute. In normal use this switch should be set to off.

MESSAGE PAGER

The message pager will display alarm, tamper and low battery messages transmitted from the WP detectors.

When the pager receives a new message it beeps. (or vibrates if selected) The new message is then displayed on the LCD display together with the time the message was received. Detailed operation of the pager can be found in the pager instruction booklet.

WP BATTERY CHARGER

Batteries can either be exchanged or charged in-situ using the BC2 charger. When a Watchpost sends a low battery message its battery should be changed or charged as soon as is convenient. It is not important to replace the battery immediately but it should be done within a few days.

Switch the unit off. The battery is replaced with a fully charged one by pulling out the circular plug in the centre of the underside of the base. and remove the battery. The battery is disconnected by pushing the plastic latch and pulling apart the polarised two part plastic connector. Fit charged battery, replace cover and switch on.

Discharged batteries should be recharged as soon as possible because leaving batteries in a discharged state for long periods can reduce capacity and shorten the battery life.

The charger has two LED lamps. The red one shows that the battery is charging, the green shows that the battery is nearly fully charged. See instructions with charger.

It is advisable not to remove the battery lead at the battery slide contacts but always disconnect using the two part plastic connector. This procedure prevents the incorrect polarity fitting of a battery.

PAGER BATTERY CHARGER

The pager batteries supplied are AA Ni-Cad rechargeables. The charger supplied also will discharge batteries prior to charging. This procedure is advised to ensure that these batteries are maintained in good condition and will accept full charge. The batteries need to be charged / discharged in pairs. See instructions with charger unit.



EDGARSSON SECURITY DESIGNS

95 WEST STREET DUNSTABLE BEDS LU6 1SE Phone 01582 600886 Fax 01582 601061 Email info@edgarsson.co.uk

WATCHPOST TECHNICAL SPECIFICATION

DETECTOR

Detection method - Bi-directional passive infra-red - two detectors Upper detector swivels with respect to lower Detection range - Each Watchpost covers two zones of up to 40 by 2.5 metres

Creep zone detection

RFI - No alarm at 25 volts/metre (100 MHz to 1.2 GHz)
EMI - No alarm at 40,000 volts charge

Sunlight - No alarm at 40,000 Lx reflected into detector White light - No alarm against halogen light within 3.0 metres

Walk test / alert beeper Target detect at velocities 0.3 to 5 m/s

RADIO TRANSMITTER

Radio transmitter - type approved to MPT 1329
Transmitter power - 500 mW
Frequency band - 458 MHz Band
Radio range - Up to 1 mile with standard antennae
Dipole available for long range
Messages - Alarm - Detector A, Alarm - B, Tamper,
Low Battery, Test Call

BATTERY

Battery type - 1.2 Amp Hr, 12 volt rechargeable SLA
Operating time - Typically 4 weeks
On / off keyswitch
Connector for battery charging
Easy battery removal for exchange with spare charged battery

MECHANICAL

Temperature range - -10°C to +60°C

Mechanical - Tube: UPVC, Base: GRP

Weights - Tube: 5.5 Kg ,Base: 9.5 Kg (Unfilled)

Height: 1.6 metres, Tube Diameter: 110 mm,

Base Diameter: 600 mm

RECEIVER / ALARM PANEL

Radio receiver to MPT 1329,1361
458 MHz band
Receives from up to eight Watchposts
8 zone expansion units available
ALarm, tamper, low battery messages displayed
Test calls checked
Missing test call alert
Range up to 1 mile with standard antenna
Up to 3 miles with half wave di-pole antenna
Battery or mains powered option with backup
Rechargeable sealed lead acid 12 volt 1.2 AHr
Battery charger
Individual relay outputs available as option
Pager transmitter and autodialler accessories

MESSAGE PAGER

32 character alpha - numeric display Alerting tone and flashing led lamp 4 beep types Time - tagged messages

SPECIALISTS IN RADIO-LINKED INTRUDER DETECTION AND CCTV SYSTEMS

web pages at www.edgarsson.co.uk