AUTOGUARD PORTABLE INTRUDER DETECTOR

USER MANUAL

PUBLICATION REVISION RECORD

REVISION	DATE	MOD. NO.	DETAILS
Re-write	1/5/00	New Manual	Includes new style detectors
	1/11/00	B	Addition of ISO9000 Logo
	9/11/05	C	Edited
	14/3/08	D	New Explorer Case Photo

CONTENTS

SYSTEM DESCRIPTION

The Autoguard System consists of the following:-

Carry Case

Base Station x 1 off complete with Antenna

Detection Heads x 8 off complete with Antennas

Bungee Straps x 16 off

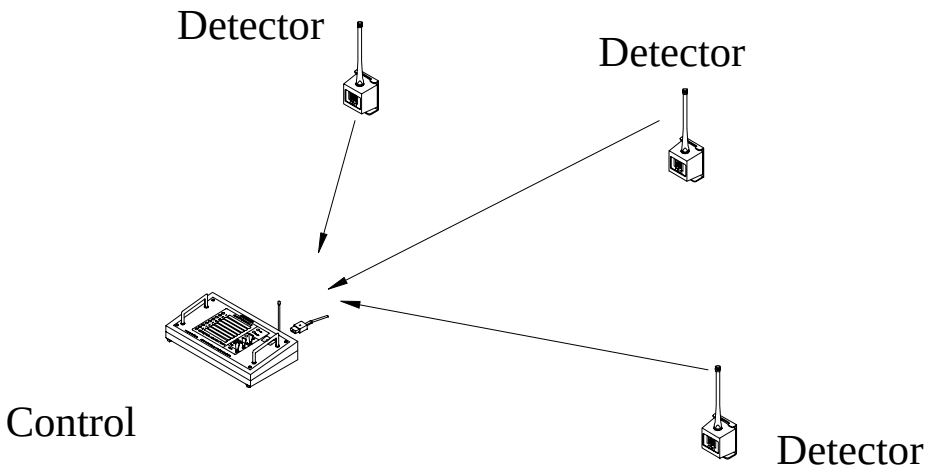
Small Tripods x 8 off

Mains/Charging Lead x 1 off

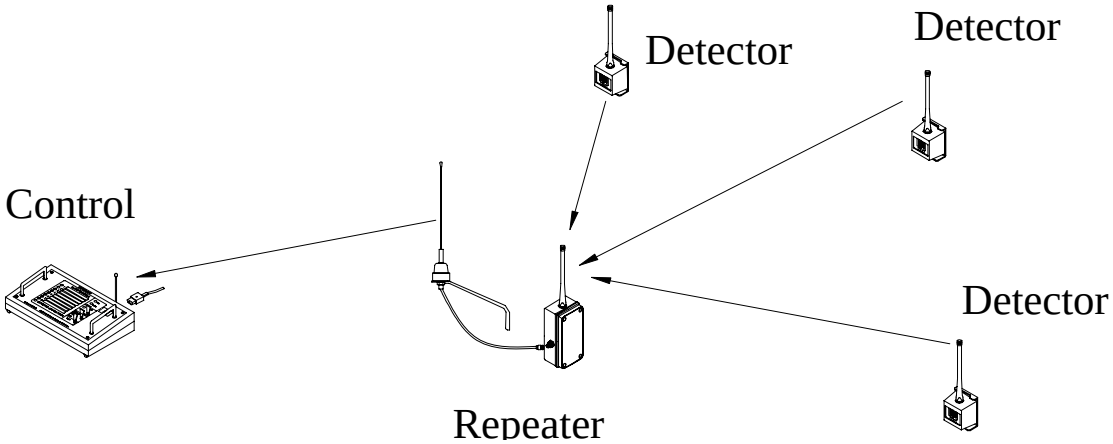
User Manual

Repeater (Optional)

Point-to Point Application



Point-to-Multi Point Application



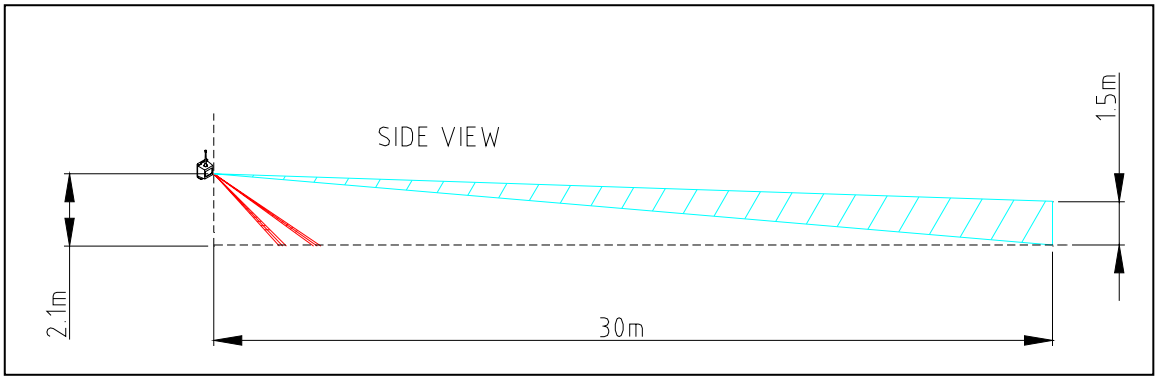
DETECTION HEADS

Each detection head is a self-contained battery powered unit capable of transmitting a coded alarm signal to the central monitoring station. Any number of similarly coded heads or a repeater may be deployed in up to eight separate zones.

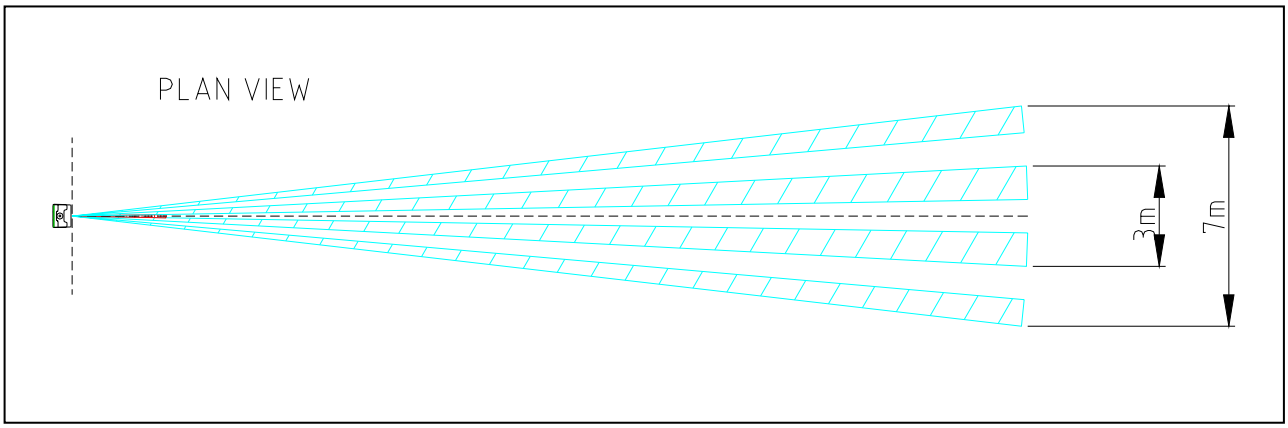
Each sensor is capable of continuous operation for up to 10 years. (See appendix for battery endurance). Alarm response is by way of passive infrared detection. The active alarmed area is a 30-meter beam detection zone from the sensor faceplate. This gives excellent selective positioning control when deploying the units, for example, running along a fence line, across an entrance, door or corridor. The units are permanently activated.
Note:Environmental conditions may reduce the distance.

As the heads are permanently active they are ready for immediate deployment as and when required. Optimum detection is achieved when mounted approximately 2m above ground level and positioned so that target movement will be across the zone rather than towards or away from the unit. It is important to avoid situations where two or more heads can trigger simultaneously as this can corrupt the transmission to the base station. Once deployed the detection zone should be ‘walk-tested’ using the base station on battery power.
Note: Once activated, the head has a reset time of approximately 5 seconds after movement has ceased.
The detection zones are indicated in the diagrams below.

DETECTION ZONE - SIDE VIEW



DETECTION ZONE - PLAN VIEW



BASE STATION

The unit is lightweight and is intended for mains operation but also contains an internal rechargeable battery capable of providing up to 36 hours of portable use. For example, walk testing etc. The battery is charged automatically during mains operation.
The base station can also be powered by an external 12V DC supply, e. g. by a car cigar lighter socket. The internal battery is charged during this mode of operation. This facility is available to special order only.
A single on/off switch, this illuminates the yellow power indicator next to the switch.
The alarm sounder may be set to one of three modes **'Off', 'Steady'** or **'Pulse'** by way of the audible alarm switch.
The nine bank LED display indicates an alarm condition by the individual zone numbers and remains illuminated until the reset switch is activated. The incoming alarm signal also triggers the sounder depending on the mode setting.
The reset switch is used to extinguish any illuminated zone LED's as and when required. It will also reset the low battery warning. The sounder will operate again if a new alarm is received from a zone already illuminated on the LED display prior to reset.
The low battery indicator illuminates on receipt of low battery warning transmitted by any of the detection heads. (See notes on Detector Head Batteries).

On the rear of the unit either a two-pole terminal is fitted for providing a single common output for all alarms and 15-pin socket is fitted for additionally supplying individual outputs for all eight alarms. The individual outputs can be used, for example, to position CCTV cameras, while the common output is suitable for activating telephone diallers.
The two-pole terminal is provided as standard, while the 15-way connector is supplied to special order only.
Base Station Alarm Outputs:
A universal normally open contact available via the two terminal posts. This output closes momentarily on receipt of a valid alarm signal from any of the 8 zones.
A 15 pin "D" Connector

Pin 1-7	Alarms 1-7
Pin 9	Output common for all alarms
Pin 8 & 10-14	N/C
Pin 15	Alarm 8

These outputs are "clean", normally open giving momentary closure when a signal is received from any zone.
System Code Transmission and Settings
On each activation an AUTOGUARD detection head transmits two separate signal codes back to the base station. A third low battery code will be transmitted when required.

OPERATION & DEPLOYMENT

The Autoguard is a completely self-contained portable intruder detection system demanding minimal skill during deployment and subsequent operation. Capable of monitoring up to eight separate zones from a single monitoring unit it provides invaluable protection for a vast range of security operations where mobility and versatility are the prime operational requirements.

The Autoguard system is supplied in a robust protective case complete with the following items: -

A battery/ mains operated base station monitoring unit complete with alarm outputs and integrated radio receiver

Eight coded battery powered detection heads, for portable deployment on site as required, capable of transmitting a radio signal back to the base station giving location number of alarmed area

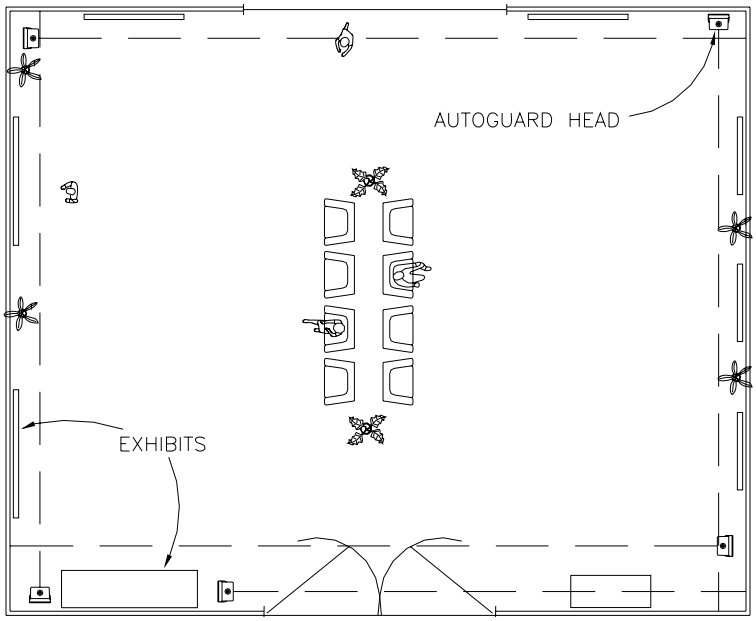
Operating instructions

DETECTOR DEPLOYMENT:

1 Remove the Detector from its carry case.
2 Install the Detector(s) in their final locations:
~ On a wall or flat surface —Stand the Detector Unit on its freestanding base.
~ On a Pole or Tree—Strap the Detector Unit to a Pole or Tree using two bungee straps over the top and bottom of the mount bracket.
3 Remove the blanking cover from the Detector.

Hidden

Post Mounted



Public Place

NOTE: If the Detector Heads are NOT activated on a regular basis i.e. during your daily/weekly walk test they can go to sleep and their performance is reduced.

BASE STATION DEPLOYMENT

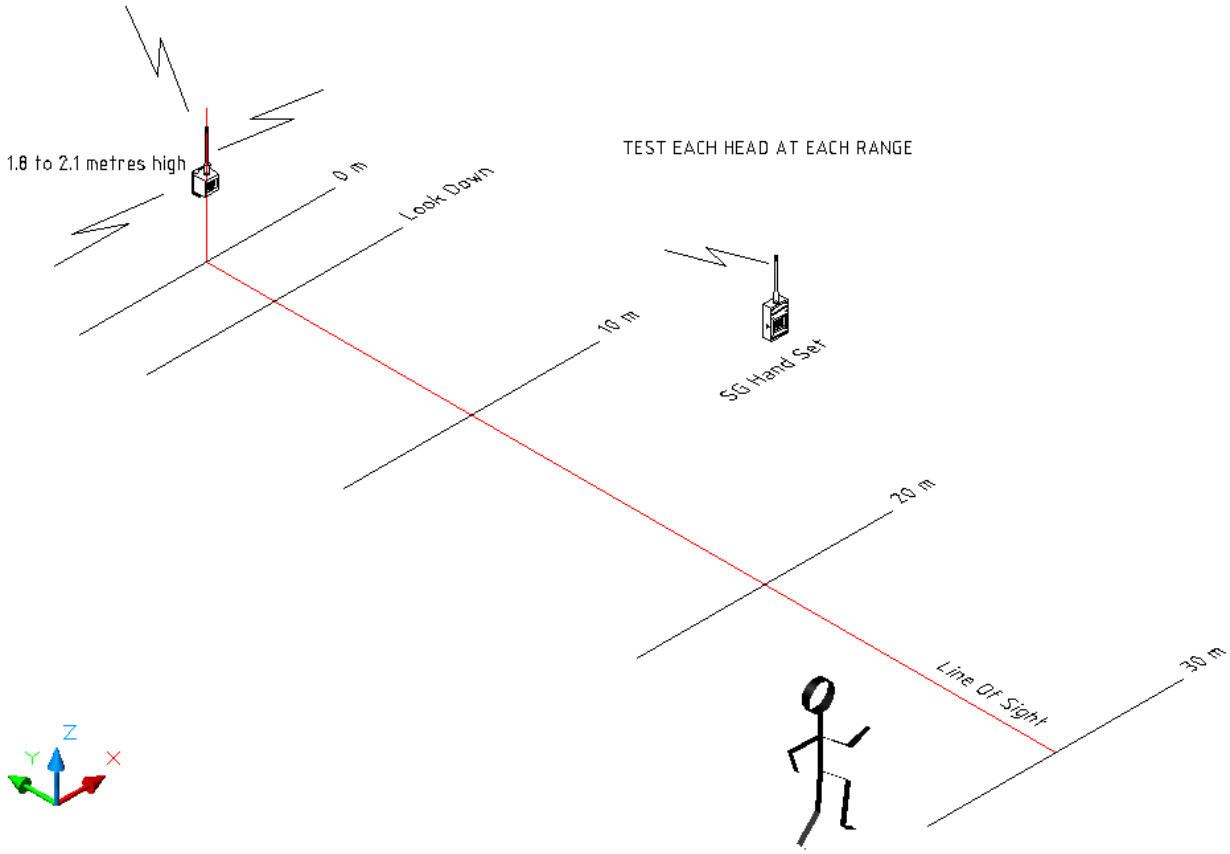
Power-up the Base Station by connecting the mains lead into the back of the unit and using the toggle switch marked ‘ON/OFF’, switch on the Base Station.
The LED marked ‘Mains’ will glow yellow indicating power is supplied to the unit.
The LED marked ‘Charging’ may also glow yellow if the internal rechargeable batteries are at a certain voltage level. This led indicates the unit is also being charged; this will not effect the application.
With all or several Detector units deployed, you may have several alarms showing, this is OK as they would have been activated during deployment. To acknowledge the alarm(s) flick the ‘Reset’ toggle switch down, all alarms should clear, if not, check the detector set-up that nothing is activating the unit prematurely. It is always required that you walk test each detector location covers the area you wish to monitor and that no moving objects you wish to ignore do not set off the detector(s).
Once the Base Station is activated you can choose whether you want the activation audio able or silent. This is done by selecting which criteria you wish using the toggle switch on the Base Station. In either case the alarm LED will glow and indicate which detector has been activated. Again to acknowledge this use the ‘Reset’ button.
If you wish, the Base Station could be used up to 36 hours powered by its own internal batteries, this facility is normally used during the setting up period.

Antenna that attaches to the Monitor Unit (Base Station)

FAULT FINDING QUESTIONS:-

1. Was the unit damaged during shipment?
2. Has the unit been dropped?
3. Have you walk tested the PIR system? Note: make sure heads are not pointing in the same direction.
4. Have you let the detector acclimatise to its environment?
5. Base unit fully charged?
6. Is there a road or footpath close to the zone?
7. Are there people using mobile phones near the detectors?
8. How high and where is the detector mounted?
9. Is the detector pointing into direct sun light or to a surface shined upon by sunlight?
10. How many false alarms are you receiving?
11. Are the alarms from one particular detector?
12. What kind of site movement is around the protected zones, i.e. vehicles, people?
13. What are the detectors pointing at?
14. Are there any overlapping areas covered by the detector heads?
15. Do you keep the base connected to the mains? (AG)
16. Did the fault occur suddenly or over a period of time?

WALK TESTING:-



APPENDIX

DETECTOR BATTERY ENDURANCE

	DAYS	YEARS
No alarms	5606	15.36

	DAYS	YEARS
1 alarm/ 24h	5461	14.96

	DAYS	YEARS
2 alarms/ 24h	5323	14.58

	DAYS	YEARS
10 alarms/ 24h	4431	12.14

	DAYS	YEARS
24 alarms/ 24h	3443	9.43

Note: typical values at 25ºC