C-VIGIL LTD : transport

AUTOGUARD INTRUSION DETECTION

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AUTOGUARD INTRUSION DETECTION

INTRODUCTION

High Risk Areas

Strategically placed wireless PIR motion detectors will alert the driver to possible intrusions without exposing him/her to unnecessary risks

Port Area Security

Detect unwanted guests who try to gain access to your vehicle. Protect the relatively exposed trailer section.

Stowaway Prevention

Detect personnel approaching the vehicle with the intent to gain un-authorised access.

AUTOGUARD COMPRISES

- Receiver / Base Station
- 8 Wireless PIR Detector Heads
- Hard Sided Carry / Storage Case
- External Antenna + Coax Cable
- Mounting Tripods + Mag Base Mounts + Bungee Cord Mounts
- User Manual
- Mains Cable

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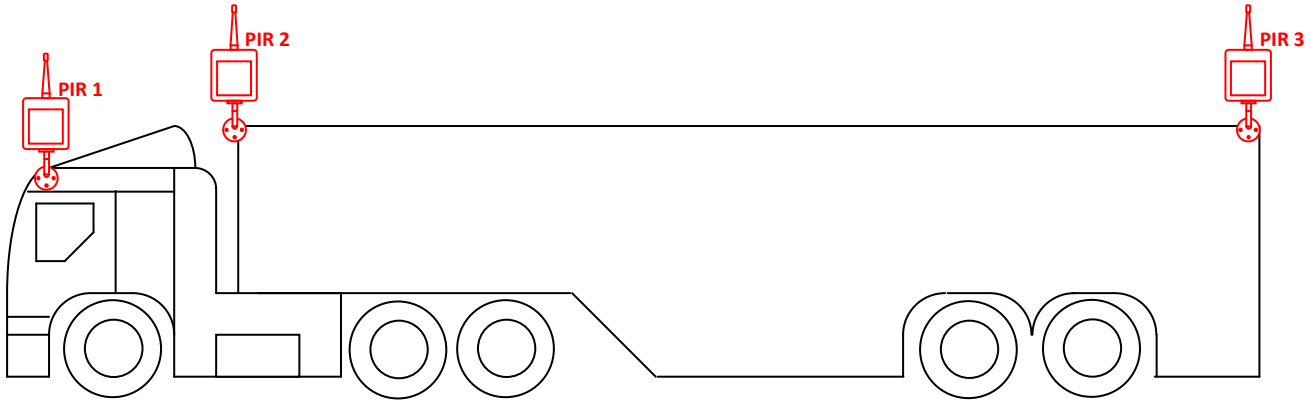
DEPLOYMENT EXAMPLE



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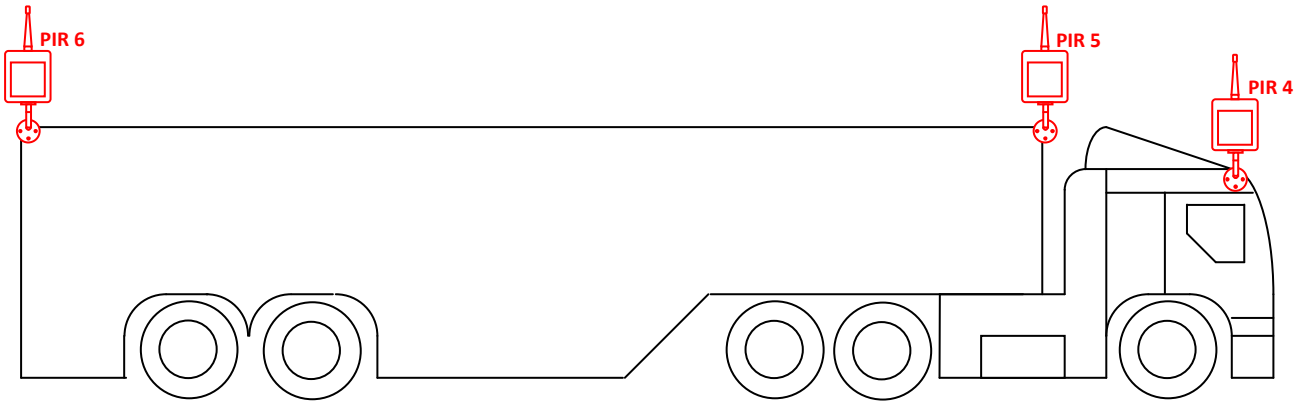

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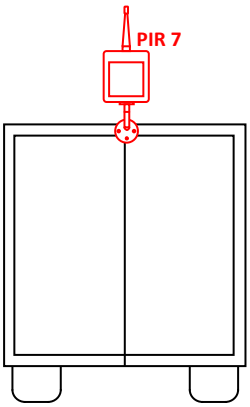

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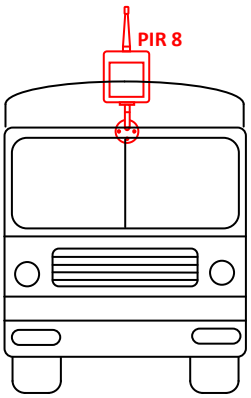

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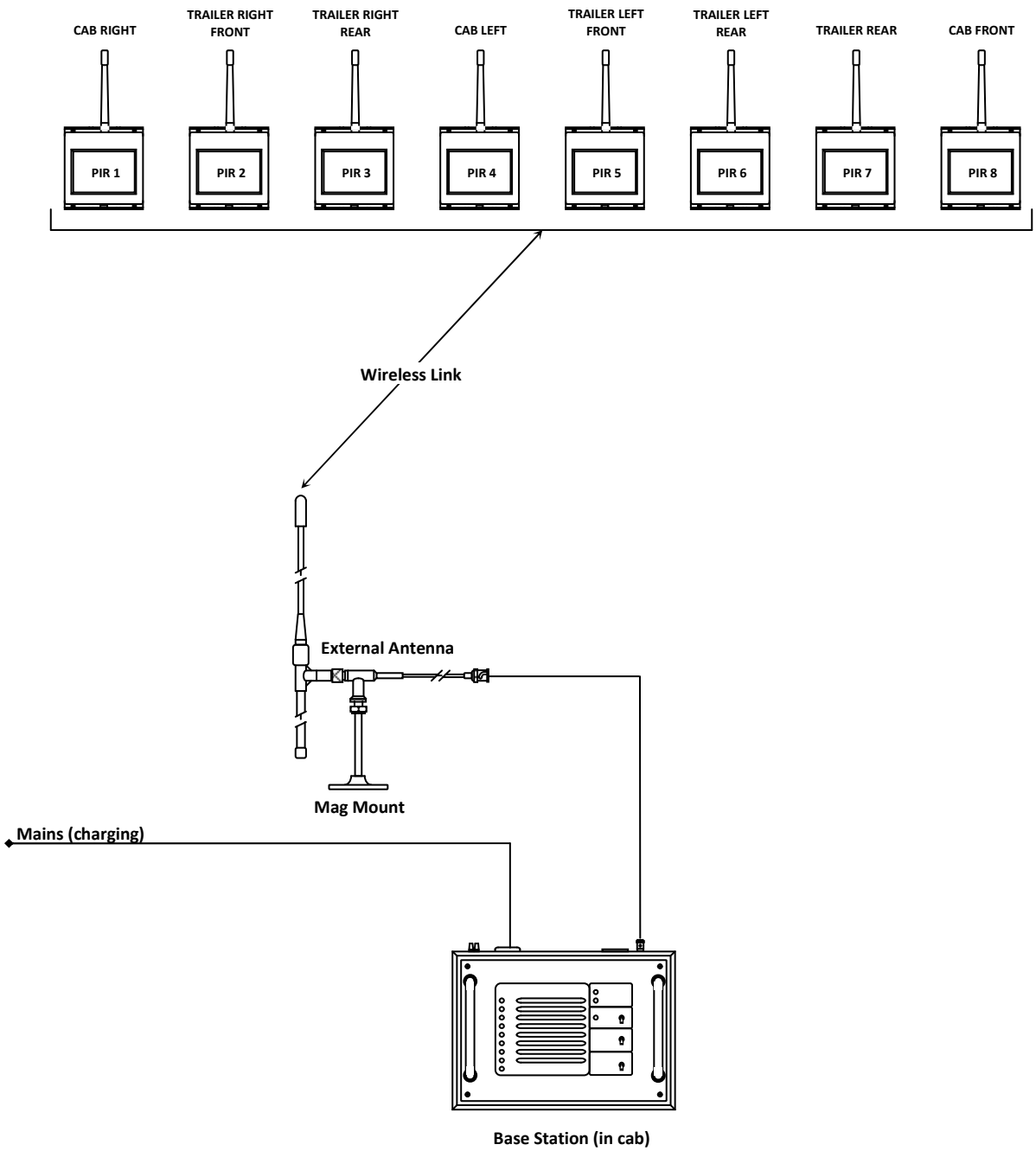

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AUTOGUARD
Wireless Intrusion Detection System

AUTOGUARD
Wireless Intrusion Detection System

User Manual

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System Description

1.1 Detector Heads

1.1.1 General

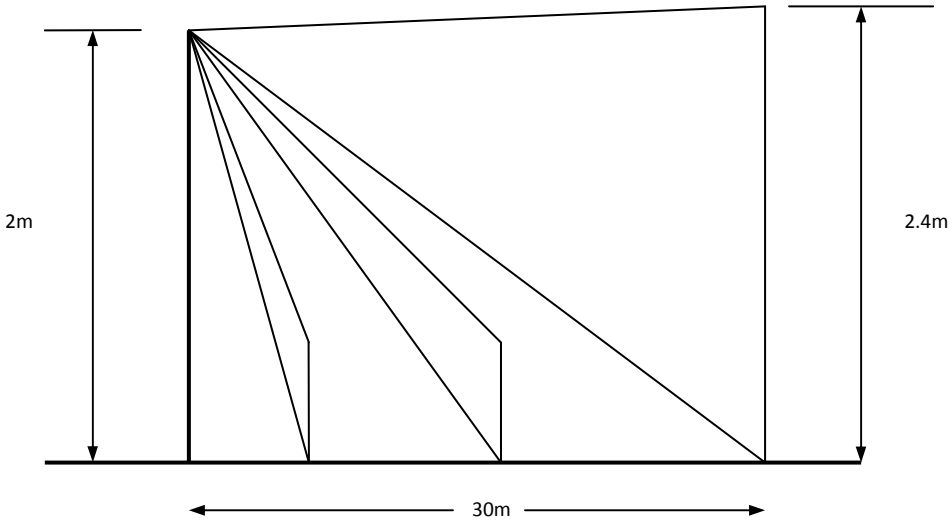
Each detector head is a self-contained battery powered unit capable of transmitting a coded alarm signal to the central monitoring station. Any number of similarly coded heads or a repeater may be deployed in up to eight separate zones.
Each sensor is capable of continuous operation for up to about 10 years (see Section 3. for battery endurance). Alarm response is by way of passive infra red detection (PIR). The active alarmed area is a 30m beam detection zone from the sensor faceplate. This gives excellent selective positioning control when deploying the units, for example, running along a ship's open decks, across a hatch entrance way, gangway access point.
The units have a protective faceplate that also acts as an on/off switch.
Note: Environmental conditions may reduce effective operating distance

Once the heads are activated they are ready for immediate deployment as and when required. Optimum detection is achieved when mounted approximately 2m above the ground 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 coded transmission to the base station. Once deployed the detection zones can be "walk-tested" using the base station on battery power.

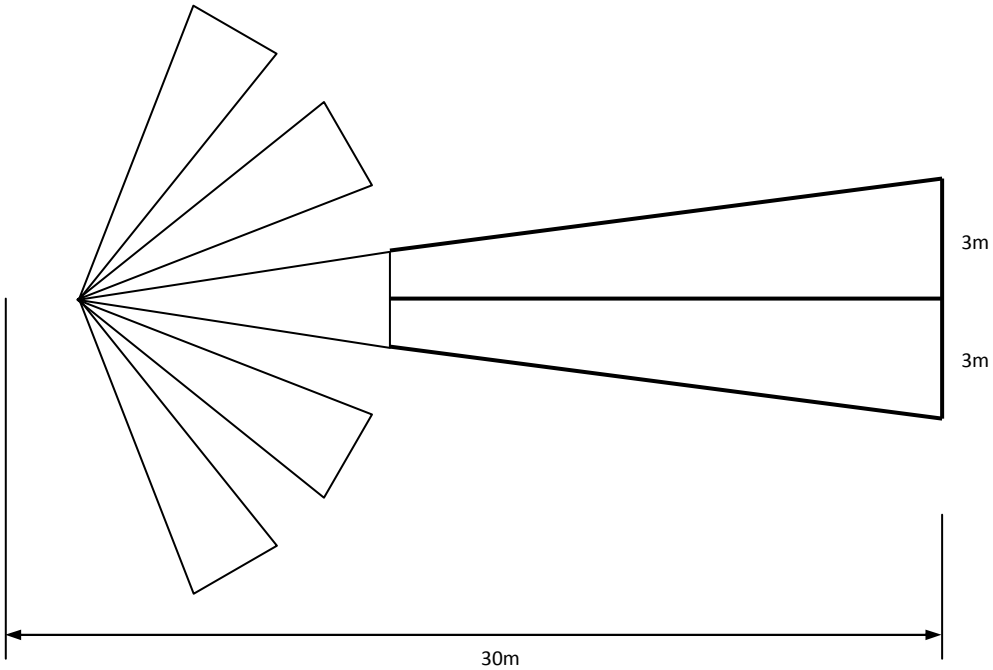
Note: Once activated the head has a reset time of approximately 5 seconds after movement has ceased.
Detector heads should be tested/activated periodically otherwise after prolonged periods of inactivity the heads 'go to sleep' and will require the cover to be replaced to reset the detector.

1.1.2 Detection Zones

The detection zones are indicated in the diagrams below: -



Detection Zone – Side View



Detection Zone – Plan View

1.2 Receiver / Base Station

1.2.1 General

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 / standby use, “walk-testing” for example. The battery is charged automatically during mains operation.

The base station can also be powered by an external 12V DC supply, 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 LEDs 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).

1.2.2 Alarm Outputs

On the rear of the unit either a two pole terminal is fitted for providing a single common output for all alarms or a 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 alarm is suitable for activating existing alarm systems.

Base Station Alarm Outputs:-

A universally normally open contact available via the two pole terminal posts. This output closes momentarily on receipt of a valid alarm signal from any of the 8 zones.

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

1.2.3 System Code Transmission & Settings

On activation each detection head transmits two separate signal codes back to the base station. A third low battery code will be transmitted when required.

1.2.4 Storage / Carry Case

When not in use the system may be stored in a hard sided case for protection and ease of transportation and deployment.

2. Operation & Deployment

2.1 General

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 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 the ship as required, capable of transmitting a radio signal back to the base station giving location number of alarmed area
- Operating instructions

2.2 Detector Deployment

1. Remove the detector from its carry case
2. Install the detector(s) in their final locations:
    i. On a suitable bracket on the ship's structure / side rails
    ii. Free standing on its tripod base
    iii. Attached to a convenient point by the bungee cords
3. Remove the protective cover from the detector

2.3 Receiver / Base Station Deployment

- Power-up the base station by connecting the mains lead into the back of the unit
- Switch 'On' the base station, the mains LED will glow yellow indicating power is supplied to the unit (The charging LED may also glow 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 normal because they would have been activated during installation. Activating the reset button should clear these alarms, if not, check the detectors set-up.
- It is always required that a 'walk-test' be carried out on each detector location.
- Once the base station is activated you can choose whether you want the activation audio able or silent. In either mode the alarm LED will illuminate on alarm
- The base station can be operated for up to 36 hours on its own internal rechargeable batteries, although it is normal to run the system from mains.

3. 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

AUTOGUARD
Wireless Intrusion Detection System
Schematics

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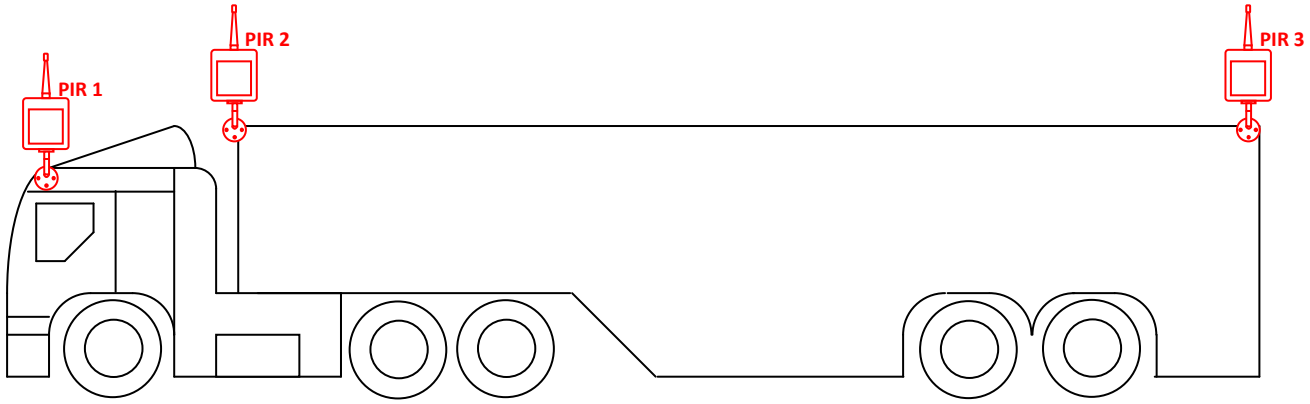
DEPLOYMENT EXAMPLE



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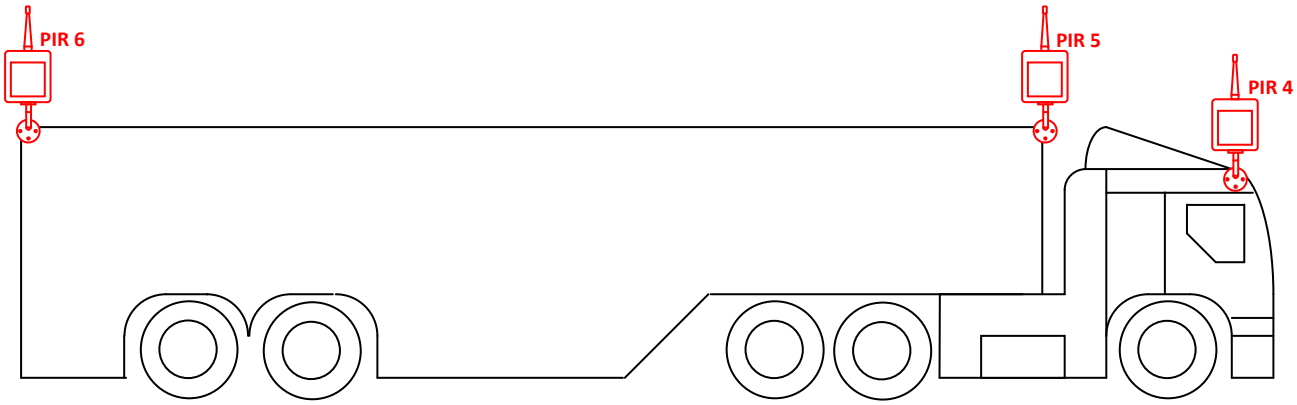

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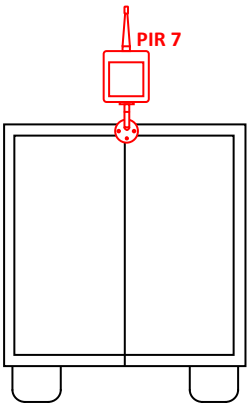

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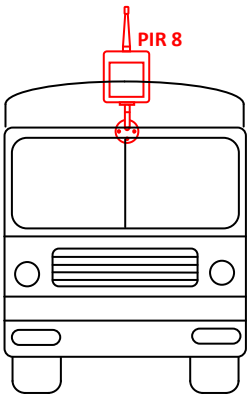

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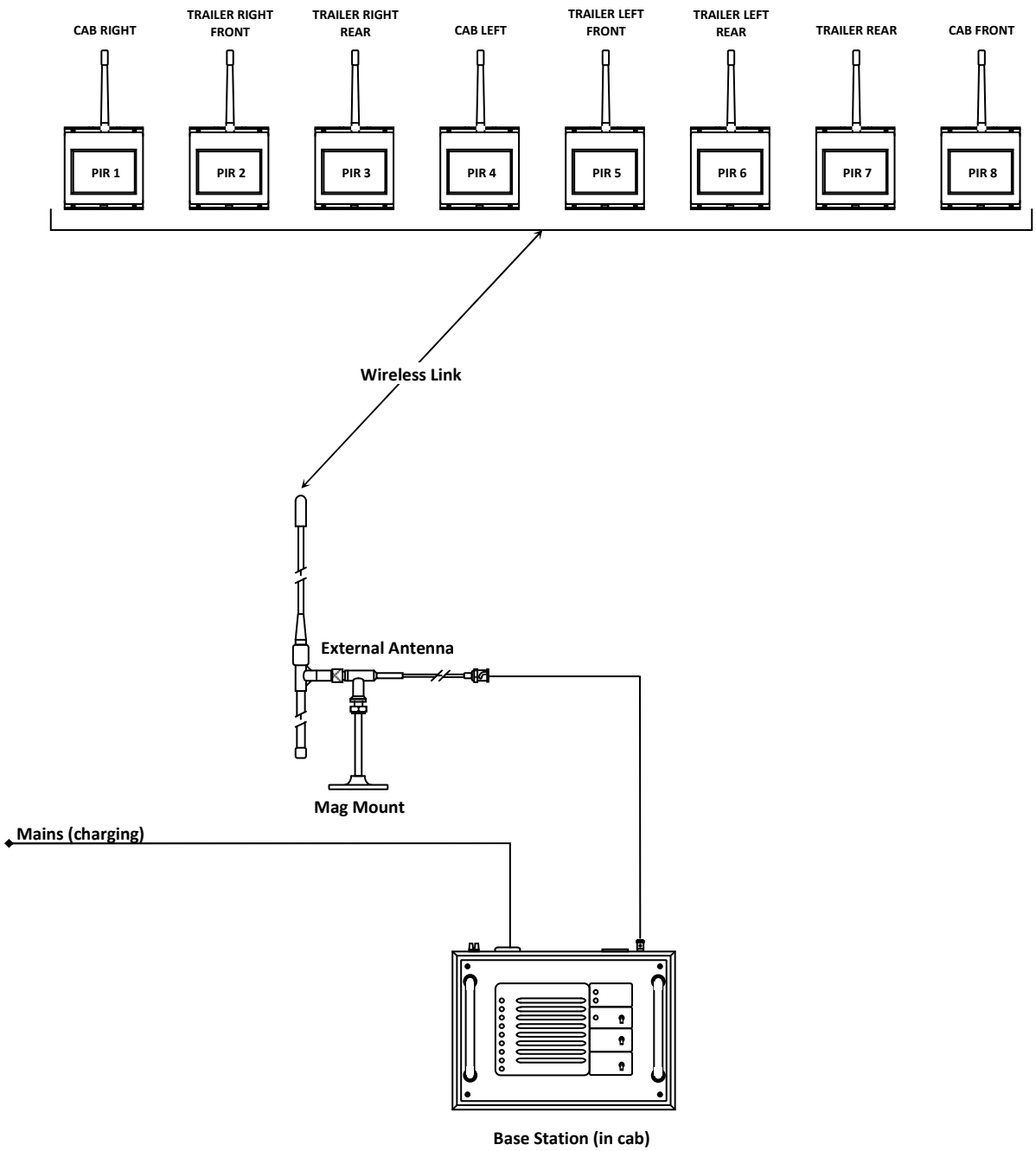

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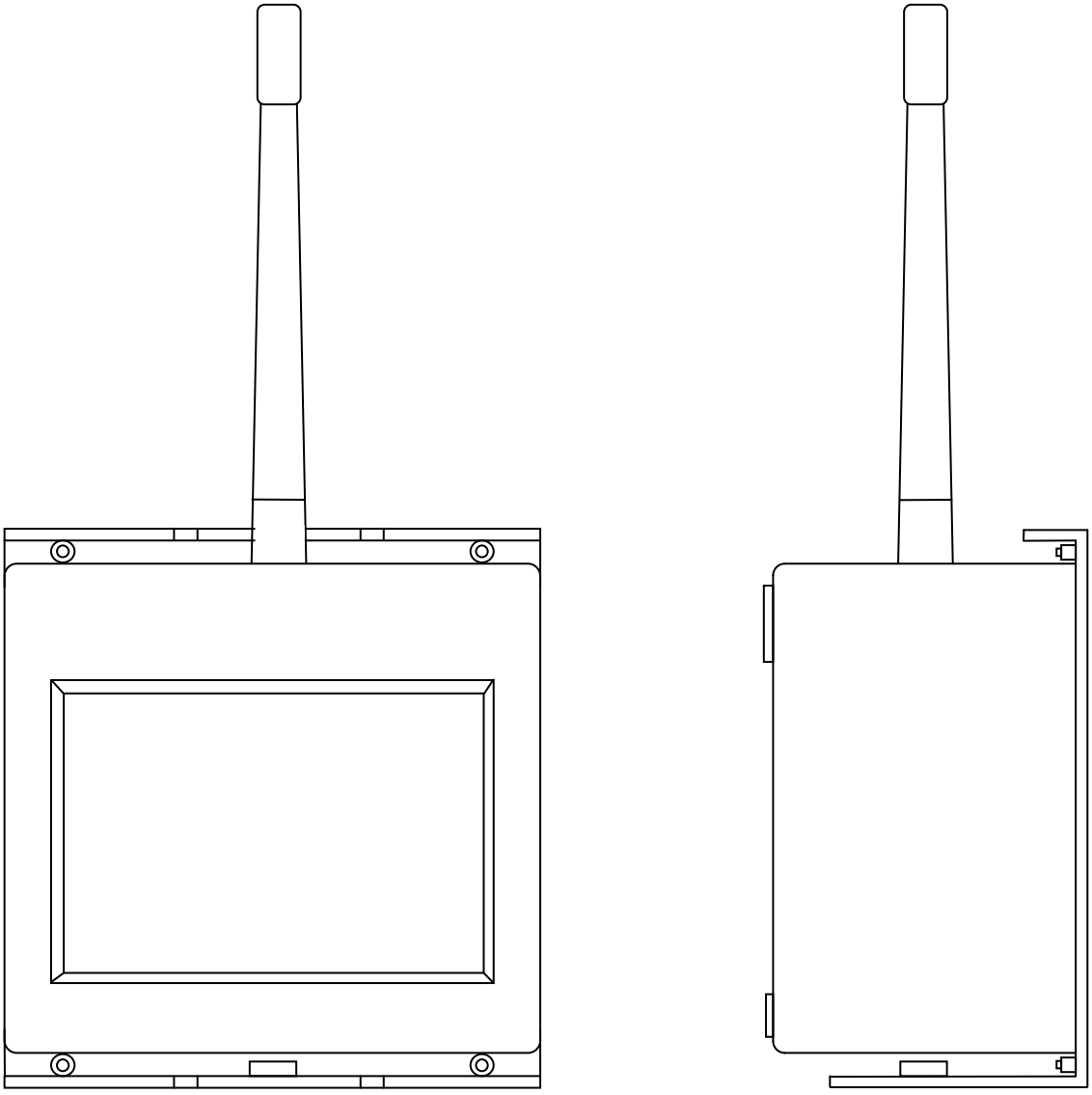
WIRELESS PIR MOTION SENSOR



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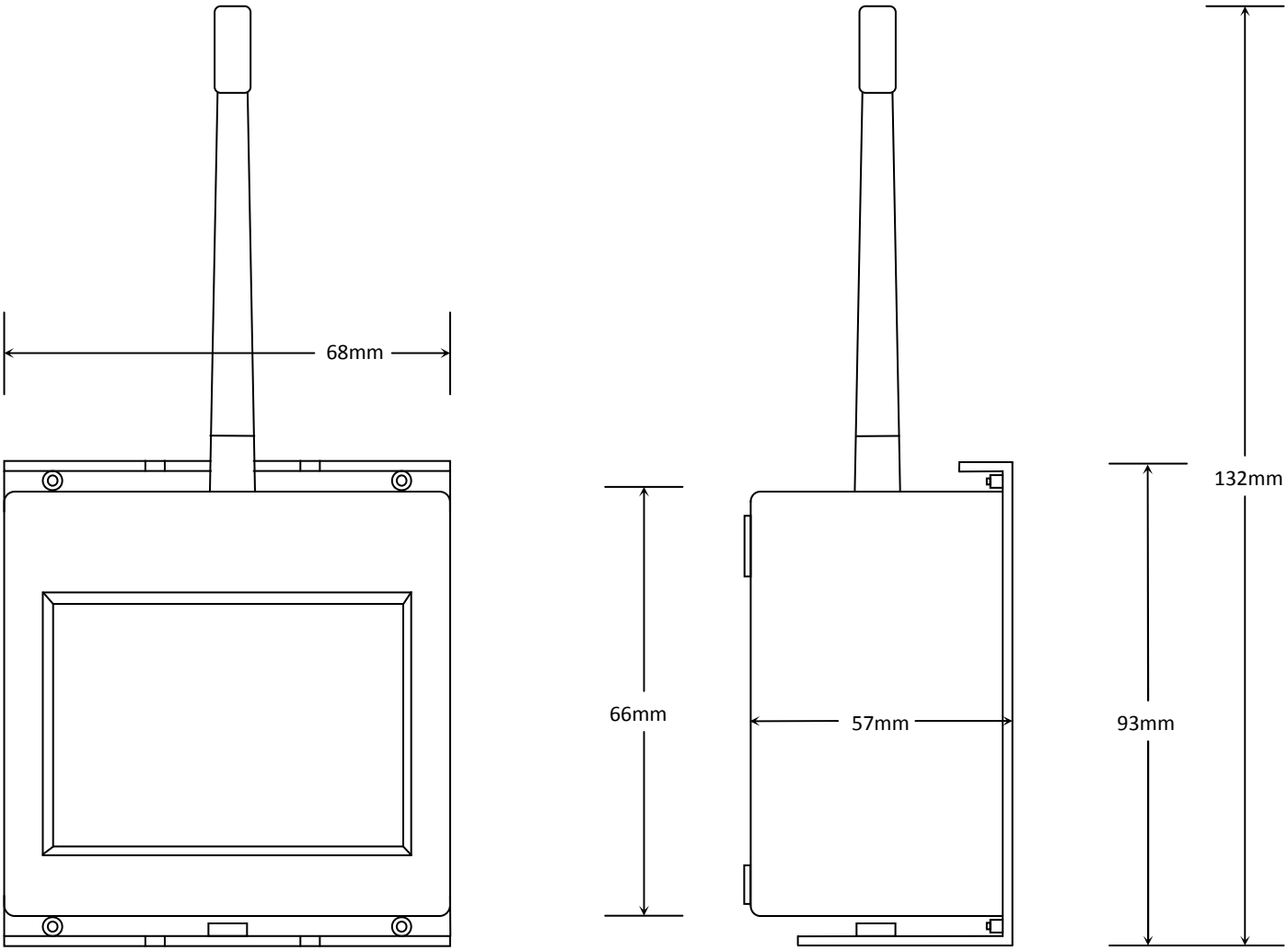

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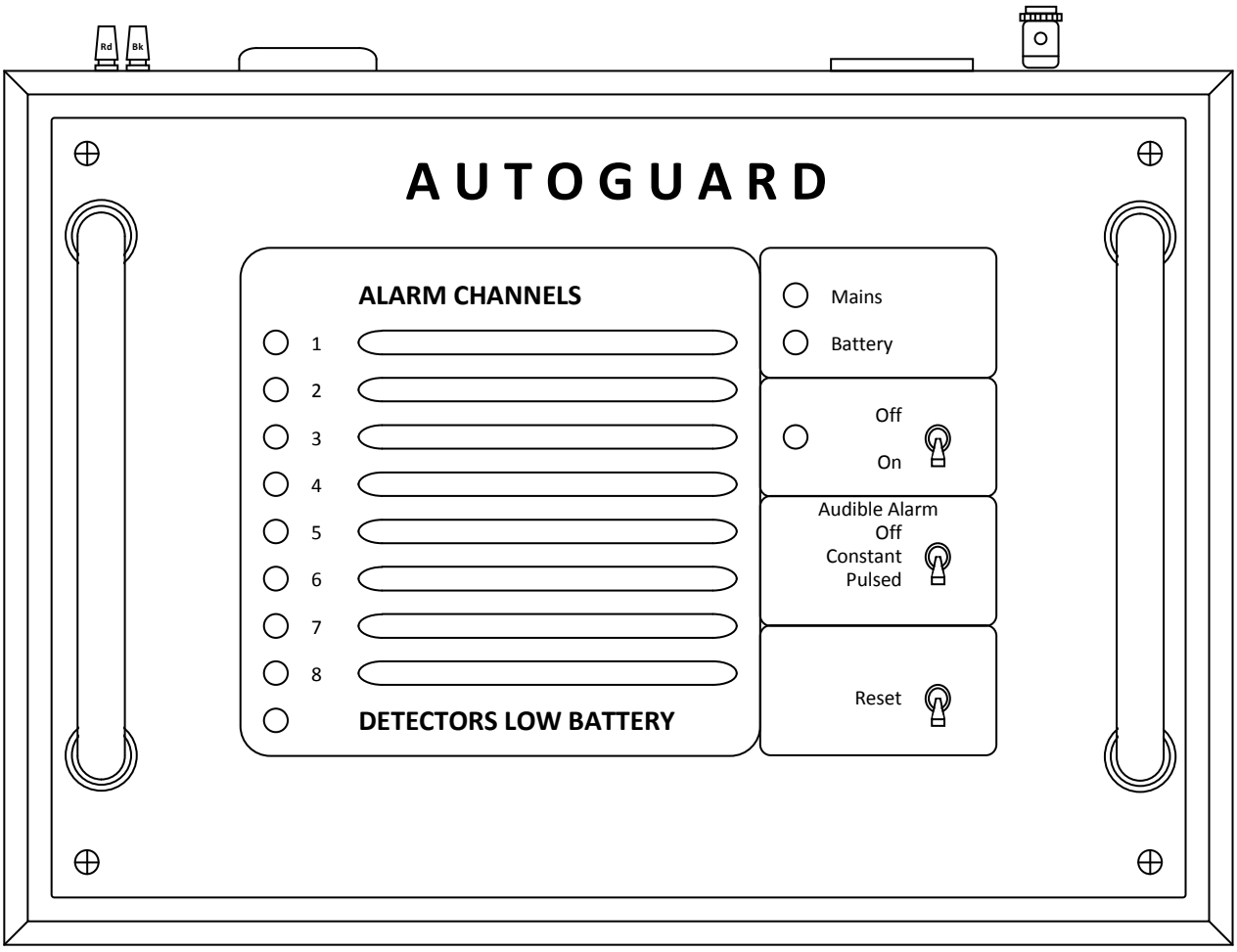
RECEIVER / BASE STATION



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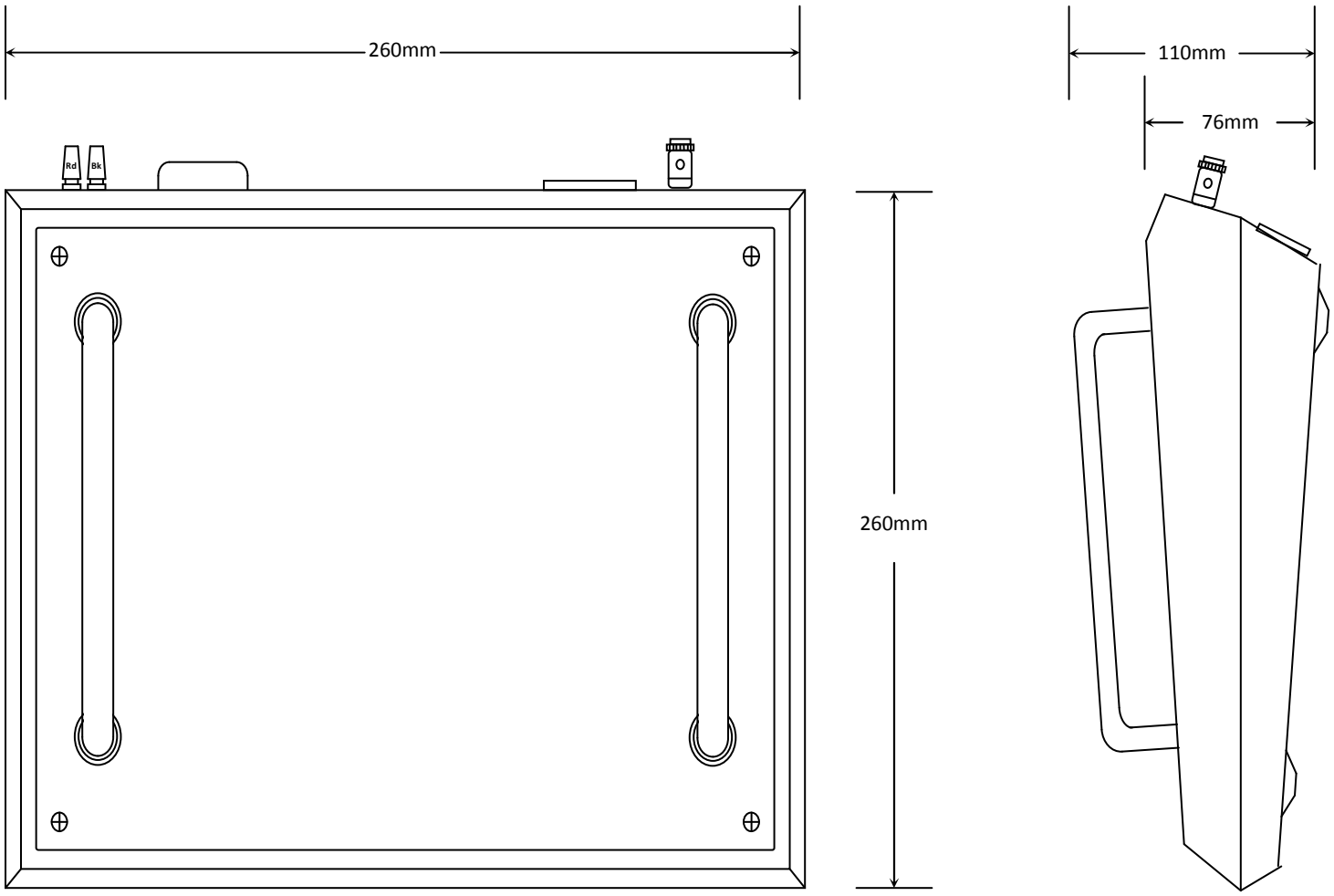

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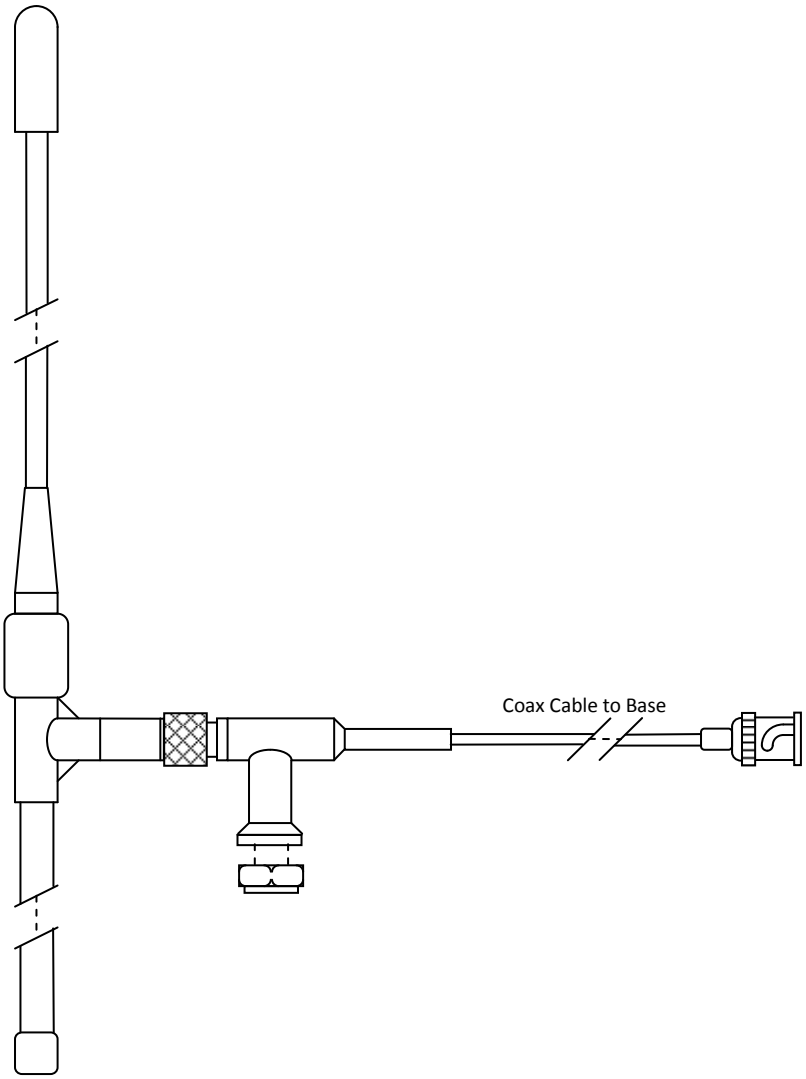
EXTERNAL ANTENNA



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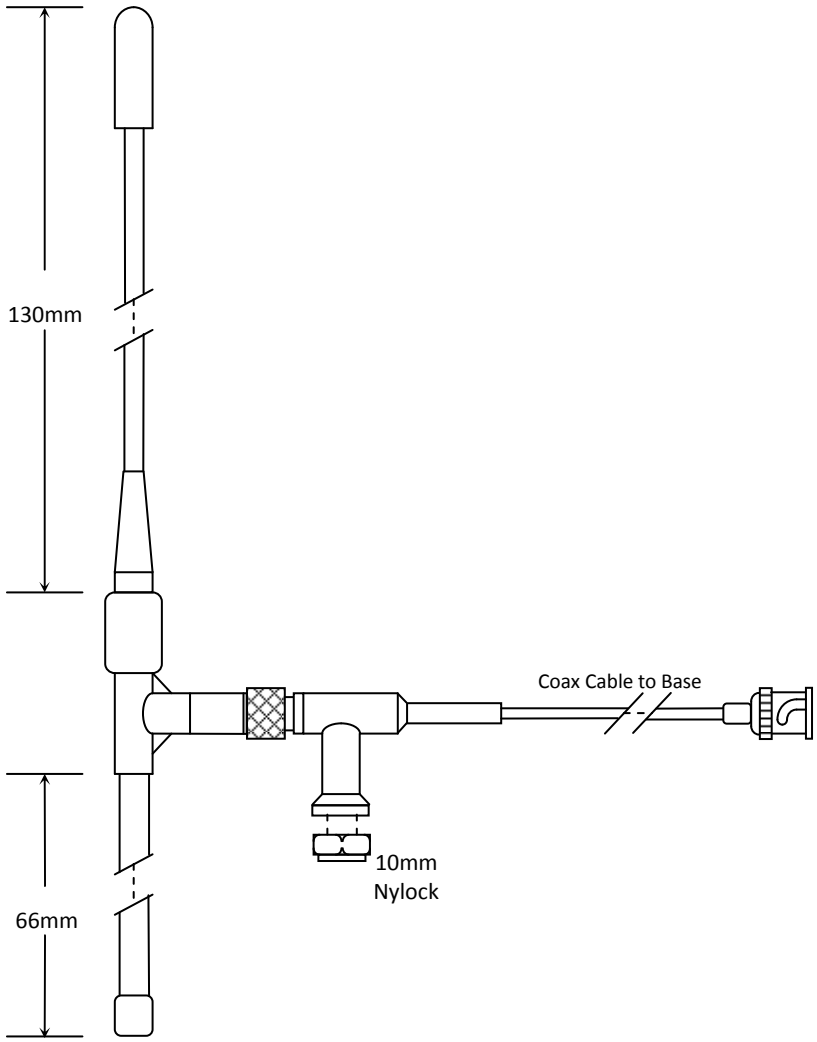

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