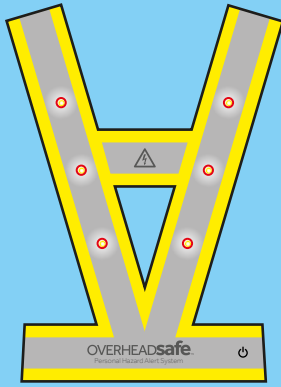


# 1. START OF SHIFT

## IMPORTANT!

Wear the OverheadSafe vest above your PPE

Make sure it is turned ON, before entering your site.

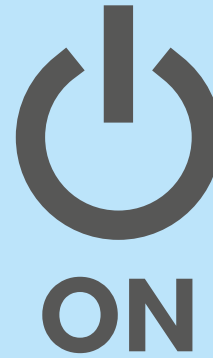


# 2. DURING SHIFT

## IMPORTANT!

Keep your OverheadSafe Vest turned ON at all times during your shift.

Keep it clean, and make sure the LED lights are not obstructed.

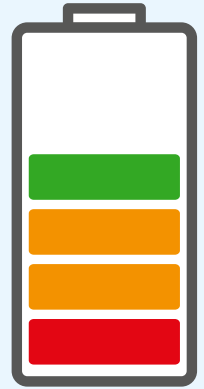


# 3. END OF SHIFT

## IMPORTANT!

Hand your OverheadSafe Vest back to your Supervisor at the end of shift.

DO NOT take it home, it needs to be checked, recharged and the data transferred.



# HOW IT WORKS

OverheadSafe is a personal hazard safety system which mitigates individual risk to overhead structures, such as: high voltage electricity cables and bridges.

Roadworkers wearing the Smart PPE Vest will flash repeatedly when entering within 5 metres of a detectable Blue Warning Cone, alerting the user of the hazard.

## BASE UNIT (WARNING CONE)

Portable or Permanently Fixed with GSM



5 metres

## CONTROLLER UNIT (VEST)

Wearable Micro-computer with radio receiver

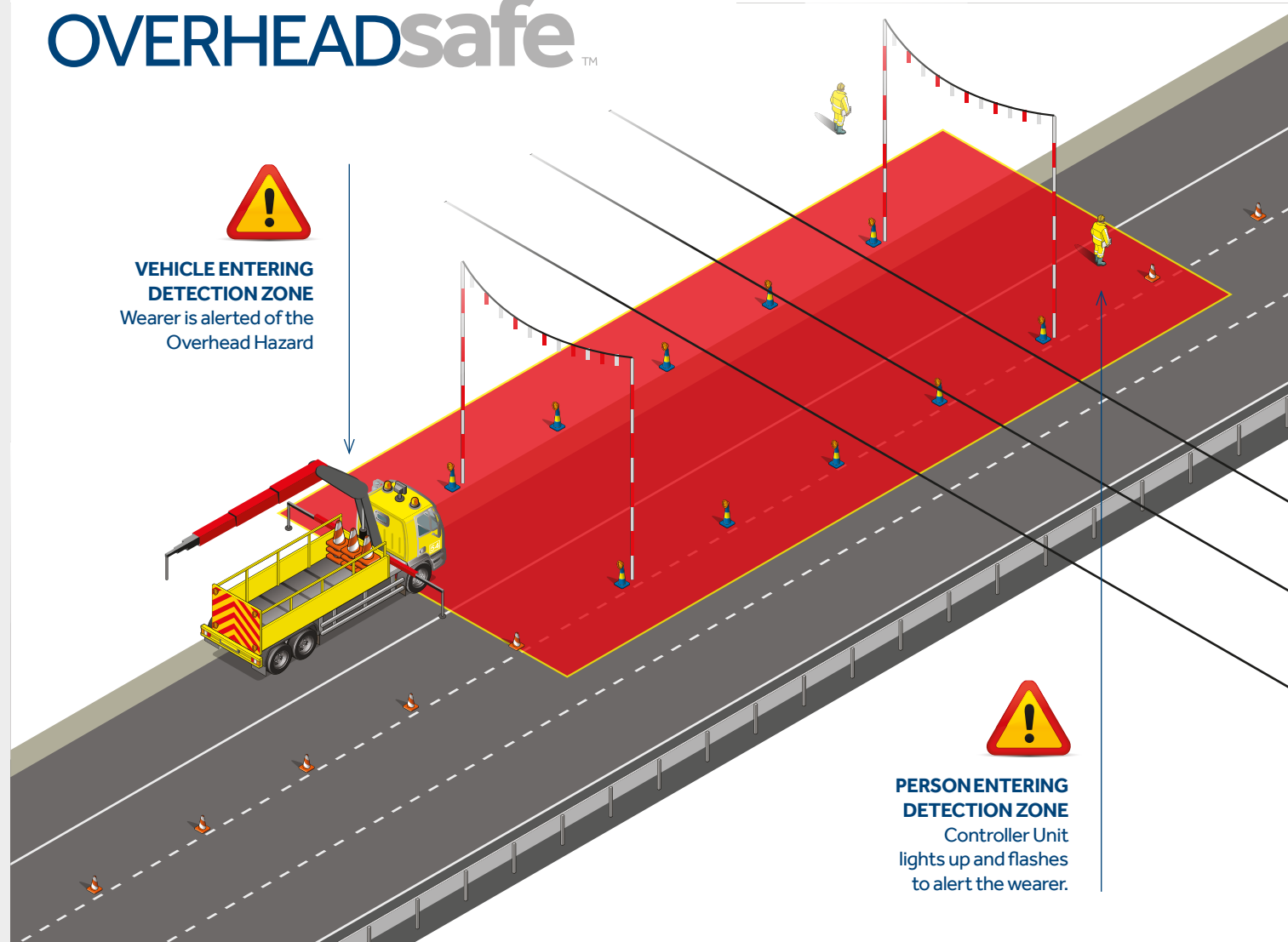


OverheadSafe combines with a fully connected IoT system, providing back office access to device management: including Location of each unit, with unique ID and battery condition.



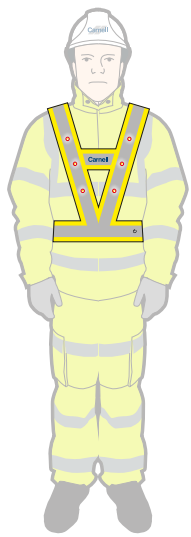
PREVENTING OVERHEAD CABLE STRIKES WITH A PERSONAL HAZARD ALERT SYSTEM.

# OVERHEADsafe™



**VEHICLE ENTERING DETECTION ZONE**  
Wearer is alerted of the Overhead Hazard

**PERSON ENTERING DETECTION ZONE**  
Controller Unit lights up and flashes to alert the wearer.



# IMPORTANT SAFETY OPERATIVE CHECKS

All operatives wearing OverheadSafe must keep the vest turned on at all times, and check it regularly, to ensure it is working until the end of shift.

## What happens if OverheadSafe is turned off during a shift?

- The safety of the operative is compromised - the LED lights on the vest will not flash when entering hazard zones.
- The vest will fail to capture important shift data, will have no timestamp. The end of shift data transfer will only record activity from the initial set up, to the time it was turned off.

## What happens if OverheadSafe battery is low?

- If the battery unit in the vest runs low, the LED lights will stay on continuously to warn the wearer. The operative must stop work and inform their supervisor who will arrange; Charging, Replacement and Reconnection.
- The safety of the operative is compromised - If the Vest Unit battery runs low or stops working and no action is taken.



# SUPERVISOR CHECKS

In order to ensure OverheadSafe works efficiently and effectively the following user checks must be strictly adhered to before and during deployment:

Supervisors and/or Appointed technicians responsible for setting up OverheadSafe on either static or managed schemes, must ensure:

1. Base Units are Powered on
2. The appropriate safety zone distance is set
3. Base Unit(s) are placed under the Blue cone(s) and
4. Monitored regularly via the Web app and Email notifications.

## What happens if OverheadSafe is not set up correctly?

- The safety of the operative is compromised - if the vest does not flash when it enters a hazard zone.

## What happens if a Base Unit is moved?

- The safety of the operative is compromised - If a Base Unit is moved and the Notification email is not promptly acknowledged and resolved.
- GS6 compliance is compromised - if OverheadSafe technology is used without placing the Base Unit(s) under the Blue Cone(s).

## General Safety

This product can only be used by adults trained and inducted on its deployment and operation. As such installation and set up can only be done by a qualified and competent Carnell approved technician.

Operatives wearing the vest unit must receive a brief and de-brief before and after shift on how to use it.

After shift charging and maintenance works should not be performed by operatives unless they also function as a trained and approved technician.

The technology manufacturer will not be held liable for any damages that may arise if installation procedure is not carried out by authorised and competent persons.

## Electrical safety

If the system has a failure, it should not be operated unless it is reported and repaired by the authorised service technician.

## Product safety

The following procedure applies to ensure maximum safety of the product:

1. Follow the set-up steps and procedures when installing the device.
2. Do not place the device outside of the blue cone when used on site.
3. Always acknowledge and resolve movement notification as quickly as possible during deployment.
4. Always report any faults or broken part of the device on time for repairs or replacement.

## Tests and checks before deployment

The base and vest units of the technology are designed with some components containing electromagnets e.g. the base unit GPS modem, transformer and RF signal allowing the different units of the technology to communicate with each other, get battery charged and establishes its location via the satellite all uses electromagnetic wave.

As part of the standard requirements for electrical products of this nature and product which will be sold on the European Economic open market, it is mandatory that such product is tested to ensure compliance with such requirements, and it is in line with this the test below was conducted;

## EMC compliance tested:

This stands for Electromagnetic Compatibility and is a measure of an electrical or electronic products' ability to both withstand electromagnetic interference that may be present in the atmosphere and similarly not to introduce electromagnetic interference into the atmosphere, which may inhibit the correct operation of other electrical products.

The EMC testing and the subsequent CE marking meant the product duly passed the EMC test certifying the product is fit for purpose and can be sold in the European Economic open market.



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Patent Pending – GB1803099.9

OVERHEADsafe™

# PERSONAL HAZARD ALERT SYSTEM.

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OverheadSafe is a personal hazard safety system which mitigates individual risk to overhead structures, such as: high voltage electricity cables and bridges.



# 50,000

Operatives working on UK highways.

# 4,000

Overhead lines crossing UK highways.

# 2

People killed per year.

OVERHEADsafe™



# IMPORTANT INFORMATION AND USER GUIDE.

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