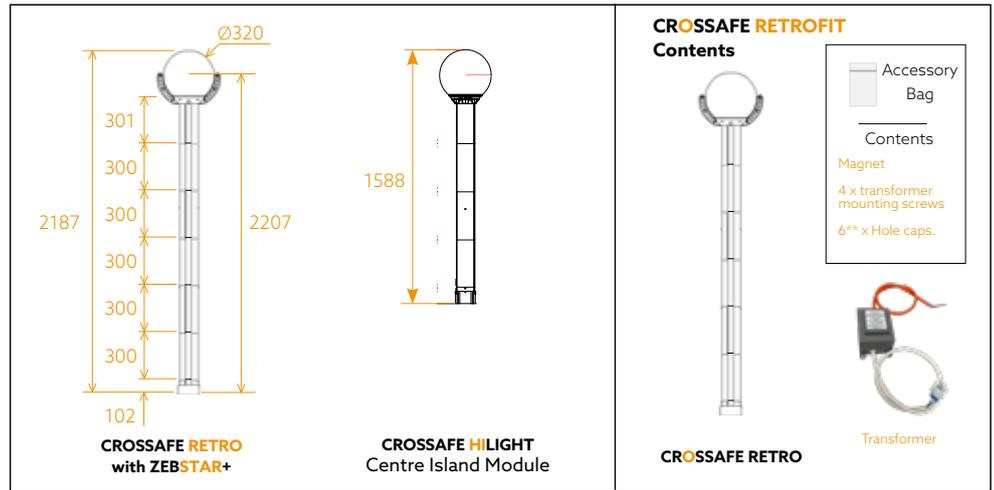
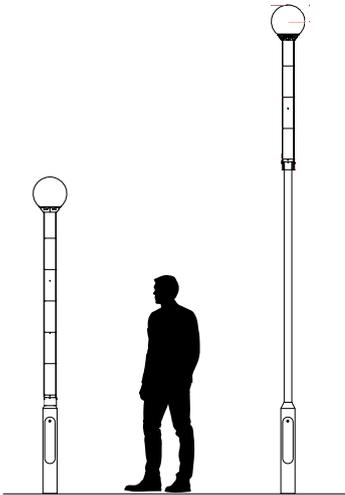


	KG	WINDAGE
<b>CROSSAFE RETRO with ZEBSTAR</b>	14.00kg	0.72m <sup>2</sup>
<b>CROSSAFE RETRO with ZEBSTAR+</b>	14.75kg	0.74m <sup>2</sup>
<b>CROSSAFE HILIGHT</b>	10.00kg	0.51m <sup>2</sup>



- ⚠️ Disconnect from the supply when conducting in-situ insulation resistance testing.
- ⚠️ If the external flexible cable or cord of this beacon is damaged, it shall be exclusively replaced by the manufacturer or his service agent or a similar qualified person in order to avoid a hazard.
- ⚠️ The light source (LED's) contained in this beacon shall only be replaced by the manufacturer or his service agent or a similar qualified person.

**SAFETY FIRST**

Isolate the electrical supply before commencing any installation or maintenance work. Wiring should be carried out in accordance with the latest IEE regulations by suitably qualified engineers.

This equipment is designed for 24 volt AC operation and must be used with a suitable transformer when connected to the mains supply. .

**TOOLS REQUIRED**

- 4mm Allen Key
- Philips Screwdriver

**1**

Prepare the host post by removing any existing equipment. Ideally the length of the 76mm shaft should be a maximum of 1874mm\* from the top to a point on the swage which is 115mm diameter. Don't worry if the shaft is shorter.

If after step 2 there is a gap between the bottom of the retrofit module and the host post, measure the vertical distance of the gap and shorten the post by this amount.

\* When fitting a CROSSAFE HILIGHT Centre Island Module the host post can be any length.

**2**

Take the retrofit module and using suitable lifting equipment raise the open end above the host post. Begin to feed the low voltage cable down the host post as the retrofit module is passed over the post. Continue to support the retrofit module until it bottoms out on the swage of the post or the top of the post engages with the beacon gallery

Locate the 6\*\* fixing screws located in each side of the retrofit module. Check the orientation of the retrofit module then tighten the 6\* fixing screws onto the host post using a 4mm allen key. Use the 6\* hole caps supplied to plug the fixing screw holes.

\*\* only 4 are required for the centre island module.

**3**

Move to the base compartment of the host post and fix the beacon transformer onto the column board using the four screws provided.

Connect the beacon supply cable to the power supply using the supplied connector. Coil and secure any excess cable neatly in the base housing.

Connect the transformer input cable to the incoming power supply at the fused cut-out.

⚡ Re-connect the electric supply and replace the base door. Check that the retrofit module operates correctly.

**4**

**Synchronising Beacons.**  
Several beacons may be synchronised by powering up at the same time or timing the powering of one beacon to match the other.\*\*

**ZEBSTAR+ Beacon**  
The intensity of the Bee Seen Hi-Viz beacon is factory set to medium power. Please see over for instructions on how to adjust the brightness should this be required.

**CROSSAFE White Band Daytime Brightness**  
The brightness of the Bee Seen Illuminated Post is factory set to medium power. Please see over for instructions on how to adjust the brightness should this be required.

\*Dependent upon mains quality.

## BEE SEEN ZEBSTAR+ BEACON BRIGHTNESS ADJUSTMENT

The Bee Seen ZEBSTAR+ beacon has an adjustable array brightness which is independent between front and back. Follow the steps below to make the adjustments.

### SAFETY FIRST

Adjustment of the ZEBSTAR+ array is carried out with the beacon powered up. Ensure that you are in a safe location when carrying out the adjustment.

### TOOLS REQUIRED

- Portland Traffic Infra-Red Handset (supplied with beacon)

Identify the front of the installed beacon which displays the yellow BEE SEEN Logo. Check the logo has a red border which indicates it can be used with the Infra-Red adjustment system. Safely move into a position where you are able to point the Infra-red remote at the front of the beacon. When using the Infra-Red Handset for the first time, pull the clear battery isolator tab to connect the battery.

### 1. SET THE ZEBSTAR+ HI-VIZ ARRAY BRIGHTNESS

Press



Pressing this for 3 seconds\* will put the ZEBSTAR+ into programming mode. This will cause the ZEBSTAR+ globe to switch off and the Hi-Viz array to be permanently on. The arrays will show the currently stored brightness setting.

\*Ensure the button is held until the ZEBSTAR+ globe switches off



Use the up and down arrow keys to adjust the Hi-Viz array brightness to the preferred level. Each time a button is pressed the beacon will flash once to confirm the instruction.

When the brightness reaches the upper (level 7) and lower (level 0) brightness limit the beacon will double flash to indicate the limit has been reached.

At this point Front and Back arrays are set to the same brightness

### 2. SET THE BRIGHTNESS OF THE REAR ARRAY

Press



This will allow the rear array to be set to a different level to the front array. In this mode the rear brightness will also be shown on the front array so that you don't have to go to the other side of the beacon.



Use to adjust the rear Hi-Viz array brightness to the preferred level.



Stores the brightness of the rear array and returns the front array to the active level previously set in 1 above.

### 3. NIGHT MODE

Press



This button allows the Hi-Viz arrays to be automatically switched off at night.

When pressed, the beacon will flash twice to indicate the arrays will be switched **OFF** at night.

Press again and the beacon will flash once to indicate that they are switched **ON** at night.

When on at night, the arrays will be set to level 1 which is a similar brightness to the beacon.



The Demonstration button will show the arrays at the selected night mode brightness saved by the beacon.

Press again to return to programming mode.

### 4. CLOSE PROGRAMMING MODE

Press



Press to close program mode, save the current settings and return to normal operation. This can be pressed at any time.

Closing the program mode also re-sets the beacon flash timer to the start of the on cycle. By observing another beacon and timing the button press it is possible to get the beacons to flash together. Beacons can also be synchronised by powering them up together or powering one to match the other(s).

## BEE SEEN CROSSAFE BRIGHTNESS ADJUSTMENT

The white band illumination brightness can be adjusted to suit site conditions to make the post more visible to drivers during daytime.



Hold the supplied magnetic wand on the marked area within the lowest black band. A red dot will illuminate on the display to show that the system is active. Keep the magnet in place for around 10 seconds when the display will illuminate to show the current lighting level. Swiping the magnet across the area will advance the lighting level making the post brighter. When level 7 is reached, a further swipe will return to setting 0.

When the desired level is selected remove the magnet and after a short delay the display will flash indicating that the new level has been stored. At this point the post may dim slightly which will be the post responding to the ambient lighting conditions.

Repeat the process on both sides of the post which are independent from each other.

LEVEL	White band Brightness (cd/m <sup>2</sup> )	
	Daytime	Night-time
0	OFF	OFF
1	591	858
2	858	858
3	2,440	858
4	3,733	858
5	5,097	858
6	6,311	858
7	7,172	858