Installation and Operation Instructions
Infinity BB4 Directional

INFINITY BB4

Product Description

Redtronic's Infinity BB4 is a dual-colour, surface recessed mount directional LED which has been innovatively designed to incorporate all driver electronics within the body of the product.

Part Number	Colour	Voltage	Colour Type	Warranty
DIFX-004-AC		11-32VDC	Single Colour	3 years
DIFX-004-BC		11-32VDC	Single Colour	3 years
DIFX-004-GC		11-32VDC	Single Colour	3 years
DIFX-004-RC		11-32VDC	Single Colour	3 years
DIFX-004-WC		11-32VDC	Single Colour	3 years
DIFX-004-BAC		11-32VDC	Dual Colour	3 years
DIFX-004-BRC		11-32VDC	Dual Colour	3 years
DIFX-004-BWC		11-32VDC	Dual Colour	3 years
DIFX-004-ARC		11-32VDC	Dual Colour	3 years

Flash Patterns

1	Quad
2	Triple
3	Double
4	Single
5	Quad/Single
6	Quad/Triple/Double/Single
7	CAP168 – unlock with brown to +ve for 10 seconds

Spare Parts

25° and 60° are standard shroud / mounting pods, other options are available on request.

Part Number	Description
SP_BB4SHROUDS25	25° Shroud / Mounting Pod
SP_BB4SHROUDS60	60° Shroud / Mounting Pod
SP_BB4LBRACKET	L-Bracket
SP_BB4GROMMET	Black Grommet

Technical Information

R65 CLASS I | R65 CLASS I | R10 EMC | ICAO CAP168 | IP69K

Voltage Range	11-32VDC
Directional Type	Unique wide angle intense optic with Ultra-bright latest generation LEDs
Number of LEDs	12 (Dual) and 4 (Single)
Amps / Current Peak Max	630mA at 12VDC
LED Power	8 watts
IP Rating	IP69K protection against dust and water ingress
Approval	ECE R65 Class I (blue and amber), CAP168/ ICAO
Compliant	EMC R10
DIM Mode	Yes (night and day)
Cruise	Cruise feature available
GATSO	GATSO light feature available
Synchronisation	Yes with other Redtronic products
Weight	30g
Operating Temperature	-40 to +105°C
Lens Material	Ultra-strong UV stabilised polycarbonate lens
Enclosure Material	Powder coated cast aluminium
Mounting	Double pop-lock grommet, window shrouds/pods or L-bracket
Warranty	3 years

Cable Connections

Function	Cable Colour	Description
Power 1 +ve	**Red Wire**	Power 1 – powers primary colour
Power 2 +ve	**Orange Wire**	Power 2 - powers secondary colour
Ground -ve	**Black Wire**	0v ground / earth
Pattern +ve	**Brown Wire**	Changes the flash pattern by momentarily applying to a positive. Apply to +ve for 2-3 seconds to revert to quad flash (pattern 1)
DIM + ve	**Blue Wire**	Activate night mode
Synchronisation	**Yellow Wire**	Link to other Redtronic products
Configuration	**Green Wire**	Colour function selection

Installation

Connecting the Infinity BB4 directionals to a vehicle battery / power source requires the **black wire** to be connected to the **negative** (-ve) terminal, and either the **red wire** (V1), **orange wire** (V2) or V1 and V2 together (V3) to be connected to **positive** (+ve) terminal. Pattern and mode functions need to be set in the same manner as the primary **red wire** colour. Disconnect the **red wire** to set the secondary functions as desired. All Infinity BB4 directionals are set to double flash pattern as default before leaving the factory.

To set colours:
Connect the **red wire** (V1), **orange wire** (V2) or V1 and V2 (V3) wire to **positive** (+ve) and the **black wire** to **negative** (-ve) terminals on the power source. Hold the **yellow wire** to the negative (-ve) terminal and the **green wire** to **positive** on the power source. The BB4 will activate in either a flashing or steady burn (GATSO) option, these are colour select modes. Scroll through the 9 optional 'colour programs' by applying the **brown wire** to **positive** (+ve) momentarily.

Single Colour Flash	**1** Colour 1	**2** Colour 2	**3** Off
Steady Burn	**4** Colour 1	**5** Colour 2	**6** Off
Dual Colour Flash	**7** Dual Colour	**8** Off	**9** Off

To set the alternate flash mode:
You can either set V1 to alternate against V2, or utilise the colour setting mode to combine an alternating feature on a single control line. If you want to keep them individually controlled: connect the **red wire** (or **orange wire**) to **positive** (+ve) and the **black wire** to **negative** (-ve) terminals on the power source. Hold the **yellow wire** to the **negative** (-ve) terminal on the power source. The BB4 will turn from flashing to 'steady burn'.

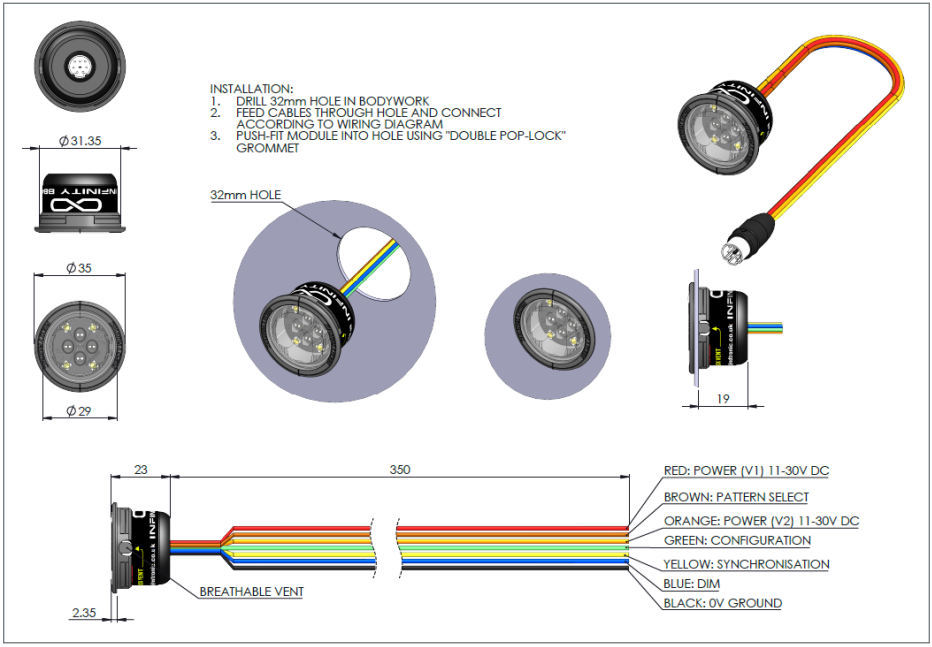
While holding the **yellow wire** on the **negative** (-ve) terminal, hold the **brown wire** to the **positive** (+ve) terminal. After 2 seconds, the unit will extinguish for 5 seconds, after which the BB4 will start a quick succession of flashes. Remove the **brown wire**, the unit should now be flashing alternately to any BB4's it synchronises with.

To set the flash pattern:
With the BB4 powered on, the **brown wire** should be connected to **positive** (+ve) terminal from the power source momentarily, to change to the next pattern. Either touch the wire to **positive** (+ve) briefly, or connect via a momentary switch and press to change pattern.

To set the DIM function:
Connect the **blue wire** to **positive** (+ve) at the power source to enable DIM (night) mode. The **blue wire** needs a constant connection to **positive** (+ve) to operate in this mode. The BB4 will return to full brightness when the **blue wire** is disconnected.

To synchronise BB4's:
When the desired flash pattern and mode has been set, connect the **yellow wires** from each BB4 together, this will ensure all BB4 flash in synchronised format. Note: **Do not** apply **yellow wires** to **positive** (+ve).
Do not attempt to sync Redtronic products with any other manufacturer's products.

Installation Diagram



Warranty and Liability

Redtronic warrants that on the date of purchase, this product will conform to Redtronic specifications for this product (which are available from Redtronic upon request). This product benefits from a 3-year warranty from the date of purchase.

Warranty disclaimer: grommet, shrouds / mounting pods and L-bracket are not covered under warranty.

Cleaning and Maintenance

Please refer to our 'How to care for your Redtronic Polycarbonate Products" and our "shrouds and mounting pods" document.