Clevertest Plus

Refer to the supplementary operation guide supplied with the Product.

After Power ON, the Status LED on a Clevertest Plus enabled fitting will display a rapid Green or Red flashing for a period up to 2 minutes.

Maintained fittings (CBULKM-xx) cannot be scanned with a camera using the Clevertest Plus App as the maintained light source interferes with the camera scanning function. To register the fitting manually enter the serial number from the QR code and visually read the test result and enter manually into Clevertest Plus App.

Zoneworks and HIVE Monitored Options

Fittings with part numbers -ZW, -HVG are fitted with Zoneworks communications modules (nodes). These fittings are monitored using either Powerline Carrier Technology that utilize the power cable to provide data communication, RF transceiver modules operating in the ISM band or a dedicated data cable to/from data routers installed on a dedicated data trunk connected to a central Server (can also be connected via Ethernet/Internet/Fibre). Zoneworks software on the server is used to monitor, coordinate testing and collate test data from each fitting. Zoneworks Fittings can be commissioned by a single push of the test switch or by scanning the supplied barcode. The LED Test Switch indicator provides a multifunction indication of the status of the fitting during testing and normal operation:

Option	State	LED Operation
ZW, HVG	Commissioned	LED on Solid (Green)
ZW	Un-commissioned	**Batt plugged-in:** yellow 1s, green 1s
		Batt unplugged: red 1s, off 1s
HVG	Un-commissioned With network connectivity	**Batt plugged-in:** yellow 1s, green 1s
		Batt unplugged: red 1s, off 1s
HVG	Un-commissioned Without network connectivity	**Batt plugged-in:** yellow 250mS, green 250mS, yellow 250mS, green 250mS, green 1s
		Batt unplugged: red 250mS, off 250mS, red 250mS,off 250mS, off 1s
ZW,	Emergency Light Test In Progress	LED flashes at yellow 5s , 0ff 1s
HVG	Emergency Light Test In Progress	LED flashes at yellow 1s , 0ff 1s

For further information of installation of a Zoneworks system, please refer to the Zoneworks Users Guide and Commissioning Guide

DALI 2 EM Option

Luminaires with part numbers having -D2 are fitted with DALI 2 certified modules (nodes) that facilitate connection and integration to 3rd Party Lighting Control Systems. Before installing the fitting please confirm that the Lighting Control System has the capability to monitor DALI Emergency Luminaires. The fitting will be addressed and configured into the control system by the Lighting Control System Commissioning Technicians and not Clevertronics

State	LED Operation
Commissioned/ Un-commissioned	LED on Solid (Green)
Emergency Light Test in progress	LED flashes at 1s On (Yellow) & 1s Off
"IDENTIFY COMMAND"	Lamp and Status LED Flash for 30 seconds

A 2-way "figure 8" cable and terminal block facilitates the connection to the DALI network OR a 5/6way "structured wiring system" lead and plug facilitating the power and DALI connection. DALI connections are marked as Da Da.

Note:

This luminaire (with reinforced insulation between control/LED terminal and AC supply) contains non-user replaceable light source and battery - to be replaced (if required, refer installation instructions for battery replacement) by Clevertronics service personnel/agents or a registered electrician.

Clevertronics

LED Emergency Bulklite
Installation & Maintenance Instruction Leaflet

NOTE: Standard product codes with this symbol are enabled with Clevertest Plus capability. Please refer to the operation guide supplied with the product for details.

☐ CE UK CA IP65

Models: CBULKy-xx-zz

Testing:		Options:	
Manual Test	xx = Blank	Switched Live/Switched Active (SA)	y = Blank
Zoneworks	xx = ZW	Maintained (xx=D2 only)	y = M
Zoneworks HIVE	xx = HVG	Non-Maintained (xx= D2 only)	y = N
DALI-2	xx = D2	White colour case(default)	zz = Blank
		Black colour case	zz = BLK

Spare Parts:

1553231	Replacement Battery
8050790	Replacement Emergency LED Board
8003842	Replacement Emergency Driver

Important:

It is illegal for anyone, except for a licensed electrician to install or maintain this product. Before installation, ensure that the electricity supply has been switched off and isolated. Installation must be carried out in accordance with the relevant British Standards.

Operation:

Note: During normal operation, for product with SA terminal, the lamp can be switched On or Off via the SA terminal, by applying mains voltage to SA the lamp will illuminate, and no mains voltage on SA will turn the lamp off.
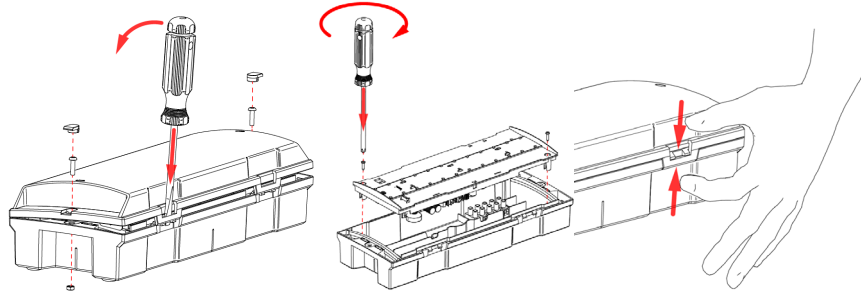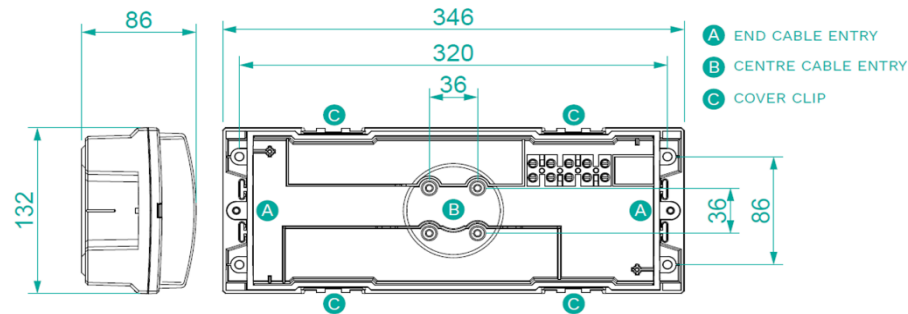
In Emergency operation the luminaire will override On/Off state set by SA or commands.

On D2 models (without SA terminal), the lamp can be switched using DALI commands, on power up or after Emergency operation luminaire will be: ON for **M**aintained model, OFF for **N**on-Maintained model.

Installation:

This CBULK Surface Mount Emergency Luminaire can be installed on solid or T-BAR ceilings/surfaces or used to replace an existing unit.
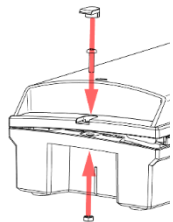
- Locate the installation position.
- Remove the diffuser by levering the 4 clips holding the diffuser (see Below image on how to do this).
- Remove Gear tray by undoing the 2 screws holding it in place (using a suitable screwdriver)
- Pre-drill mounting holes (Image showing it below).
- Mount base plate and use suitable fixings to secure the base plate into the pilot holes (including consideration of maintaining the IP rating)
- Bring in supply cables via the rear entry hole or via the ends of the base you will need to drill a suitable hole where cable entry is required).
- Terminate the supply cables to the Neutral(N), Unswitched Live(L), Switched Live(SA) & Earth Loop(E) terminals (in the case of the -D2 fittings terminate the DALI cable to the terminals marked Da Da, this does not have SA terminal).
- Ensure the Battery is connected.
- Push the gear tray back into position and secure in place using the two screws.
- Install the diffuser by pushing it down and squeezing the clips together. Verify that all 4 clips are properly engaged this is ensure the IP seal is (image below)
- If the CTP capabilities are activated, please affix the CTP status label to a visible surface and Four Segment Marking on the product will include an "F" in third segment block.

Dimensions/Installation:

A END CABLE ENTRY
B CENTRE CABLE ENTRY
C COVER CLIP

Securing the Diffuser

To secure the diffuser you can add the provided screw and nut. To do this add the nut into the slot provided in the base then use the screw to fix in place.

DALI (D2) Luminaire Switching: (-D2 model only)

This fitting will appear as a DALI Emergency Fitting on the DALI line.
To turn luminaire ON, issue any of the following commands:
• 008 – On And Step Up
• 005 – Recall Max Level
• 006 – Recall Min Level
To turn luminaire OFF, issue any of the following commands:
• 007 – Step Down And OFF
• 000 – OFF
Do not issue Reset (032) command, this will set the fitting to Maintained operation.
Further information available in 942588 – DALI Control Supplement Leaflet.

Battery Replacement:

1. Prior to any work, isolate the power to the luminaire that requires battery replacement
2. Open the fitting by removing the diffuser, see images in installation instruction.
3. Remove the Geartray. Support gear tray while removing the screws
4. Remove the Battery Connector from the Emergency PCA.
5. Remove the battery from the gear tray by removing mounting screws.
6. Replace battery, re-install screws and connect to Emergency Driver.
7. Refit Gear Tray, and diffuser.

Testing Procedure:

When the unit is connected to the un-switched active, it must be allowed to charge the battery for at least 24 hours. The emergency lamp only illuminates during a power fail. Conduct the following tests:

- The emergency lamp must illuminate for at least 180 min after disconnection from the mains. If the unit fails to illuminate for the requisite time, remedial action must be taken to repair the situation and once completed, the unit must pass a subsequent test.
- Press and hold Test Button or switch Off Mains Supply, check that the emergency lamp is On.
- Release the Test Button or Switch On Mains Supply, check that the emergency lamp is Off (Non-maintained operation).

Trouble Shooting:

Below are a list of common problems and their possible causes.

Fault: **The Green LED Test Switch indicator is not illuminated.**
Check: A.C. is connected and is turned on.
Battery is connected
Test Switch for damage.

Fault: **Lamp does not illuminate in emergency mode.**
Check: A.C. is connected.
Lamp is correctly inserted.
Battery is connected

Fault: **Lamp illuminates in emergency mode, but only stays on for a short period.**
Check: Battery has been allowed to charge for at least 24 hours.
Battery for damage.

Caution:

On many building sites, power circuits may be cut off in an uncontrolled and repetitive basis during construction. As a result, any Exit & Emergency Units, on these circuits, will have their batteries discharged or "cycled". The Li-ion battery in the Exit & Emergency Unit has been selected to give excellent long life performance in a controlled IEC 60598-2-22 testing environment. Excessive battery cycling will reduce through-life performance and may lead to premature battery failure. Battery warranty claims, as a result of such abuse, are specifically EXCLUDED from Clevertronics warranty terms.

Warranty:

For Product Warranty information and Terms and Conditions of Sales please refer to our website
https://clevertronics.co.uk/product-warranty-statement/