

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.

**Zoneworks, HIVE (HV/HVG) and DATA Monitored Options**

Fittings with part numbers -ZW, -HV, -HVG, -DATA 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, HV, HVG, DATA	Commissioned	LED on Solid (Green)
ZW, DATA	Un-commissioned	<b>Batt plugged-in:</b> yellow 1s, green 1s
		<b>Batt unplugged:</b> red 1s, off 1s
HV, HVG	Un-commissioned With network connectivity	<b>Batt plugged-in:</b> yellow 1s, green 1s
		<b>Batt unplugged:</b> red 1s, off 1s
HV, HVG	Un-commissioned Without network connectivity	<b>Batt plugged-in:</b> yellow 250mS, green 250mS, yellow 250mS, green 250mS, green 1s
		<b>Batt unplugged:</b> red 250mS, off 250mS, red 250mS, off 250mS, off 1s
ZW, DATA	Emergency Light Test In Progress	LED flashes at yellow 5s , Off 1s
HV, HVG	Emergency Light Test In Progress	LED flashes at yellow 1s , Off 1s

In the case of the DATA version a 2-way “figure 8” cable and terminal block facilitates the connection to the DATA network via a multi-drop bus (daisy chain connection). For further information of installation of a Zoneworks system, please refer to the Zoneworks Users Guide and Commissioning Guide (incl. DATA version)

**DALI EM Option**

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

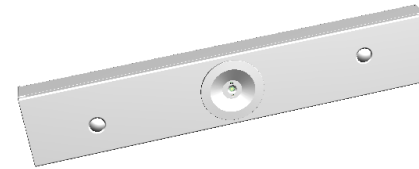
State	LED Operation
Commissioned/ Un-commissioned	LED on Solid (Green)
Emergency Light Test in progress	LED flashes at 1s On (Yellow) & 1s Off
“IDENTIFY COMMAND”	Lamp and Status LED Flash for 30 seconds

A 2-way “figure 8” cable and terminal block facilitates the connection to the DALI network. DALI connections are marked as Da Da.



**LP™ LED Non-Maintained Batten  
Surface Mount Emergency Luminaire**

**Installation & Maintenance Instruction Leaflet**



**Victoria (Head Office & Manufacturing)**  
Website: [www.clevertronics.com.au](http://www.clevertronics.com.au)  
Email: [info@clevertronics.com.au](mailto:info@clevertronics.com.au)  
Phone: +61 3 9559 2700  
Fax: +61 3 9559 2799

**New South Wales**  
Phone: +61 2 8805 6400  
Fax: +61 2 8805 6444


**Queensland**  
Phone: +61 7 3442 9700  
Fax: +61 7 3442 9777

**South Australia/Northern Territory**  
Phone: +61 8 8301 8800  
Fax: +61 8 8351 8286

**Western Australia**  
Phone: +61 8 9207 0000  
Fax: +61 8 9207 0088

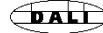
**New Zealand**  
Phone: +64 800 548 448

**Designed in Australia to comply with the requirements of AS2293.3: 2005 and AS/NZS CISPR15: 2017**

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.


**Models: CBS2N-xx-yy**

**Testing:**

- Manual Test xx = Blank
- Zoneworks xx = ZW
- Z/W DATA xx = DATA
- Zoneworks HIVE xx = HV/HVG
- DALI Registered. xx = DALI 
- Clevertest xx = CT

**Options:**

- Black Colour yy = BLK

(NOTE: -CT Products supplied with the Clevertest Plus Symbol  are activated with Clevertest PLUS capability. Please refer to the operation guide supplied with the product for details).

**Spare Parts:**

- 1550010 Replacement Battery
- 1100925 Replacement Emergency LED Board (White)
- 1100924 Replacement Emergency LED Board (Black)
- AUM02370170001 Replacement Emergency Driver
- AUM02870100001 / AUM02970060001 Replacement Emergency Driver (-HV / -HVG)
- AUM02270170002 Replacement Emergency Driver (-DALI)

**Important:**

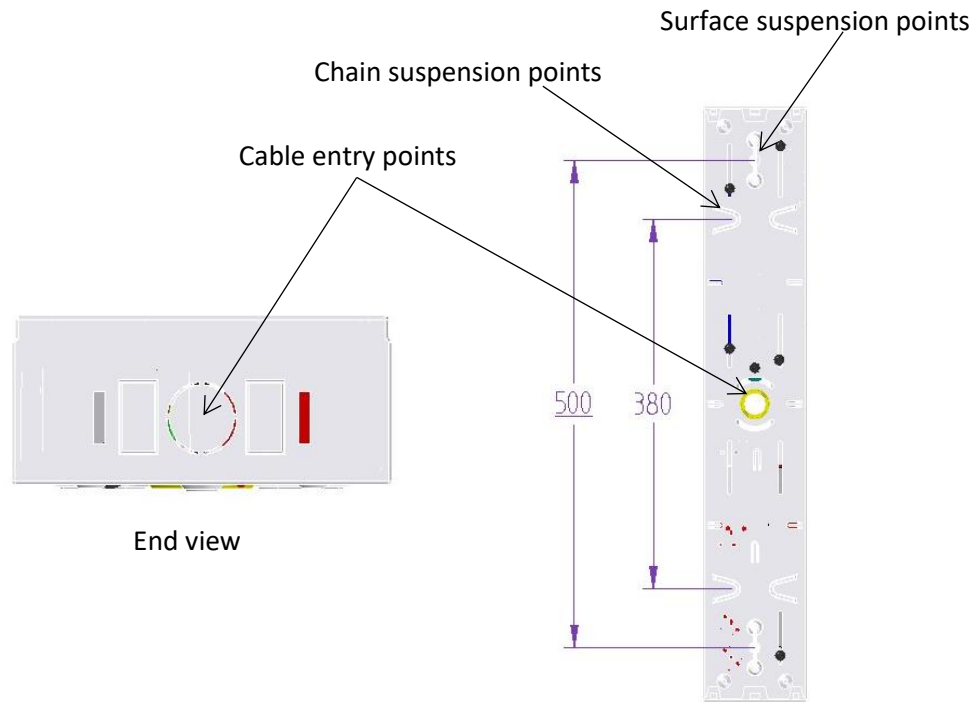
It is illegal for anyone, except for a licensed electrician to install or maintain this product. Before installation, ensure that the electricity supply has been switched off and isolated. Installation must be carried out in accordance with the relevant Australian and International Standards.

## Installation:

This Surface mount non-maintained Emergency Luminaire can be installed on solid surface or used to replace an existing unit.

- Locate the installation position.
- Refer Images and Dimensions below for the Cut-out Hole and other dimensions.
- Pre-drill mounting holes.
- Mount base plate and use suitable fixings to secure the base plate into the pilot holes.
- Bring in supply cables via the rear entry hole or via the end of the base plate (surface mount conduit entry).
- Terminate the supply cables to the L, N & E terminals (in the case of the –DALI or –DATA fittings terminate the DALI or DATA cable to the terminals marked Da Da or DATA).
- Ensure the Battery is connected.
- Install the top cover, containing the LED Head, ensuring to reconnect the control gear assembly to the connector from LED Head on cover plate.
- Screw the cover to the base plate and, in the case of side/conduit entry remove the knock-out at the end of the cover to go cover the conduit.
- 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:



## Testing:

When the CBS2N 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 failure. Conduct the following tests:

- During the first commissioning test the emergency lamp must illuminate for at least 2 hours after disconnection from the main supply. The results of all tests are required to be recorded in a service logbook, which is to be kept on-site at all times. 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 for each LED head or switch Off Mains Supply, check that the emergency lamps are 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.

**Rated Emergency Lumen Output in accordance with AS2293.1, not applicable for –TH (theatre) version (refer to spacing tables for installation positions):**

Refer to the Technical Label for classification information.

## 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 battery in this fitting has been selected to give excellent long-life performance in a controlled AS2293 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

<http://clevertronics.com.au/terms-conditions-sale-australia-nz/>