

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 Monitored Options**

Fittings with part numbers -HV/-HVG are fitted with Zoneworks HIVE communications modules (nodes). These fittings are monitored using RF transceiver modules operating in the ISM band 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 HIVE Fittings can be commissioned by scanning the supplied barcode. The LED indicator provides a multifunction indication of the status of the fitting during testing and normal operation:

Option	State	LED Operation
HV/HVG	Commissioned	LED on Solid (Green)
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
HV/HVG	Emergency Light Test In Progress	LED flashes at yellow 1s, Off 1s

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

**DALI EM Option**

Luminaires with part numbers having -DALI are fitted with DALI modules (nodes) that facilitate connection and integration to 3rd Party Lighting Control Systems. Before installing the -DALI fitting 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 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.

If flexible wiring is connected to this luminaire and is within arm’s reach, the wiring shall be effectively fixed to the wall to reduce the risk of strangulation.

**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/>

**FORM 16m Exit**  
**Installation & Maintenance Instruction Leaflet**



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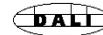
**New Zealand**  
Phone: +64 800 548 448

Designed in Australia to comply with the requirements of AS2293.3: 2018 and AS/NZS CISPR22: 2019.

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: FORM-16-SM-CM-zz-L10-xx-yy**

**Testing:**

Manual Test xx = Blank  
Zoneworks HIVE xx = HV/HVG  
DALI Registered. xx = DALI 

**Options:**

No EM Lens yy = Blank  
EM Lens yy = ESC  
Rod Suspended zz = RS  
Cable Suspended zz = CS

**Spare Parts:**

1530050 Replacement Battery  
AUM0187090001 Replacement Emergency Driver

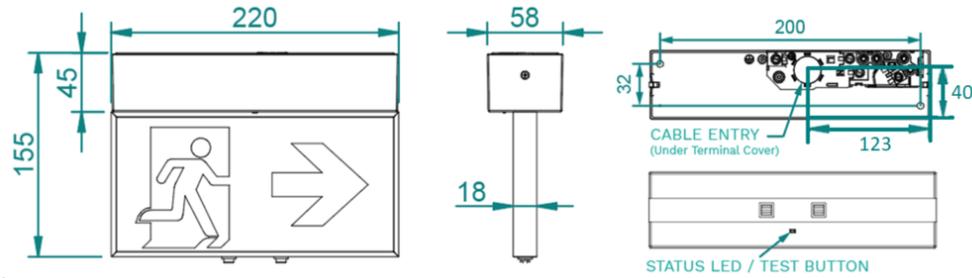
**Important:**

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 Australian and International Standards.

**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.

## Dimensions:



## Installation:

Please follow the below steps to install the product correctly:

- Firstly, remove Terminal Cover to gain access to Terminals (See Figure 2)
- Insert cable through the appropriate cable entry and leave enough cable to reach into the terminal block
- Mark and install Mounting Plate using Mounting Points (see Figure 1).
- Wire mains power cable, 240V 50Hz, to terminals marked L, N & ⚡ (and DALI Cable to terminals marked Da Da as applicable)
- Re-attach Terminal Cover (ensure screw is used to secure cover into place)
- Insert the Box/Blade Assembly and secure the two side screws (See Figure 3)
- Ensure correct decal is installed into product, if not, slide out default decal and replace with correct version (see Figure 4)
- 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.

## Battery Replacement:

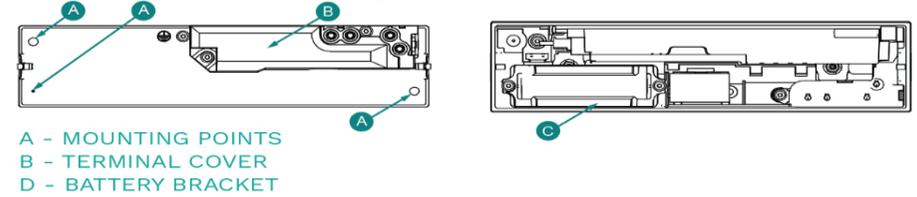
1. Prior to any work, isolate the power to the luminaire that requires battery replacement
2. Remove the two side screws on the Box (See figure 3)
3. Pull Blade/Box assembly down to release from Terminals
4. Disconnect Battery from EM Driver and remove Battery Bracket & Battery
5. Replace Battery/Battery Bracket and connect to Emergency Driver
6. Reinstall the Blade/Box assembly and secure the two side screws

## 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 Exit Lamps illuminate in normal conditions as well as during power fail. The Escape Lamps (for -ESC products only) only illuminate during a power fail. Conduct the following tests:

- The Exit Lamps & Escape Lamps must illuminate for at least 120 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. For more specific information, please refer to the current edition of the AS 2293.3 Standard.
- Press and hold Test Button or switch Off Mains Supply, check that the Exit Lamps & Escape Lamps is **ON**.
- Release the Test Button or switch On Mains Supply, check that the Exit Lamps are **ON** & Escape Lamps are **OFF** (Non-maintained operation).

## Installation/Maintenance Images:



## MOUNTING PLATE/BOX & BLADE INSTALLATION

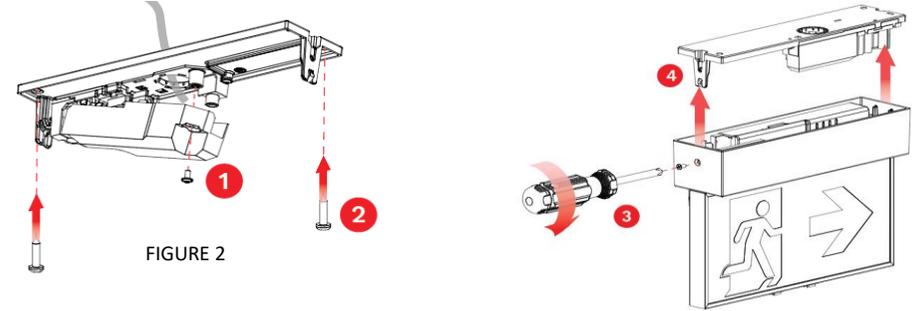


FIGURE 2

FIGURE 3

## DECAL REPLACEMENT

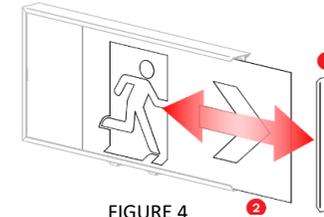


FIGURE 4

## 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.  
Blade loom is connected to Driver correctly

**Fault:** Lamp(s) does not illuminate in emergency mode.

**Check:** A.C. is connected.  
Lamp is correctly inserted.  
Battery is connected

**Fault:** Lamp(s) 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, (refer to spacing tables for installation positions):**

Refer to the Technical Label for classification information.