Trouble shooting guide

If you have installed and connected the unit as per the instructions listed earlier and it does not function correctly, use the following table as a guide to fixing the problem. Look up the type of fault in the left column and check the possible causes from the right column.

| | Fault | Possible causes |
|---|--|--|
| 1 | Lamp and LED not lit | AC mains supply not connected; or AC mains supply turned off; or Unit not inserted into the base properly; or Test switch damaged |
| 2 | Lamp not lit but LED is lit | Lamp damaged; or Lamp incorrectly inserted |
| 3 | Lamp is lit but LED not lit | Test switch damaged; or Battery not connected |
| 4 | The lamp does not switch to emergency mode when the test button is pressed | Test switch damaged |
| 5 | The lamp works momentarily on emergency when the test button is pressed | Battery not yet charged (allow up to 16 hours) |

If the unit still does not work after checking these possible causes, contact ABB service in Australia on 1800 222 435, Monday to Friday, 7.00am to 5.00pm (AEST) and ask for help. Our trained service personnel will usually be able to take your call immediately and assist you in resolving your difficulty. ABB is committed to providing valuable through-life support for its products.

ABB Australia Pty Limited

Phone: 1800 222 435

E-mail: AU-ABB-Stanilite@abb.com

Installation manual

Exit LED Quickfit® vandal resistant jumbo Standard, Nexus LX, Nexus RF

Doc no. 29-99569





| This document covers | What's inside the box |
|---------------------------|--------------------------|
| Safety warning | Main frame |
| Installation instructions | Diffusers |
| Removal instructions | Ceiling bracket |
| Testing precautions | Hole plug set (6 pieces) |
| Trouble shooting guide | Installation manual |
| | Warranty information |

Congratulations

Congratulations on choosing to use this ABB product covered by our unique through-life support system. This document is designed to assist you during the installation of this product; for the safety of yourself and others ABB recommends that you read this document thoroughly before commencing installation. The fittings are designed for easy installation. They are advanced pieces of electronic equipment which, when treated with care and maintained through regular and appropriate servicing, will perform reliably for many years to come.

Safety warning

In Australia and New Zealand, only licensed electricians are permitted by law to work with 240 volt electrical installations. Do not attempt to install or connect this product unless you are a licensed electrician.

Turn off and isolate the electrical supply before connecting this fitting to the building wires.

Do not touch the terminals of the terminal block when the light fitting is energised.

The only user-serviceable parts are fluorescent or halogen lamp/s. LED light sources are not user-servicable.

Do not tamper with the fitting or the warranty will be void.

As the installer, it is your responsibility to ensure compliance with all relevant building and safety codes, (ie: AS3000, AS/NZS2293). Refer to the applicable standards for data and mains cabling installation procedures and requirements.

Important note: This product is designed for indoor use only.

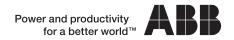
Nexus LX (data cable system)

The Nexus® range of emergency light fitting are designed to be connected together into a special communication network over a Level 4 (or higher) high speed, single twisted pair data cable. The Nexus user and technical guide describes all you need to know to successfully install a Nexus project. Ask for it from your supervisor, from your employer or from your nearest ABB product supplier. The network cabling of the building must be installed as per the procedure detailed in the Nexus user and technical guide. No mains or mains carrying cables are to be connected to the data terminals or cables.

Nexus RF (wireless system)

The Nexus RF range of light fittings are designed to communicate via a proprietary RF network, however the electrical installation of the fittings is identical to that of a standard non-monitored fitting.





Installation instructions

Important note: A M6 torx screw driver or drive bit is required for the installation.

- Remove the unit from the packing box and inspect it for damage or imperfections. If any damage is found, do not install the unit, but replace it carefully into the packing box and notify the ABB product support hotline in Australia on 1800 222 435.
- 2. If all looks okay, installation can proceed.
- 3. Put the main frame upside down, remove six (6) special G6 x 1/2 counter sunk torx screws by using a torx pin driver or screw driver. Gently insert a small flat head screwdriver into the side of the front cover to lever it out, remove the front cover. See figure 3.
- 4. Loosen the thumb screws to remove the side diffusers. Leave the bottom diffuser on.
- 5. Remove the unit from the bracket by gently inserting a small screwdriver into the slot (at 'D' in figure 4) on the front of the bracket towards the right hand end of the fitting to ease the locking tab into the fitting and away from the bracket. The unit is then free to slide to the right along the bracket for about 50mm, at which time the slots line up and it can be lowered away from the bracket, allowing the two to separate.
 - **Note:** The main metal frame can be mounted on either side but inside can only be accessed from one end. Make sure to leave a gap of at least 650mm to remove the unit from the metal frame.
- 6. Determine the mounting configuration and position, ie: ceiling or wall. Drill mounting holes at the positions as shown in figure 1 or figure 2. All drilling locations are indicated on the metal frame by dimple features. Due to the wide variety of building construction materials, mounting screws are not provided with the unit. Use appropriate hardware to suit the individual installation and structural support needs of the unit (17kg approx). The cable entry hole for wall mounting can be drilled through the polycarbonate panel and the cable entry hole for ceiling mount must be drilled at the dimple at the centre of the top face, marked A as shown in figure 1.

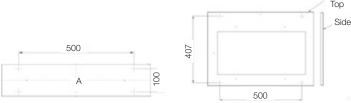


Figure 1: Ceiling mount

Figure 2: Wall mount

7. Run the cables in the ceiling or wall space as appropriate through the cable hole into the bracket, a suitable bush may have to be used to protect the cable as it passes through the cable entry hole into the mounting bracket. Secure the main frame to the wall or ceiling before terminating any wiring. Strip, connect and terminate the cables as indicated in figure 3. Ensure that the double insulation of the cable/s passes completely into the terminal block enclosure so that no single insulation is exposed when the cover is in place. Be careful with multi-strand conductors that all of the strands are twisted together before insertion into the terminal. Any stray strands that inadvertently come into contact with their neighbouring terminal or the metal frame of the fitting will cause undesirable results when the fitting is powered. Install the plastic panel over the terminal block.

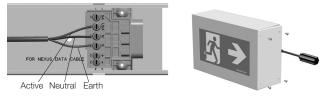


Figure 3: Mains connection and how to get acess to main frame

- Maintained fittings are design for permanent illumination: connect incoming unswitched active, neutral and earth to terminal marked USA, N and E respectively.
- Data connection for Nexus LX product installation:
 - The same colour wire from each data cables connects to the terminal marked +.
 - The other colour wire from each of the data cables connects to the terminal marked -.
 - When connected, replace the terminal block cover so that it clicks and locks into place.
- No mains or mains carrying cables are to be connected to the data terminals or cables.

8. Fit the LED lamp (carefully follow the instruction label on top of the unit) and attach the unit to the mounting bracket by aligning the top left hand end of the unit (the end without the protruding electrical connecting metal lugs) with the large cut-away slot towards the left hand end of the bracket. Slip the left hand end of the unit up into the slot in the left hand end of the bracket (step (1) in figure 4) and hold the unit horizontal to and parallel with the bracket. It should be approximately 50mm to the right of its final destination. Simply slide the unit (step (2) in figure 4) 50mm to the left along and into the bracket to engage the connection and the locking tab. Once in place, the unit cannot be removed from the bracket without the use of a tool (a small screwdriver) to push in the locking tab at 'D' in figure 4.

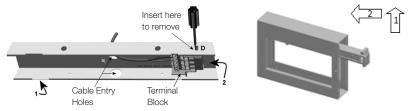


Figure 4: Frame insertion diagram

- 9. Once powered up, the LED lamp should energise and remain lit until the power supply fails. The emergency function of the light fitting should only operate when the normal lighting power supply fails or when somebody presses the manual test button located on the side of the unit. Normal status of the unit when powered, red LED indicates that the power is connected and the battery is charging or when commissioned on the Nexus LX/RF network and the unit is receiving a command from the Nexus LX/RF controller to switch into emergency mode. Normal initial uncommissioned status of the indicating LED on the unit is flashing green. Once commissioned, the LED changes to a steady red and flashes red during test. Please refer to the Nexus user and technical guide for a full detailed description of all possible LED states and their meanings.
- 10. Check operation of the unit to ensure that the installation was successful. When powered up, allow a few minutes to give the battery a small charge, then press the manual test button located at the top right hand side edge of the unit. Hold the test button in for a few seconds and observe the operation of the lamp switching from mains to the emergency mode. If the lamp on emergency mode works momentarily, that's okay. Try again in a few more minutes because if the battery was completely discharged, it may take a little time to charge up enough to operate even momentarily. After this time, press the test button again and if the lamp does not work at all, check the supply, the connections and the trouble shooting guide at the end of this document.
- 11. If the function test is successful, insert the side diffusers and tighten the thumbscrews by hand (clear polycarbonate panel must be facing outside). Check and adjust the gasket on the end cover, make sure it is sitting flush on the edge. Fit the end cover to the enclosure and secure it in place by six M6 torx screws. For wall mount version you may not need screws on the that side.

Removal instructions

See steps 3 and 4 in the installation instruction.

Testing precautions

Once the fitting is permanently connected to the mains supply, a commissioning discharge test as required in AS/NZS2293.2 must be carried out. You will need to allow 24 hours for the battery to fully charge prior to conducting this test, presently (at the time of writing), the standard requires that fittings operate in emergency mode for a period not less than 2 hours for their commissioning test and for not less than 90 minutes thereafter (it is required that 6 monthly discharge tests be carried out). You will need to keep the records for the commissioning test and enter them into the building emergency services logbook or via other recording methods as allowed by AS/NZ2293.2.

Construction sites

Continuously switching of the mains power supply that is connected to emergency light fittings during the construction phase of an installation will cause these fittings to discharge and charge their batteries many times over a short period; this can shorten the life of the battery and will also result in shortened emergency lamp life. ABB does not recommend such practices and may not honour the warranty on batteries when they are subjected to such harsh operating conditions. Emergency light fittings are designed to be discharge tested once every 6 months as per AS/NZS2293.2, subjecting the product to repeated discharge or charge cycles is regarded as an abuse of the fittings.