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.

No.	Fitting type	Fault	Possible causes	
1	Standard Nexus LX Nexus RF	Lamp does not light up when connected to mains	AC supply not connected or turned off; or Switch active turned off; or Lamp damaged or not inserted properly	
2	Nexus LX	LED is flashing green but AC lamp does not come on when connected to mains	Switch active turned off; or Lamp damaged or not inserted properly; or Missing loop from unswitched to switched active	
3	Nexus LX	LED is flashing green but lamp does not come on when test switch is pressed	Switch active turned off; or Lamp damaged or not inserted properly; or Battery pack not connected or faulty; or Test switch damaged	
4	Nexus LX	LED does not light up red after the commissioning	Battery pack not connected; or LED wire not properly inserted into the terminal	
5	Standard Nexus LX Nexus RF	Lamp is lit momentarily when test switch is pressed or when mains fail	Battery not fully charged (allow up to 24 hours); or Battery pack damaged	
6	Nexus LX	LED is constant green	Unit self checks fail - return to manufacturer	
7	Nexus LX Nexus RF	Unit LED is not flashing yellow/orange under wink node command	Unit is not receiving communication signal Check data cable wiring path and cable or RF connections Refer to Nexus user and technical guide	

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.

Installation manual

Spitfire[®] LED Batten Standard, Nexus LX, Nexus RF

Doc no. 29-00129

	This document covers	What's inside the box
	Safety warning	Spitfire LED batten
	Installation instructions	Installation manual
	Removal instructions	Warranty information
· (a) · (b) ·	Testing precautions	
	Trouble shooting guide	

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.

ABB Australia Pty Limited

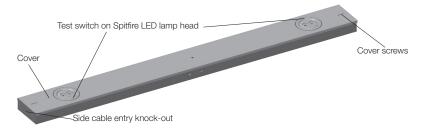
Phone: 1800 222 435 E-mail: AU-ABB-Stanilite@abb.com





Installation instructions

- 1. 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. Undo the centre retaining nut and the 2 screws and then remove the cover screws.
- 4. The Spitfire LED batten can be either ceiling mounted or suspended (Note: This product is not designed for wall mounting). Put the batten against the ceiling and mark the position of the mounting screw holes. For side cable entry; remove the appropriate cable entry knockout.
- 5. Secure the batten to the ceiling using appropriate fixings (not supplied) depending on the type of building construction material used.
- 6. Route the mains cable through the cable entry hole. The cable needs to be mechanically protected with a grommet, gland or bush as it passes though the cable entry hole.



7. Strip 9mm insulation length from mains cable, connect and terminate wires to the terminal block. Be careful with multi-strand conductors that all the strands are twisted together before insertion into the terminal. Any stray strands that inadvertently come into contact with their neighbouring terminal will cause undesirable results when the fitting is powered.

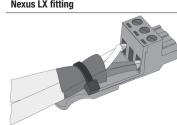
Wire/fitting type	Non-maintained	Maintained - with SA
Switched active	Don't wire SA terminal	Wire to SA terminal
Unswitched active	Wire to terminal A	Wire to terminal A
Neutral	Wire to terminal N	Wire to terminal N
Earth	Wire to terminal E or 📥	Wire to terminal E or 🛨

- 8. Verify that the battery is connected to the power pack or PCA. For Nexus LX product; connect the data cable to the power pack PCA. For Nexus RF product; fit the antenna connector to the hole provided in the base and then install the antenna. For more details refer to the data connections section.
- 9. Re-install the cover and secure it to the base with the centre retaining nut and the 2 screws.
- 10. Energise the fitting and check the operation of the fitting to ensure that the installation was successful. Once powered up allow a few minutes to give the battery a small charge then press the test button on either Spitfire LED lamp head. Check the operation and LED indications per the following tables. If abnormal operation or indication is encountered refer to the trouble shooting guide section.

Fitting type/fitting state	Normal operation	Test switch pressed (after few minutes charging)	
Non-maintained	LED's will be off	LED's will illuminate	
Maintained - with SA	LED's follow the state of the SA	LED's will illuminate irrespective of SA state	

Fitting type	Indicator LED state - on initial powering - no fitting faults
Non-monitored	Solid red
Nexus LX	Flashing green
Nexus RF	Green flash with 2 red blinks, green flash with 3 red blinks

Data connections - Nexus LX and Nexus RF product range



Nexus LX fitting

A lie	Connect the data cable to the green connector on the power pack. When correctly installed no fitting should have more than 2 data cables connected to it. If you have more than 2 data cables at any 1 fitting, the installation is incorrect. If this fitting is at the end of a data cable run, a terminator needs to be connected across the 2 data lines. If there is an in and out data cable, then the shields should be wound together, folded back and taped up. Consult the Nexus user and technical guide for further detail, including product commissioning.
Nexus RF fitting	·
Antenna	Fit the antenna connector through the vacant hole on the side of the base and then connect the antenna to it as shown. Note: Other end of the antenna is pre-connected to the power pack. Consult the Nexus user and technical guide for further detail, including product commissioning.

Important note: 24 hours is required to allow the fitting battery to reach full capacity, ie: prior to a discharge test. As the installer, it is your responsibility to conduct the initial discharge testing of the installed fitting. Refer to AS/NZS2293.

Removal instructions

Cable

- 1. Before removing the installed fitting, de-energise and lock off the supply circuit. Note: There may be 2 actives present, ensure all power is isolated before proceeding.
- 2. Undo 2 screws and remove the cover.
- 3. Unscrew the unswitched active, switched active, neutral and earth cable connection from the terminal block. For Nexus LX fitting; unplug the data cable connection from the terminal.
- 4. Disconnect the battery plug from the PCA.
- 5. Unscrew the mounting fasteners and remove the base.

Note: When the fitting is reconnected to the supply, it will need time to recharge its battery for 24 hours before it will be capable of a full length discharge.

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.