

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/NZS2293.2.

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 for fluorescent fittings. Thomas & Betts 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.

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.

#	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 LX/RF User & Technical Guides.

If the unit still does not work after checking these possible causes, contact Thomas & Betts Service in Australia on 1300 666 595, Monday to Friday, 8.30am to 4.30pm (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. Thomas & Betts is committed to providing valuable Through-Life Support for its products.

Thomas & Betts

A Member of the ABB Group

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LED Spitfire Weatherproof Batten Installation Manual

Standard, Nexus LX, Nexus RF

This Document Covers	What's Inside the box
Safety Warning	LED Spitfire WP Batten
Installation Instructions	Accessory Kit
Removal Instructions	Installation Manual
Testing Precautions	Warranty Information
Trouble Shooting Guide	

**GREETINGS**

Congratulations on choosing to use this Thomas & Betts 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 **Thomas & Betts 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-serviceable.

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.

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 LX User & 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 Thomas & Betts product supplier. The network cabling of the building must be installed as per the procedure detailed in the Nexus LX User & Technical Guide. No mains or mains carrying cables are to be connected to the data terminals or cables.

NEXUS RF (WIRELESS SYSTEM)

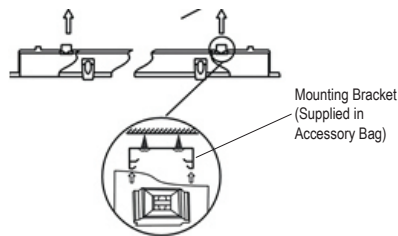
The Nexus RF range of light fittings are designed to communicate via a proprietary RF network, however the electrical installation of the fittings is identical to that of a standard non-monitored fitting.

INSTALLATION INSTRUCTIONS

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 Thomas & Betts Product Support Hotline in Australia on 1300 666 595.
2. If all looks okay, installation can proceed.
3. Remove the diffuser from the base.
4. Squeeze the gear tray retaining clips (2) to remove the gear tray from the base.
5. The LED Spitfire Weatherproof Batten can be either ceiling or wall mounted, or suspended. For wall or ceiling installation; mark the position of the mounting brackets using the distance LF as shown in table below. Use the mounting bracket as a template to mark mounting bracket screw locations.



LF (mm)	Clip Qty	L (mm)	W (mm)	H (mm)
905	8	1278	105	106



6. Secure the mounting brackets (2) to the ceiling or wall using appropriate fixings (fixings suitable for installation into concrete are supplied, for other mounting surfaces use appropriate fixings depending on the type of building construction materials used).
7. There is 1 cable entry hole provided at 1 end of the base. If an alternate cable entry position is to be used, then drill a hole to suit. Align the base to the installed mounting brackets and push the base to lock in onto the mounting brackets. Note: To remove the base from the mounting brackets, rotate the gear tray retaining clips assembly a half turn anti-clockwise. To refit the base, turn the retaining clips assembly a half turn clockwise.
8. Run mains cable as appropriate through the base access hole via a sealing grommet, gland or conduit. Ensure that the IP rating of the luminaire is maintained. Note: If a sealing compound is used, it must be of the neutral cure type.
9. Attach the gear tray to the base via 2 lanyards and terminate the mains. 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

10. 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.
11. Energise the fitting and check for correct operation to ensure that the installation was successful. When powered up, allow a few minutes to give the battery a small charge then press the test button on either LED spitfire lamp head.

Fitting Type/Fitting State	Normal Operation	Test Switch Pressed (after few minutes charging)
Non-maintained	Lamp will be off	Lamps will illuminate
Maintained - with SA	Lamps follow the state of the SA	Lamps will illuminate irrespective of the SA State

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

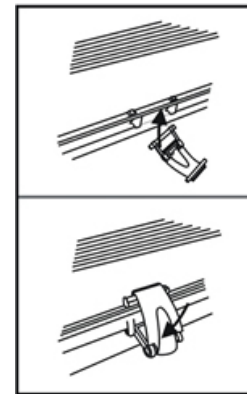


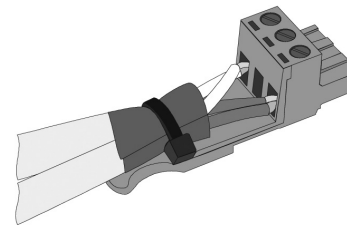
Figure 1: Diffuser Clip Diagram

12. If the installation is successful, install the clips (8) to the base and clip on the diffuser as shown in figure 1 above. If required, lock the clips using countersunk screws supplied in the bag.

DATA CONNECTIONS - NEXUS LX & NEXUS RF PRODUCT RANGE

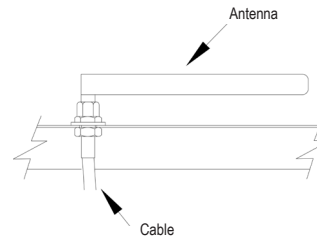
Nexus LX fitting:

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 wire in parallel 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 LX User & Technical Guide for further detail, including product commissioning.



Nexus RF fitting:

Fit the antenna connector through the vacant hole on the gear tray and connect the antenna to it as shown. Collect the MAC address, by removing the peel off sticker section and locating it on your floor plan or spreadsheet. Note: Other end of the antenna has been pre-connected to the power pack. Consult the Nexus RF User & 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

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 the retaining clips, remove the cover and unclip the gear tray from the base.
 3. Unscrew the unswitched active, switched active, neutral and earth cable connection from the terminal block. For Nexus LX unit; unplug the data cable connection from the terminal.
 4. Disconnect the battery plug from the PCA.
 5. Rotate the gear tray retaining clips assembly a half turn anti-clockwise to remove the base from the mounting brackets.
- 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 again.