Complete Solutions in Emergency Lighting





A Member of the ABB Group

Thomas & Betts (Australasia) Ptv. Ltd. ABN: 062 074 810 898 Head Office: Unit D3, 3-29 Birnie Avenue, Lidcombe NSW 2141, Australia Manufacturing: 23a Nyrang Street, Lidcombe NSW 2141, Australia Phone: 1300 666 595 Fax: 1300 666 594 Email: austsales@tnb.com Website: www.tnbaust.com

LED Legend Wall Mount Flush Exit Installation Manual

Standard, Nexus LX, Nexus RF

This Document Covers	What's Inside the box
Safety Warning	LED Legend Wall Mount Unit
Installation Instructions	Installation Manual
Removal Instructions	Warranty Information
Testing Precautions	
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-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 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.

REMOVAL INSTRUCTIONS

- 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.
- Undo 2 screws and remove the lid as shown in figure 1.
- Undo 2 screws and slide the gear tray forward to allow adequate room to disconnect the mains cable assembly plug and the battery plug from the PCA. For Nexus LX unit; disconnect the data plug from the main PCA.
- Remove the gear tray, disconnect mains cable and Nexus LX Cable (where applicable) from the terminal blocks.
- Undo the mounting screws and remove the base from the wall cavity.

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 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.

#	Fault	Possible Causes
1	LED light source and indicating LED not lit	AC supply not connected; or AC supply turned off; or Test switch damaged
2	LED light source is lit but indicating LED not lit	Test switch damaged; or Battery not connected or faulty
3	LED light source does not switch to emergency mode when the test button is pressed	Test switch damaged; or Battery not connected or faulty
4	LED light source works momentarily on emergency when the test button is pressed	Battery not yet charged (allow up to 24 hours)

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 (Australasia) Pty. Ltd. 2014 Rev: 2.0 12 August 2014 4 © Thomas & Betts (Australasia) Pty. Ltd. 2014 Rev: 2.0 12 August 2014 1

INSTALLATION INSTRUCTIONS

- 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. Undo 2 screws and remove the lid as shown in figure 1.
- Undo 2 screws and remove the gear tray from the base as show in figure 2.
 Note: Carefully unplug the mains cable assembly from the PCA in order to completely remove the gear tray from the base.



Figure 1

Figure 2

- 5. Determine the mounting location and studs position in the wall, check and verify that there is adequate space in the wall cavity for a box size 182mm height x 365mm width x 85mm depth and there is no obstruction for mains cable running. Allow 50mm clearance from the ceiling or wall corner for the cover.
- 6. Mark, double check and cut out a hole size 182mm height x 365mm width in the wall. See figure 3.
- 7. Orient the base such that the test switches are on the right hand side corner for the wall cut out.
- 8. Determine the mains cable entry direction then remove the appropriate knockout from 1 side of the base.
- Route the mains cable through the knock out and mechanically protected it by a grommet, gland or bush as it passes through cable entry.
- 10. Insert and push the base flush to the wall. Secure it to a wall stud by using 2 appropriate fixings (not supplied due to variety types of building construction materials used). For double brick wall; use suitable adhesive or fastener (liquid nail, epoxy anchor, etc.) to secure the base in place.

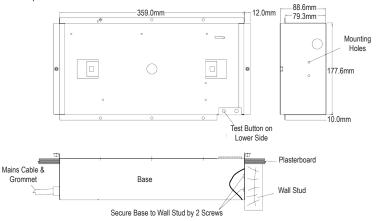


Figure 3

11. Strip 9mm insulation length from mains cable, connect and terminate wires to the terminal block. Be careful with multistrand 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	Maintained - no SA
Unswitched active	Wire to terminal A
Neutral	Wire to terminal N
Earth	Wire to terminal E or <u>+</u>

Complete Solutions in Emergency Lighting

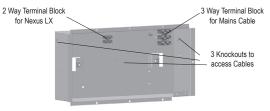
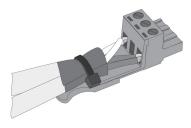


Figure 4

- 12. This step is for monitored fittings only. For a Nexus LX fitting; terminate and connect data cable to the 2 way terminal block as shown in figure 4. For a Nexus RF fitting; ensure that the antenna is fitted to the gear tray and is tight. For more details refer to the Data Connections section.
- 13. Verify that the battery is connected to the PCA then connect the mains cable assembly to the PCA.
- 14. Secure the gear tray to the base by 2 screws as shown in figure 2 and lid as shown in figure 1.
- 15. Check the operation of the fitting 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 to ensure that unit is functional in emergency mode.

Fitting Type	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 & NEXUS RF PRODUCT RANGE



Nexus LX fitting:

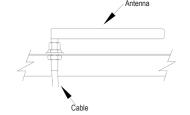
Connect the data cable to the green connector on the power pack or PCA, or to the fixed terminal block marked DATA.

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 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 or PCA. 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.