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

Continuous 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.

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.

<table>
<thead>
<tr>
<th>No.</th>
<th>Fault</th>
<th>Possible causes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>LED light source and indicating LED not lit</td>
<td>AC supply not connected or turned off; and/or Test switch damaged</td>
</tr>
<tr>
<td>2</td>
<td>LED light source is lit but indicating LED not lit</td>
<td>Test switch damaged; or Battery not connected or faulty; or USA not connected or turned off</td>
</tr>
<tr>
<td>3</td>
<td>The 4 emergency LED’s do not illuminate when the test button is pressed</td>
<td>Test switch damaged; or Battery not connected or faulty</td>
</tr>
<tr>
<td>4</td>
<td>The 4 emergency LED’s work momentarily when the test button is pressed</td>
<td>Battery not yet charged (allow up to 24 hours)</td>
</tr>
</tbody>
</table>

If the unit still does not work after checking these possible causes, contact ABB service in Australia on 1300 666 595, 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 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.

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

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 1300 666 595.

2. If all looks okay, installation can proceed.

3. The fitting has removable mounting bracket.

4. Loosen 2 screws to remove the base from the mounting bracket. Refer figure 1. Use the bracket as template to mark mounting hole and cable entry hole position. Note: For wall mount orientation refer figure 2.

5. Secure the bracket to the ceiling or wall 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 through 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 neighboring terminal will cause undesirable results when the fitting is powered. Refer table below.

<table>
<thead>
<tr>
<th>Wire/fitting type</th>
<th>Maintained - with SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switched active</td>
<td>Wire to SA terminal</td>
</tr>
<tr>
<td>Unswitched active</td>
<td>Wire to terminal A</td>
</tr>
<tr>
<td>Neutral</td>
<td>Wire to terminal N</td>
</tr>
<tr>
<td>Earth</td>
<td>Wire to terminal E or E or</td>
</tr>
</tbody>
</table>

8. Verify that the battery is connected to the power pack. 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. Plug the mains cable harness from base to the mains connector on the mounting bracket. Secure the base tightening the 2 screws. Refer figure 1.

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 the side of the base. Check the operation and LED indications per the following tables. Refer to the trouble shooting guide on the last page if abnormal operation or indication is encountered.

<table>
<thead>
<tr>
<th>Fitting Type</th>
<th>Normal Operation</th>
<th>Test Switch Pressed (after few minutes charging)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without motion detect sensor</td>
<td>LED panel will illuminate to full brightness when SA is energised.</td>
<td>4 non-maintained emergency LED will illuminate.</td>
</tr>
<tr>
<td>With motion detect sensor</td>
<td>The operation of the LED Panel in normal mains availability is dependent on the settings of the Motion Detect Module. Please refer to separate sheet included for details.</td>
<td>4 non-maintained emergency LED will illuminate.</td>
</tr>
</tbody>
</table>

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

11. Re-install the diffuser by lifting 1 clip at a time and insert the diffuser.

Data connections - Nexus LX and 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 user and 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 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

1. Before removing the installed fitting, de-energise and lock off the mains supply circuit. Note: There may be 2 actives present, ensure all power is isolated before proceeding.

2. Remove the diffuser shown in figure 1.

3. Remove the base by loosening 2 screws and unplug the mains cable harness from the mains connector on the mounting bracket. Refer figure 1.

4. Disconnect the mains cable from the terminal block.

5. Disconnect the battery plug from the battery.

6. Unscrew 2 screws and remove the mounting bracket.

Note: When the fitting is reconnected to the supply, it will need 24 hours charging time before it will be capable of a full duration discharge.