

Service Light

The service light is located beside the secondary antenna, and indicates the current status of the LAR, as shown in the table below.

LED state	Meaning
Off	Normal operation.
Flashing every 0.5 sec.	Unconfigured LAR. Run Auto Configure in the LonWorks Device Installation dialog box.
On	Hardware failure. Download firmware to the LAR from the LonWorks Device Installation dialog box.

Warranty

Xmark's products are warranted against defects in materials and workmanship and shall perform in accordance with published specifications for a period of one year. Instantel Inc. reserves the right to change specifications without notice.

Limitation of Liability

This Product has been designed for use to assist personnel in summoning help when they are under personal duress and/or locate assets.

The range, accuracy, function and performance of this Product may vary from the published specifications due to many factors, including, without limitation, site impairments from structural effects, metal objects in the vicinity, placement of the receiver and transmitter, interference from other electrical devices, atmospheric effects, installation, and maintenance. There may be other factors, which also affect performance of this Product.

Instantel does not guarantee that this Product will detect 100% of the calls for personal assistance and locate all assets 100% of the time. Instantel does not guarantee that this Product will not return false reports of calls for personal assistance and/or location of assets.

Monthly testing and maintenance of this Product, as described in the Product documentation, is essential to verify the system is operating correctly and to ensure that the probability of detecting an alarm and/or locating the transmitter are maximized.

The failure to undertake regular testing and maintenance will increase the risk of system failure and failure to report personal duress calls and/or failure to locate assets. The failure to undertake regular testing and maintenance will increase the risk of false reports of calls for personal assistance and/or location of assets.

Instantel hereby disclaims all warranties, express or implied, arising out of or in connection with any of its Products of the use or performance thereof, including but not limited to, where allowable by law, all other implied warranties or conditions of merchantable quality and fitness for a particular purpose and those arising by statute or otherwise in law or from a course of dealing or usage of trade.

Instantel's liability to you or anyone claiming through or on behalf of you with respect to any claim or loss arising out of the use or misuse of Instantel's Product, defective products or materials, improper

installation or maintenance of Instantel's Product or products or the system in which they are incorporated, or alleged to have resulted from an act or omission of Instantel or any person, negligent or otherwise, shall be limited to:

- A) The repair or replacement of defective Product or materials supplied by Instantel during the warranty period as set out in the Product documentation; or, at the option of Instantel,
- B) Refund of the purchase price of the Product supplied by Instantel.

In no event shall Instantel be liable for general, specific, indirect, consequential, incidental, exemplary or punitive damages or any losses or expenses suffered by you or anyone else, whether or not Instantel, or its employees, officers, agents, resellers or installers has been informed of the risk of such loss or expense and whether or not such losses or expenses were foreseeable.

Statements

United States—Federal Communication Commission (FCC)

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Warning: Changes or modifications not expressly approved by Xmark could void the user's authority to operate the equipment.

Canada—Industry Canada

The term "IC," before the certification/registration number only signifies that Industry Canada technical specifications were met.

European Union—CE declaration

Xmark hereby declares that this radio frequency receiver is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.



Part Number 806A5301

Xmark™

Know for sure

Local Area Receiver Guide



Have you: • Pulled network and power cable?
• Resolved power supply requirements?
• Selected the location for the LAR?

If you answered, "No," to any of these questions, refer to the MyCall/FindIt Installation Manual before installing.

Read these instructions thoroughly before installing the Local Area Receiver. Faulty installation can lead to system failure.

Materials Required

- Local Area Receiver (p/n 806A5301); includes antennas, Caddy clip and mounting hardware.
- Facility floor plan indicating LAR position and network wiring path.
- 105 Ω network terminator (p/n 805A2401) required to terminate network. Two provided with each Controller (p/n 805A2201).

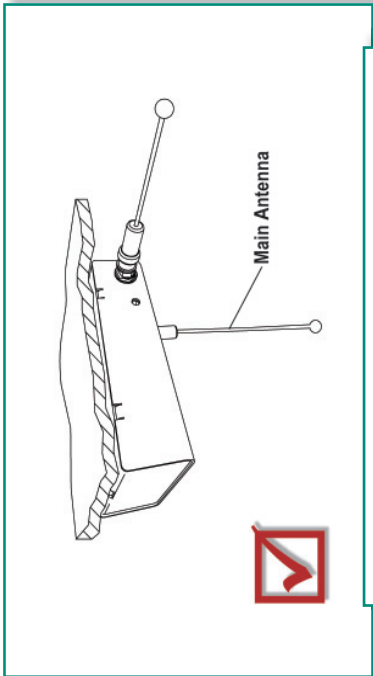
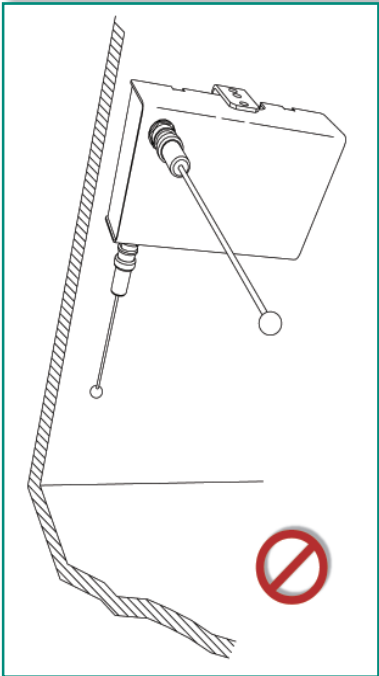
Important Reference Documents

- Hugs Installation Manual (p/n 805I0301)
- MyCall/FindIt Installation Manual (p/n 805I0401)

Specifications

Frequency	433.42 to 434.42 MHz
Supply Voltage	10-30 VDC
Current Draw	60 mA @ 12 / 24 VDC, 100 mA max.
Detection Radius	50 ft. (15 m) overlapping LARs 35 ft. (11 m) stand-alone LARs
Communications	LonWorks two wire
Temperature	Operating: 32°F to 120°F (0°C to 49°C) Storage: -22° to 158° F (-30° to 70°C)
Humidity	0-85% RH @ 70°F (21°C), non-condensing
Dimensions	Approximately 5.2 x 3.3 x 1.5 in. (133 x 84 x 38 mm)
Weight	Approximately 9.2 oz. (260 g)

LAR Orientation



- Main antenna should be pointing downward into an area free of metal obstructions.
- Ensure that the LAR is at least 2 ft. (60 cm) from metal objects, such as framing or air ducts.



Certified to the ISO 9001 Quality Standard

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Installation Considerations

- **Position the LAR beneath ceiling obstructions**—When mounting above drop ceilings, mount the LAR below metal duct work, pipes and foil-backed ceiling tiles.
- **Route cables up and away from the LAR**—When the cable is not in conduit, keep it at least 1 ft. (30 cm) from the LAR.
- **Install the LAR temporarily until testing is complete**—Fastenings should be secure enough that the LAR can be permanently mounted without disturbing its orientation.
- **Point the secondary antenna into a clear area, away from metal objects**—The main antenna always points downwards, but the orientation of the secondary antenna is adjusted to suit site conditions. Point it away from metal objects, and make sure it is not running parallel to cabling in the ceiling.
- **Observe temperature and humidity restrictions**—Refer to the Specifications table.
- **Leave slack in the cable**—Leave at least 10 ft. (3 m) of slack in the communication and power cable to allow for adjustments in the location of the LAR.
- **No user adjustments to internal circuitry**—Tampering may cause component or system failure, or both, and will void the warranty.

Installing the LAR

-  **Ensure that the power supply and network are turned off to prevent electrical shock or damage to equipment.**
- **Touch your hand to ground to discharge any electrostatic charge before handling the LAR.**

The steps below correspond to the numbers in **Figure 1**.

- 1** Record the LonWorks ID number.
Locate and record the LonWorks identification number onto the facility floor plan indicating the LAR's position and network wiring path. Use the tear-away sticker on the LAR's Neuron ID label.
- 2** Remove the Mounting Plate from the LAR.
If the LAR is to be installed to a receptacle box, pass the network and power supply wires through the hole in the Mounting Plate. (For other installations, the wires are passed through the slot on the side of the LAR case in Step 5.)
- 3** Wire the terminal block.
Connect the LonWorks Network IN, Network OUT, and Power Supply to the terminals. If the LAR is at the end of the network, then terminate the network segment with Item A (105 Ω terminator). Ensure there is at least 10 ft. (3 m) of slack in the cable to allow the possible repositioning of the LAR.
- 4** Install the Mounting Plate.
Referring to the facility floor plan, decide the position of the LAR. Do not place near metal objects and structural frames. Ensure that the service light will be visible and that space is allowed for the antennas. Unless there is a conduit tray, run the cables at least 1 ft. (30 cm) up and away from the LAR.

Install the mounting plate using one of the following methods.

- A** Fasten to a suspended ceiling guy wire, using:
 - 1 multi-function Caddy clip
 - 2 machine screws
 - 2 hex nuts
 - 2 lock washers**OR**
 - B** Install directly to a ceiling or a wall using:
 - 2 wood screws
 - 2 hollow wall anchors**OR**
 - C** Install to a receptacle box, using:
 - 2 machine screws
- 5** Install the LAR to the Mounting Plate.
Plug the wired terminal block into the LAR and install the LAR onto the Mounting Plate, using the screw removed in Step 2. **DO NOT** place excess network and power supply wires inside the LAR case.

- 6** Attach the two antennas.

The antennas have a protective covering to prevent them from touching metal. For best coverage, ensure that they are at least 2 ft. (60 cm) from metal objects. Do not encase, wrap, or otherwise cover the antennas.

Installation is complete. Proceed to **Final Steps** below.

Final Steps

-  **Do not supply power to the LAR or any other network device until all connections are complete.**

Once all devices are installed, power up the LAR and other devices. In the Xmark™ software, run Auto Configure to install the new devices, and then configure them for operation.

The coverage area of the LAR must also be checked.

Refer to the Hugs Installation Manual (p/n 80510301) or MyCall/FindIt Installation Manual (p/n 80510401) for detailed information on how to complete these steps.

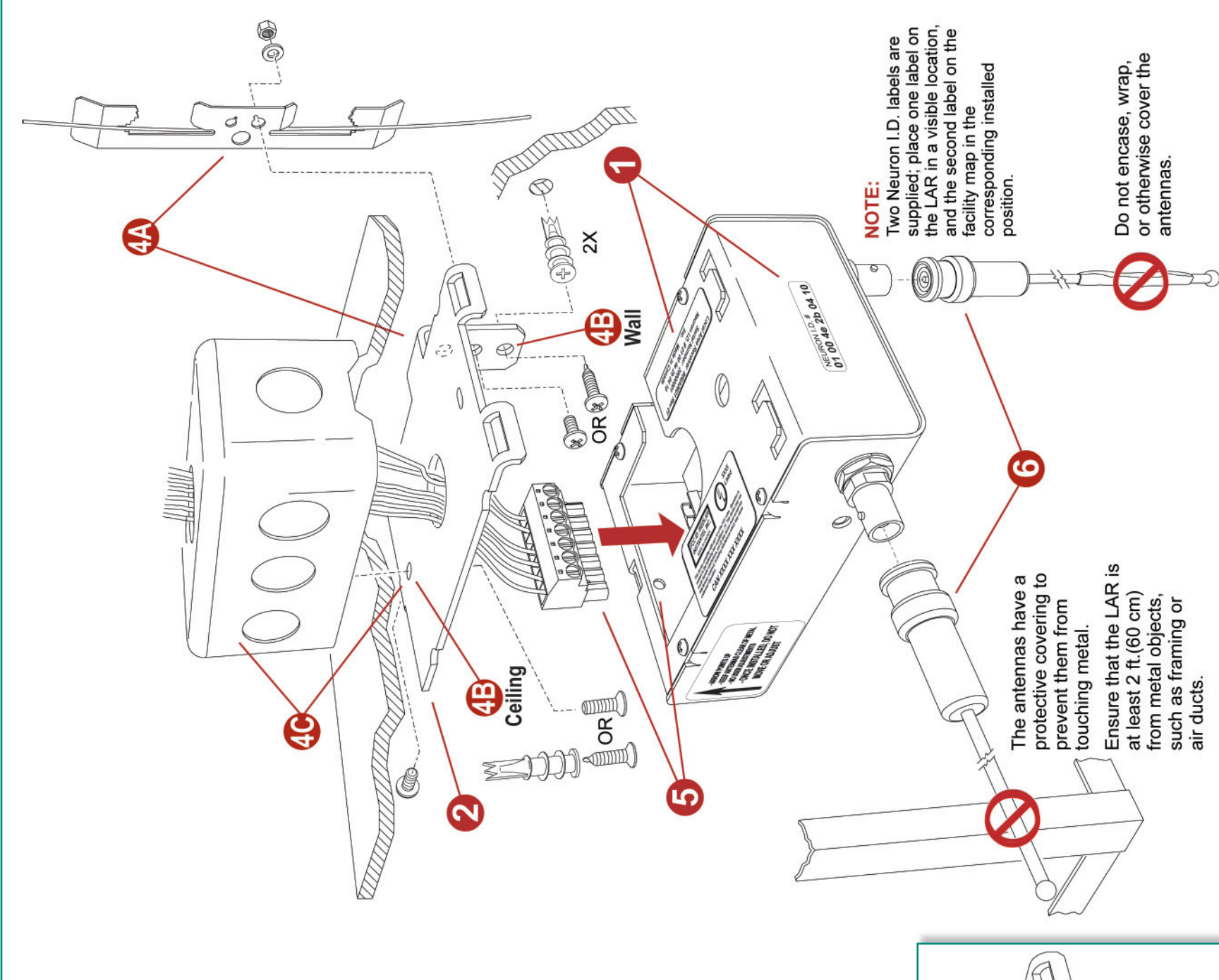
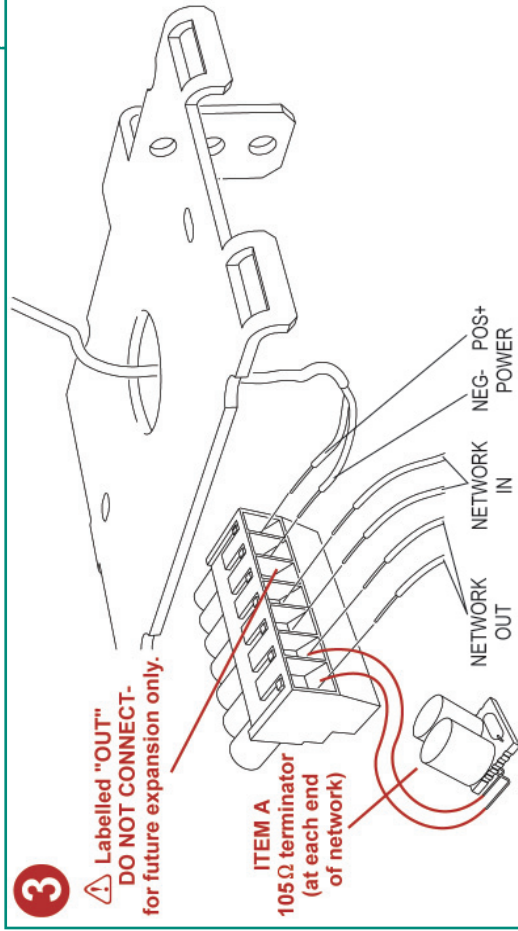


Figure 1: Physical connections for the LAR.