Xmark™
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Locator Installation Guide

⚠ **Read these instructions thoroughly before installing the FindIt Locator. Faulty installation can lead to system failure.**

Materials Required

- FindIt® Locator (p/n 806A2901)—includes AC power adapter, two antennas, mounting plate with screws, and stand.

- Suitable mounting hardware (not supplied)—for mounting Locator to a vertical surface, such as a cart: screws, double-sided tape or cable ties.

Installation Considerations

- **Position the Locator vertically with the antennas pointing upwards**—The supplied stand angles the Locator at approximately 70°. Do not mount the Locator at a lower angle if mounting to a solid surface, and never lay the Locator flat.

- **Keep the antennas away from metal**—If mounting the Locator to a metal cart, ensure that the antennas project above the frame of the cart. Do not lean the Locator against a metal object.

- **For best performance, place the Locator in an unobstructed location**—Where possible, keep the Locator away from the body or large objects.

- **Performance may not be optimal while the Locator is being charged**—The Locator continues to operate while the batteries are charging, but performance may not be optimal. Keep the power cord away from the antennas to improve performance.

- **Observe temperature and humidity restrictions**—Refer to the Specifications table.

- **No user adjustments to internal circuitry**—Tampering may cause component or system failure, or both, and will void the warranty.

Important Reference Documents

- FindIt Portable User Manual

Figure 1: The Locator with antennas attached

Specifications

Frequency	217 MHz
Supply Voltage	12 VDC, 800 mA
Batteries	Two 3.6 V lithium-ion rechargeable
Battery Life	24 hours when fully charged
Detection Radius	Up to 35 ft. (11 m)
Communications	LonWorks 2 wire
Temperature - operating	32° to 113°F (0° to 45°C)
Temperature - storage	-22° to 158°F (-30° to 70°C)
Humidity	0 - 90% RH @ 70°F (21°C), non-condensing
Dimensions	Approx. 6.3 x 3.5 x 1.5 in. (159 x 89 x 38 mm)
Weight (with antennas)	Approx. 15.9 oz. (452 g)

Installing the Locator

The steps below correspond to the numbers in **Figure 2**.

1 Remove the Mounting Plate from the Locator.

2 Charge the Locator batteries.

The Locator contains rechargeable lithium-ion batteries. Plug the supplied AC adapter into a 120 VAC outlet, and then connect it to the Locator. The CHARGING light will come on. A full charge takes approximately 3 hours.

3 Attach the two antennas.

The antennas use a BNC connector. Push the antenna onto the mast, and give it a ¼ turn clockwise to secure it.

Note: The antennas have a protective covering to prevent them from touching metal. Do not encase, wrap, or otherwise cover the antennas.

4 Install the mounting plate using one of the following methods.

A Fasten to the stand using the three screws supplied.

B Install to a vertical surface using mounting hardware appropriate to the surface material, such as screws, double-sided tape or cable ties.

5 Install the Locator to the mounting plate.

Slide the Locator into the mounting plate. If desired, the Locator can be secured by inserting a small lock or cable tie through the top hole on the mounting plate and Locator.

Installation is complete, and the Locator is now ready for use.

Gathering Asset Data

The Locator can gather data on assets in your facility carrying FindIt tags either on its own, or when connected to a Client PC with the FindIt software.

Refer to the FindIt Portable User Manual for detailed information on how to gather data.

Charging the Batteries

The STATUS light on the Locator begins to flash when the batteries require recharging. The Locator will continue to receive FindIt tag transmissions for a further 20-30 minutes, and will then shut down. All data received up to that time are saved.

Plug the Locator into a 120 VAC outlet using the supplied AC adapter. The CHARGING light will remain on until the charge is complete. A full charge takes 3 hours, providing approximately 24 hours of operation.

The Locator should be charged every few months when not in use to maximize battery life.

Warning: Only charge the Locator using the supplied adapter. Failure to do so may cause the battery to become hot, explode or ignite and cause serious injury.

STATUS and CHARGING Lights

The locator has a STATUS light and CHARGING light, which provide basic information about the Locator's operation. Both lights are located on the left side of the Locator.

STATUS Light (Green)	
Off	Not receiving tag messages, or batteries are fully discharged.
Occasional flashes	Locator is receiving tag messages.
Steady flashes	Batteries are low. Recharge immediately. The Locator will continue to receive tag messages for a further 20-30 minutes, and will then shut down. (All data are saved).
On	Error. Connect to the Client PC to automatically download firmware.
CHARGING Light (Red)	
On	Batteries are charging
Off	Batteries are fully charged.

Battery Handling

This device contains lithium-ion batteries. Do not place the batteries in or near fire, or in direct sunlight. Heating the batteries can damage the safety circuitry, which can cause additional heating, rupture or ignition of the batteries.

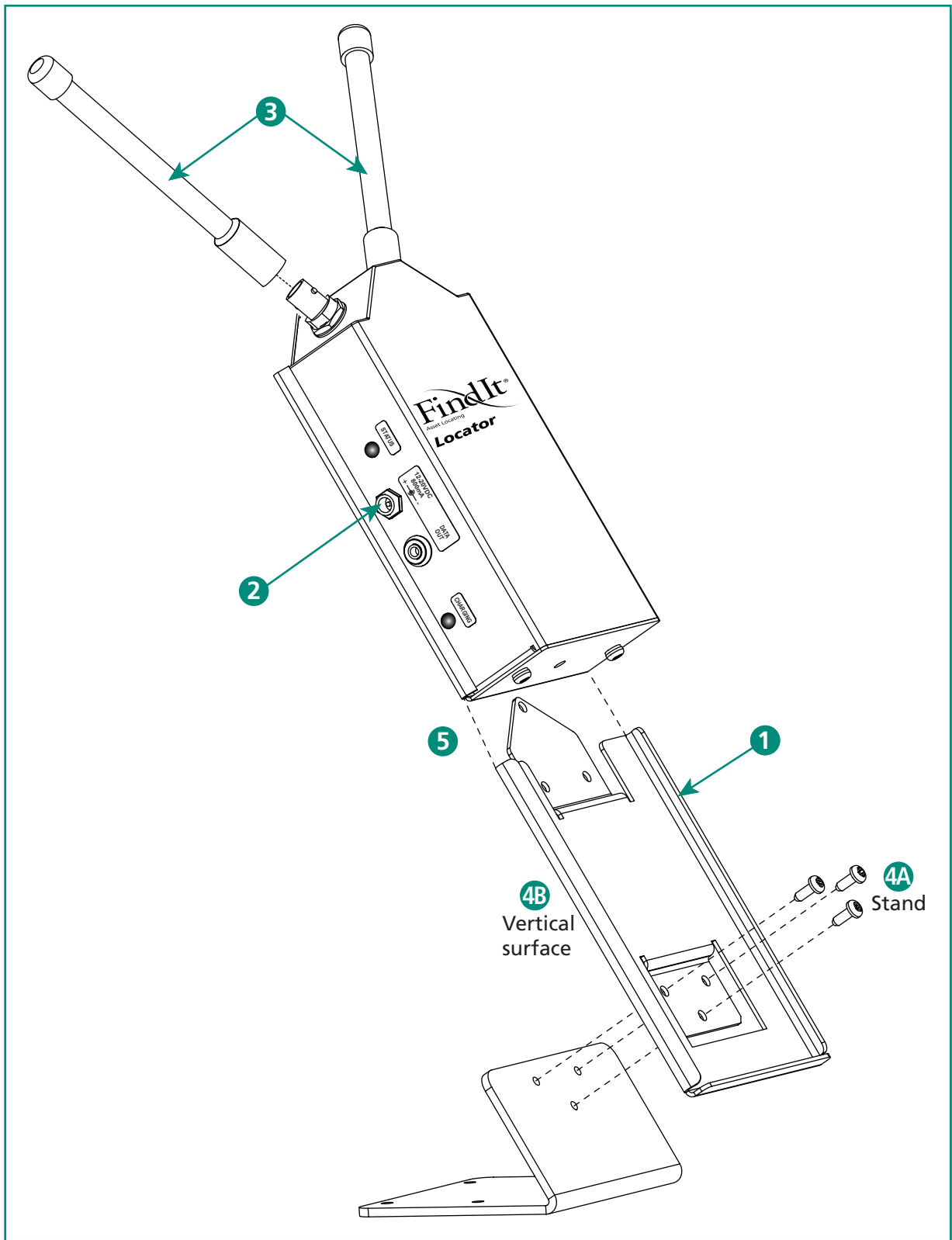**The batteries are not user replaceable. Never open the case on the Locator.**

Figure 2: Installing the Locator.

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. Xmark reserves the right to change specifications without notice.

Limitation of Liability

This Product has been designed for use to 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 locate all assets 100% of the time. Instantel does not guarantee that this Product will not return false reports of 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 locate assets. The failure to undertake regular testing and maintenance will increase the risk of false reports of location of assets.

Instantel hereby disclaims all warranties, express or implied, arising out of or in connection with any of its Products or 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.