

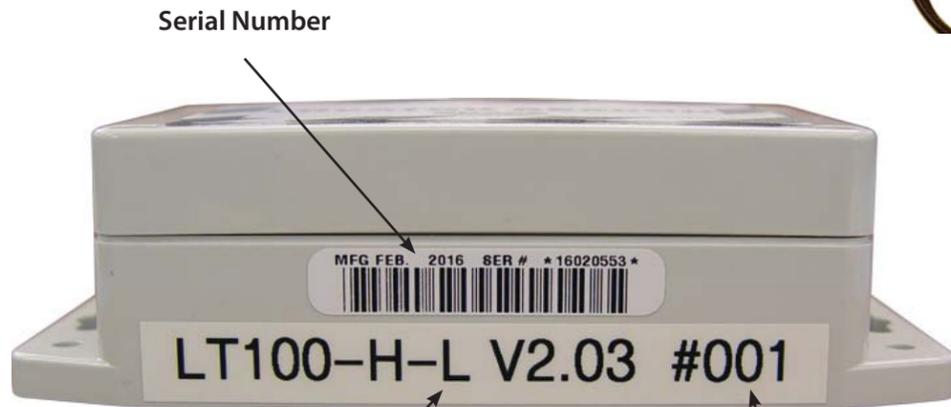


Model LT100-H-L



Model LT100-H-EP

DC Power Connection



Serial Number

Model Number and Firmware Version

Location Code (ID Number)

Warranty Information

Grace Industries, Inc. warrants the LT100-H to be free from defects in workmanship and materials for a period of one year from the date of purchase. This warranty is valid only when the returned unit is accompanied by a sales slip or other proof of purchase that states the date and location of purchase. Grace Industries, Inc. will not repair or replace any merchandise under warranty which has been damaged because of accident, misuse or abuse of the LT100-H while in possession or control of the consumer. This warranty is void if any attempt to repair or replace parts was made or attempted by other than qualified Grace Industries, Inc. personnel. This warranty is void if any of the sealed compartments are opened or tampered with. Send all returned merchandise, prepaid and accompanied by proof of purchase to: Grace Industries, Inc., Repair Division, 305 Bend Hill Road, Fredonia, PA 16124. Grace Industries, Inc. shall not be liable for any direct, incidental or other consequential loss or damage arising out of the failure of the device to operate.

The sole and exclusive remedy under all guarantees or warranties, expressed or implied, is strictly limited to repair or replacement as herein provided. ALL IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO, WARRANTIES OF FITNESS AND MERCHANTABILITY, ARE HEREBY LIMITED IN DURATION TO A PERIOD ENDING ONE (1) YEAR FROM THE DATE OF PURCHASE. The warranty and liability set forth in the prior paragraphs are in lieu of all other warranties, expressed or implied, in law or in fact, including implied warranties of merchantability and fitness for a particular purpose. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

This warranty gives you specific legal rights and you may also have other rights which may vary from state to state.

The information contained in this booklet is believed to be accurate and reliable. Grace Industries, Inc. provides this information as a guide only.

LT100-H technical assistance is available by contacting Grace Industries, Inc. at 724-962-9231.

For training purposes, a copy of this information is available by contacting Grace Industries, Inc.



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LT100-H Locator-Beacon UI 2017-12

Locator Beacon Models LT100-H-L and LT100-H-EP Installation and User's Information



General Description

The LT100-H Locator Beacon is a compact signaling device that transmits a location code to SuperCELL® SC500 when the user is in range of the Beacon. Once updated with a location code from the Locator Beacon, all SuperCELL® transmissions will contain the last Location Code received, thus providing location to a Grace-Watch monitoring system.

The LT100-H-L is powered by a D-size Lithium battery. The LT100-H-EP is powered by 12 VDC with a Lithium battery backup. Both models are suitable for mounting on ceilings, doorways and walls throughout a facility, including outdoor areas.

The Grace-Watch System supports over 4,000 unique locations and is scalable to any size facility. Location resolution (the number of Coverage Zones in a given area) is adjustable and is determined by the proximity and placement of Beacons.

When the Coverage Zone of a Locator Beacon is entered by a SuperCELL® user, the SuperCELL® receives the Location Code and transmits a radio signal to a Grace-Watch (monitoring station) with its current status and the new Location Code. The Locator Beacon has an adjustable Coverage Zone to accommodate various environmental factors and zone area sizes. Internal jumpers allow the Coverage Zone to be set to 6 different sizes: 1-Smallest to 6-Largest, as needed.

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Installation and Setup

Note: All environments are different.

Before installing a Locator Beacon, it is important to understand the system operation.

If general location is the goal, Beacons would typically be positioned at strategic entry and exit points.

If more precise location is desired, more Locator Beacons will be required and will need to be installed closer together.

It is important to survey the facility and determine optimum placement of Locator Beacons to match your Coverage Zone requirements.

Consult with appropriate personnel regarding the use of other radio equipment in and around the facility, especially equipment using the 902-928 MHz band. Other radio equipment outside the 902-928 MHz band may still cause interference and undesired results.

Locator Beacons should be installed on a stable surface in the middle of the desired Coverage Zone. Mounting the Beacons on a metal wall or ceiling is acceptable and may also be helpful in reducing overlap. Installation points should be away from other radio equipment or antennas. Beacons should be installed as far from lighting fixtures as possible as they may create interference. Avoid placing Beacons too close together as this will increase the possibility of overlap (where a SuperCELL® may simultaneously receive location codes from multiple Beacons).

For optimum performance Locator Beacons within proximity of Grace Repeaters should be installed in a manner that keeps the Repeater out of Coverage Zone of the Beacons (ie: greater than 100 feet away from a Beacon with a Zone Coverage Level set to level 4).

NOTE: Grace Repeaters do not repeat location codes from the Beacons. However, Grace Repeaters will repeat all signals from Grace Safety devices, including SuperCELL® and TPASS®.

Testing the Coverage Zone

After installation, Locator Beacons must be tested to ensure the Coverage Zone is covering the desired area.

To perform this test, you will need a SuperCELL® SC500 set to "Range Test Mode".

To Set a SuperCELL® to Range Test Mode:

1. Press the mode button on your SuperCELL® to enter setup mode. (See SuperCELL® SC500 user's information).
2. Scroll through the menu options until you reach "Range Test Mode", press the Select button to enable Range Test Mode.

While in "Range Test Mode", the SuperCELL® will display the specific Locator Beacon location code when it enters the Coverage Zone of a Beacon operating in Test Mode.

To test the Locator Beacon's Coverage Zone:

1. Loosen all four (4) screws and remove the Beacon's cover to access the Test Mode Switch.



Test Mode Switch Test Mode LED

2. To place the Locator Beacon in Test Mode, press and hold the Test Mode Switch (on side of unit) for a minimum of 1 second and not more than 2 seconds. Test Mode LED will start blinking with each test mode transmission.

NOTE: Locator Beacon automatically exits Test Mode 5 minutes after pressing Test Mode Switch. If more time is needed, press Test Mode Switch again for a minimum of 1 second (and not more than 2 seconds) and continue testing.

3. Walk slowly in and out of the Coverage Zone.

Each time the SuperCELL® receives a signal from the Beacon, the SuperCELL® will beep and display the received Beacon Location Code (ID)

G:01 U:125L ←	Locator Identifier
0051 ←	Location Code (ID)

Note: The SuperCELL® Range Test Mode will beep when receiving any Grace device signal. To avoid confusion with other Grace devices, turn off other Grace devices or verify the receive signal displayed on SuperCELL® is the Beacon Location Code - the four digit ID number displayed below "G:01 U:125L".

Repeating this process at other points of the Coverage Zone will help you determine the physical area covered by each Beacon.

If you need to adjust or re-align the Coverage Zone, make the appropriate adjustments to the mounting location and/or the Zone Coverage Level setting to provide the desired Coverage Zone.

Note: Location signals can be transmitted through walls; keep this in mind when installing Locator Beacons in narrow hallways and doorways. In these tighter areas, setting the Zone Coverage Level to a smaller setting and placing Beacons in the middle of the Coverage Zone will provide best results.

Adjusting the Coverage Zone Size

The Locator Beacon has 6 Zone Coverage Level settings. Level 6 provides the largest Coverage Zone.

Level 1 produces the smallest Coverage Zone (up to approximately 30 ft. unobstructed).

To Change Locator Beacon's Zone Coverage Level:

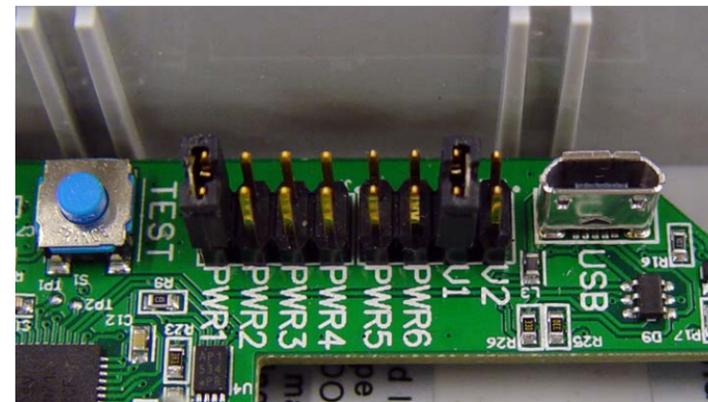
1. Loosen all four (4) screws and removed the Beacon's cover to access the 6 Zone Coverage Jumpers.
2. Remove the battery and wait 3 seconds.
3. Move the shorting-jumper to the new Zone Coverage Level. Care must be taken not to bend the pins and to ensure shorting jumper is properly seated on both pins.

NOTE: PWR1 is the smallest Zone Coverage Level.

PWR6 is the highest Zone Coverage Level.

4. Reinstall battery.
5. Replace cover and tighten all 4 screws to 8 in-lbs torque.

A larger Zone Coverage Level provides a longer range for communicating the Beacon's location code to a SuperCELL®. The Zone Coverage Level should be set to the smallest level that permits consistent, reliable operation. The level required to meet your needs is dependent on the environment and placement of the Beacon.



Zone Coverage Level 1 is Shown Above

Battery Information

Battery Life: 3 years in Coverage Zone 1-3. (Less for higher Coverage Zone settings). 10 year shelf life.

Low Battery Indication: An LT100-H Locator Beacon with a low battery will be identified on the Grace-Watch screen by an "L" following the ID number (ex. 0801 L).

Battery Replacement: Replace exhausted batteries with a 3.6V, D-size Lithium battery.



Specifications

Size: 5-3/4" x 2-5/8" x 1-5/8" deep.

Weight: 9.2 oz. (260 grams).

Battery Power Input: 3.6VDC, D-size Lithium Battery.

- **NOTE: Battery is Not rechargeable** -

External Power Input: 12VDC (regulated +/-5%).

- **Provided wall plug power supply is for indoor use only** -

Frequency Range: 902-928 MHz.

Compatibility: Grace Radio-H personal safety products and GraceWatch Monitoring Systems.

Case: NEMA enclosure type 4X, 12, 13. Indoor/Outdoor. To maintain UL rating (case only), all openings must be covered with rated equipment. Cover screws must be torqued 8 in-lbs.