

150 Short-Range Beacon

The Subsite® Electronics 150 short-range beacon is designed, depending on frequency, to trace the path of or locate blockages in metallic pipe, non-metallic pipe or conduit when used with a receiver. The 150 short-range beacon is available in two watertight versions: water/sewer and conduit. These beacons transmit a signal which can be located with a receiver configured to receive the same frequency as the beacon. Some receivers with depth capability can use these beacons to display depth information.

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. Changes or modifications not expressly approved by The Charles Machine Works, Inc. could void the user's authority to operate the equipment.

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 operator's 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.

FCC Statement

Specifications

Operating frequency: 512 Hz, 640 Hz, 29 kHz, 30 kHz or 33 kHz

Battery: one "N" alkaline

Battery life: 4-6 hours continuous use @ 70°F (21°C)

Operating temperature range:
-4°F (-20°C) to 122°F (50°C)

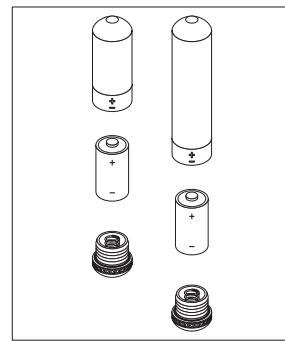
Attachment thread size:
1/4-20UNC

Inspect Components

- Make sure battery has enough charge to complete the job.
- Ensure that battery is properly inserted into battery chamber.
- Inspect o-ring for nicks and cuts.

Install Battery

1. Unscrew cap.
2. Insert one "N" alkaline battery as shown.
3. Hand tighten cap firmly.



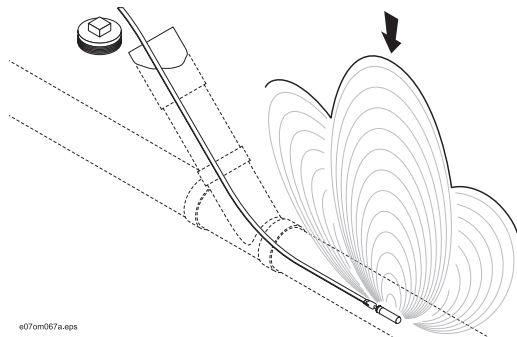
Test Operation

Use a receiver to test beacon function before leaving for jobsite and after every battery change. To test beacon function:

1. Turn on receiver.
2. Select proper beacon frequency or mode.
3. Check display for signs of beacon signal.

For Best Results

- Keep beacon stationary when locating signal.
- Identify beacon location at the main signal. A typical beacon signal pattern shows a main signal and two weaker secondary signals. Familiarity with beacon signal patterns will lessen the effect of ghost signals.



Attach Beacon to Flex Rod

1. Attach adapter to beacon if necessary for particular application.
2. Attach flex rod to adapter or directly to beacon.

Clean and Store Components

When finished using beacon,

- thoroughly wash flex rod and beacon,
- remove battery,
- dry beacon.

This unit covered by one or more of the following patents: **U.S.** 5,850,624; 5,872,703; 5,880,680; 7,150,331; **UK** 0846841.