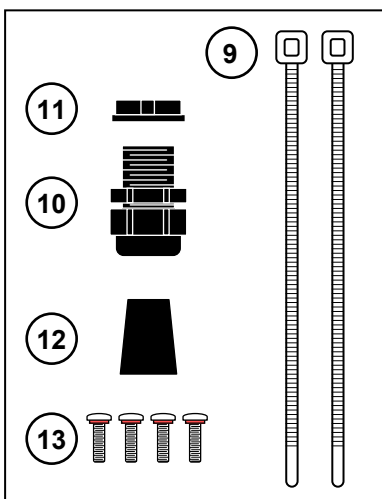
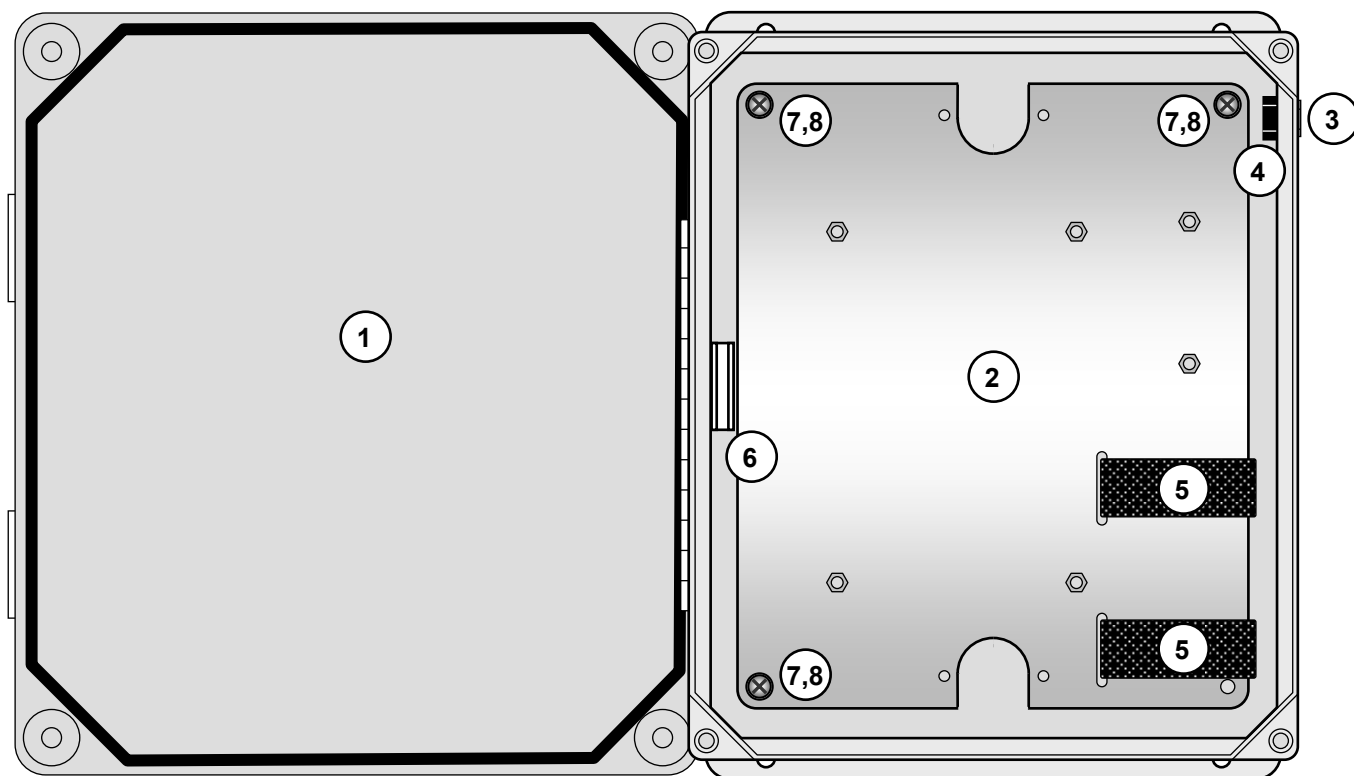


## LMH-100 Installation Instructions

Ritron model LMH-100 is an outdoor, weatherproof enclosure designed to house Ritron models LM-U450 and LM-V150 Loudmouth receivers. The LMH-100 is used when the Loudmouth receiver cannot be installed in a location protected from the elements.

### Step 1: Check the contents of the LMH-100



#### **Items installed at the factory:**

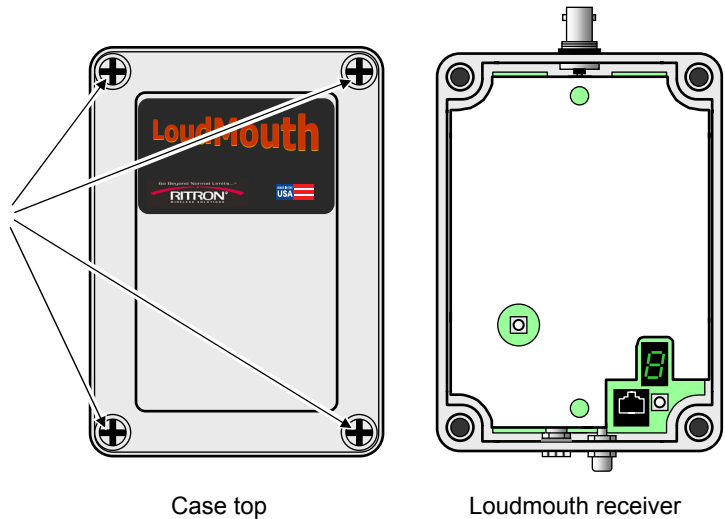
1	13990059	Enclosure, #13990026 modified for vent
2	25110100	Mounting Plate, Loudmouth Outdoor
3	25204100	Case Vent, Membrane, Gray
4	25204200	Case Vent, Mounting Nut, Black
5	25204300	Strap, Velcro, 1" W, Omniwrap (Qty: 2)
6	25204800	Clip, Adhesive Mount, Antenna Location
7	28151901	Screw, 10-32 x .312 LG, PPH, SS (Qty: 3)
8	28323901	Lockwasher, #10 Internal Tooth, SS (Qty: 3)

#### **Items included for LMH-100 installation:**

9	02800088	4.0 X .1 Plastic Cable Tie (Qty: 2)
10	25204500	Strain Relief, LMH-100
11	25204600	Strain Relief, Nut
12	25204700	Strain Relief, Plug
13	28151607	Seal Screw, 6-32 X 3/8 LG, SS, Passivated (Qty: 4)
14	14520009	Installation Instructions, LMH-100

## Step 2: Remove Loudmouth Case Top

Remove the case top from the Loudmouth receiver by loosening the 4 plastic corner screws. Do NOT remove the plastic screws from the case top.

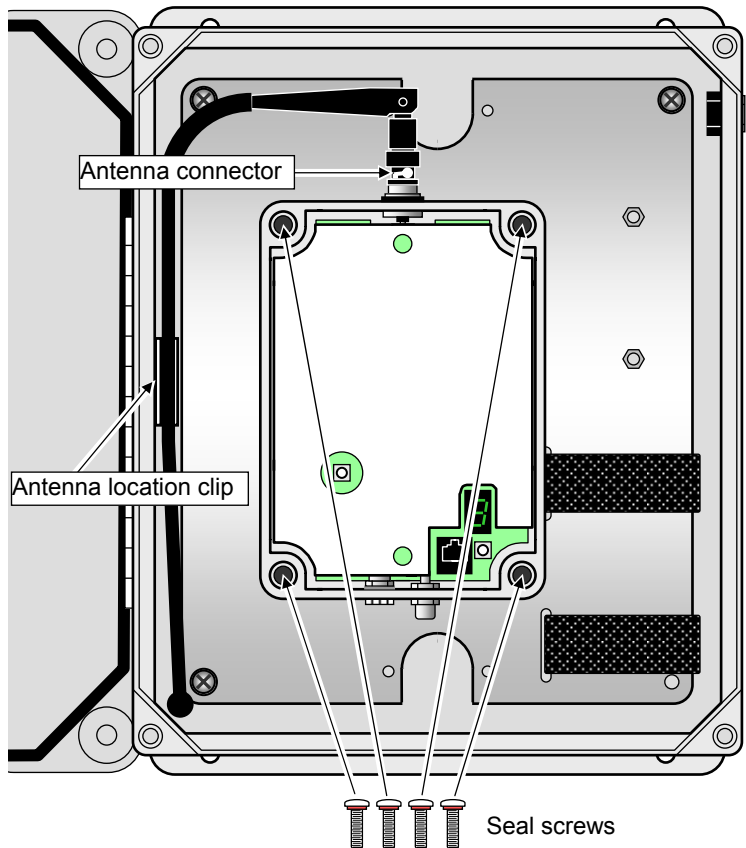


## Step 3: Install Loudmouth in LMH-100 Enclosure

Install the Loudmouth receiver into the LMH-100 enclosure using the four Seal Screws (28151607) included with the LMH-100. The screws are inserted into the four holes on the corners of the Loudmouth case and threaded into the LMH-100 mounting plate (25110100) that was pre-installed at the factory.

## Step 4: Install Antenna

Connect the AFB-1545 antenna to the antenna connector on top of the Loudmouth receiver. The antenna is then routed along the left side of the LMH-100 enclosure and secured with the Antenna Location Clip (25204800) that was pre-installed at the factory.



## Step 5: Replace Loudmouth Case Top

Re-install the Loudmouth receiver case top that was removed in Step 2 by tightening the 4 plastic corner screws. Do NOT over-tighten the plastic screws.

## IMPORTANT

The Loudmouth power and speakers cables can be routed from the LMH-100 enclosure in a variety of ways, depending on the specific installation. Steps 6 through 8 describe the installation of the weatherproof strain relief that was included with the LMH-100.

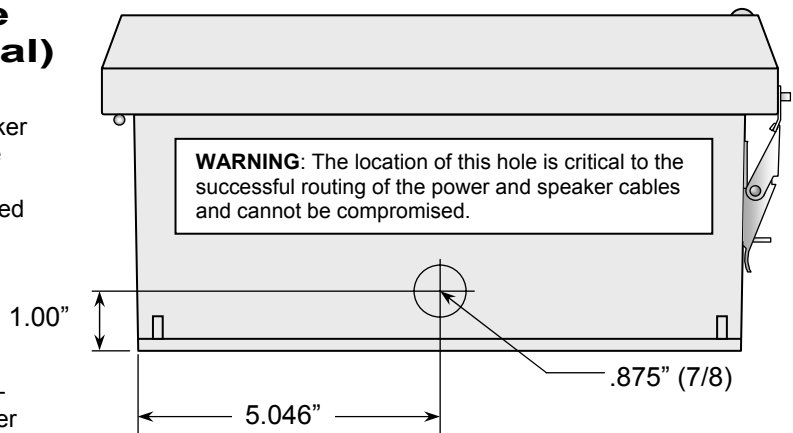
An alternative method is to install electrical conduit. Carefully consider your installation before drilling holes in the LMH-100 housing. Be sure there will not be interference with the internal parts, and that the cable and connectors can be routed through the conduit to the connectors on the bottom of the Loudmouth receiver.

### Step 6:

#### Drill LMH-100 Enclosure for Strain Relief (Optional)

A hole can be drilled in the bottom of the LMH-100 enclosure to route the Loudmouth power and speaker cables. The instructions in this manual describe the installation of the weatherproof strain relief (25204500, 25204600) and plug (25204700) included with the LMH-100.

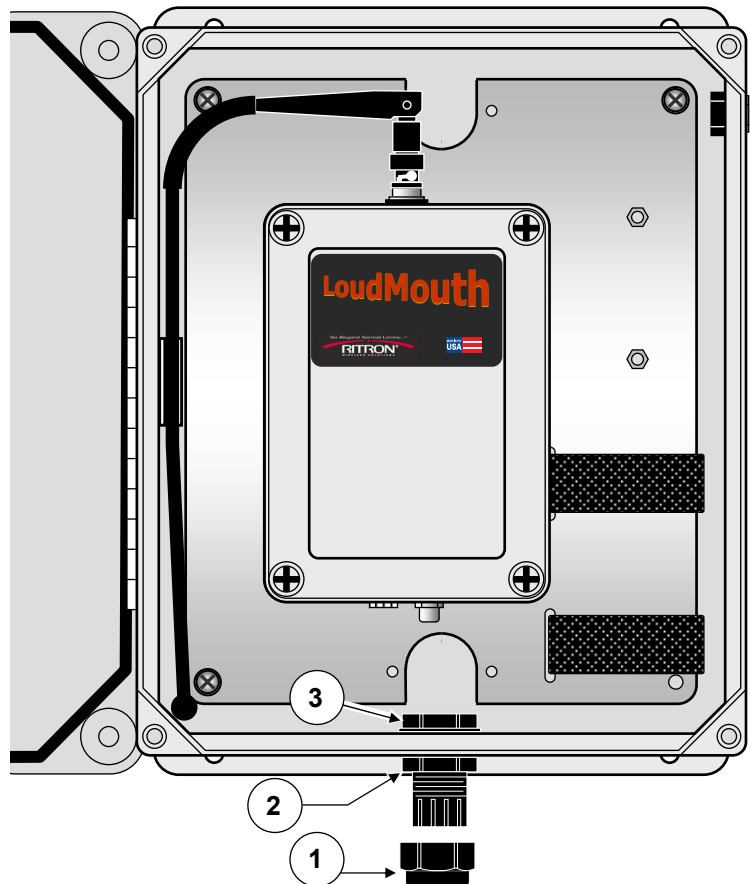
1. Carefully measure and mark the location of the hole on the bottom of the LMH-100 enclosure per the diagram at right.
2. Drill a .875 (7/8) hole in the bottom of the LMH-100 enclosure. Remove all residual plastic after drilling and thoroughly clean the area.



### Step 7:

#### Install Weatherproof Strain Relief (Optional)

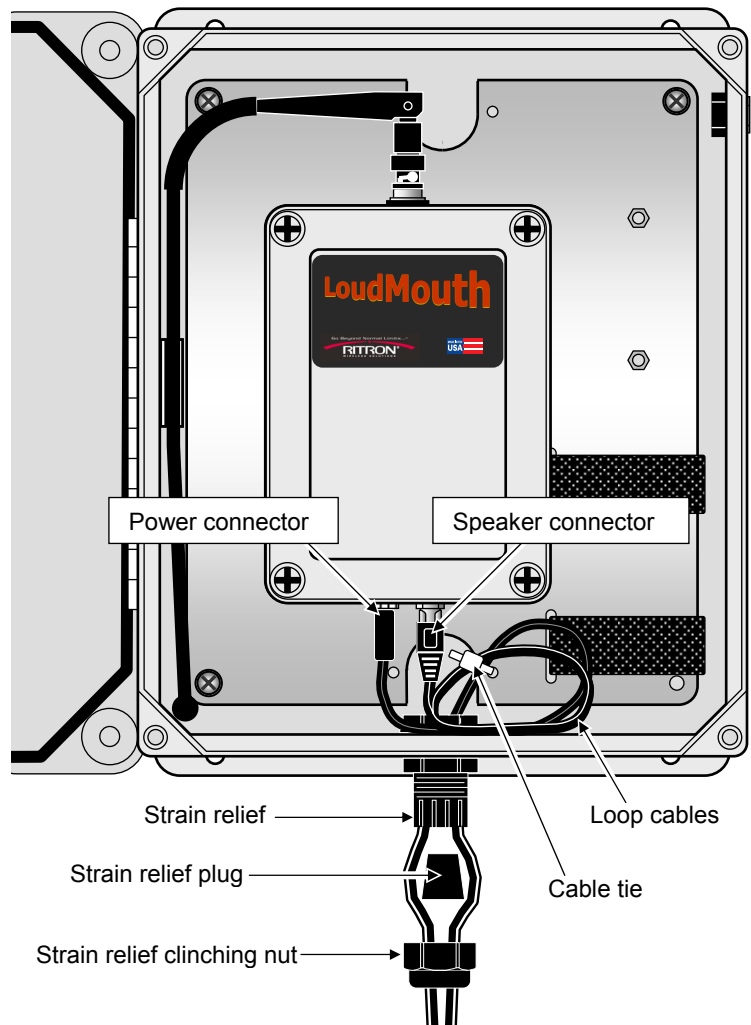
1. Remove clinching nut from strain relief (25204500)
2. Insert strain relief (25204500) fully through the hole in the LMH-100 enclosure
3. Secure strain relief (25204500) to the LMH-100 enclosure with the strain relief nut (25204600)



## Step 8:

### Connect Loudmouth Power and Speaker Cables through Strain Relief (Optional)

1. Route the Loudmouth power and speaker cable connectors through the strain relief clinching nut that was removed in Step 7.
2. Route the Loudmouth power and speaker cable connectors through the strain relief installed on the LMH-100 enclosure.
3. Connect the power connector to the Loudmouth DC power jack on the Loudmouth case (left side jack), and the speaker connector to the phono jack on the Loudmouth case (right side jack).
4. Insert through the strain relief enough length of both cables to create a loop as shown at right.
5. Use a plastic cable tie (02800088) to secure both cables to the LMH-100 mounting plate (25110100). Thread the cable tie through the hole in the mounting plate and tightly secure both cables.
6. Press the rubber strain relief plug (25204700) into the strain relief installed on the LMH-100 enclosure, between the speaker and power cables. The plug should be fully inserted into the strain relief.
7. Tighten the strain relief clinching nut onto the strain relief to compress the plug and seal the cables.

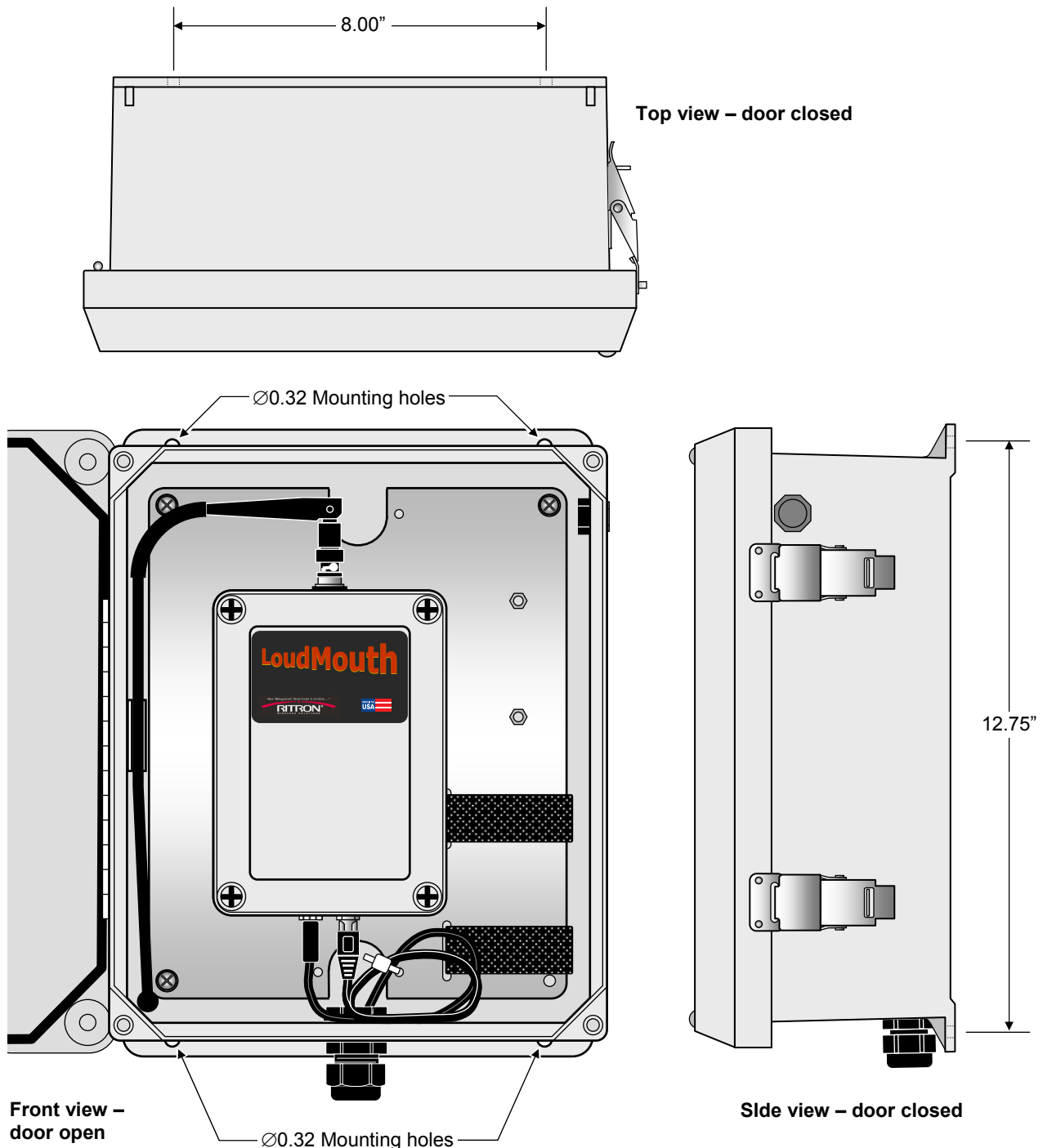


## Step 9:

### Install the LMH-100 Enclosure

The LMH-100 may be installed to a wide variety of surfaces and materials. For this reason, mounting hardware is not included with the LMH-100. LMH-100 mounting is accomplished using the four 0.32" diameter holes pre-drilled in the enclosure as indicated below.

**WARNING:** Do not attempt to mount the LMH-100 enclosure by drilling additional holes. Additional holes may compromise the weatherproof integrity of the enclosure.



## Step 10:

### Install Optional Sealed Gelcell Battery

The Loudmouth can be powered with an optional 7AH gelcell battery (RTN# 04000064) installed in the LMH-100 enclosure. The gelcell battery is connected to the Loudmouth using the optional LMK-BP cable assembly.

1. Install gelcell battery (04000064) as shown and tightly secure to the LMH-100 mounting plate (25110100) using the two velcro straps (25204300) that were pre-installed at the factory.
2. Connect the black lead of the LMK-BP cable assembly to the negative (black) terminal of the gelcell battery.
3. Connect the red lead of the LMK-BP cable assembly to the positive (red) terminal of the gelcell battery.
4. Connect the DC coaxial power connector of the LMK-BP cable assembly to the Loudmouth DC power jack on the Loudmouth case (left side jack).

#### NOTES:

- The optional gelcell battery cannot be used in conjunction with the DC power cube (RPS-1A) that comes with the Loudmouth.
- The gelcell battery can be charged with the battery removed from the enclosure, or while installed, using a commercially available 12VDC, 1A gel cell charger.
- When selecting a charger make sure it is designed for charging sealed gel cell batteries. Standard automotive chargers generally charge at a rate that exceeds maximum charge current for a sealed battery.

