

MODEL 350

Vibratone® Electro-Mechanical Horn Installation and Maintenance Instructions

256918 Rev K3 0323



Limited Warranty: This product's limited warranty can be found at www.fedsig.com/SSG-Warranty.

Messages to Installers and Users ⚠ This product should be installed to code by a licensed electrician and follow all safety instructions. Failure to do so may result in property damage, serious injury, or death.

- Read and understand instructions before installing or operating the equipment.
- **SHOCK HAZARD** - To avoid electrical shock hazards, do not connect wires when power is applied.
- Optimum sound distribution will be severely reduced if any objects are in front of the horn. Ensure that the front of the horn is clear of any obstructions.
- All effective warning sounders produce loud sounds that may cause, in certain situations, permanent hearing loss. Take appropriate precautions, such as hearing protection. The device should be installed far enough away from potential listeners to limit their exposure while still maintaining its effectiveness. The OSHA Code of Federal Regulations 1910.95 Noise Standard provides guidelines that may be used regarding permissible noise exposure levels.
- After installation, test the system to ensure that it is operating properly.

Overview: The Model 350 horn is a very loud electro-mechanical device that produces a horn tone by vibration of a diaphragm. This horn is capable of reproducing coded blasts or sustained tone. The horn has a duty cycle of five minutes on, five minutes off.

Unpacking the Device: After unpacking the device, examine it for damage and verify the parts. See Table 1 for the Carton Contents List. If a part is missing or appears damaged, do not attempt to install. Contact Federal Signal Customer Support at +1 708-587-3587 or ordersup@fedsig.com.

Table 1 Carton Contents List

Qty	Description
1	350 Horn
2	8-32 x 1-5/8" oval head screws
2	10-32 x 5/8" oval head tapping screws
1	10-32 x 3/8" hex head tapping screw
1	10-32 x 3/8" hex socket head set screw

Mounting the Device

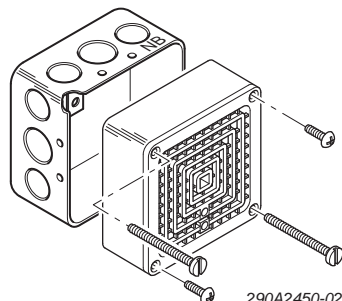
The horn may be directly mounted to a standard 4-inch square electrical box or may be mounted using various Federal Signal accessories (purchased separately).

Outlet Box Mounting

To mount the horn to a wall or other flat vertical surface:

1. Mount a 4-inch square electrical box to the mounting surface with appropriate user supplied hardware.
2. Connect the wires per the Electrical Connections section below.
3. Mount the horn to the box using the two 8-32 by 1-5/8-inch screws provided.
4. Install the two 10-32 by 5/8-inch tapping screws into the two unused screw openings on the horn. See Figure 1.

Figure 1 Outlet Box Mounting

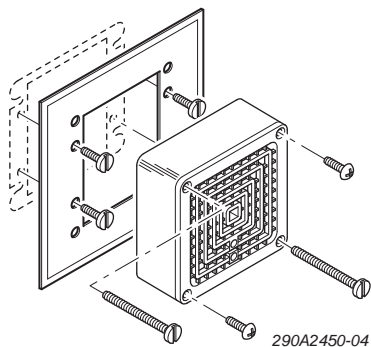


Semi-Flush Mounting

Semi-flush wall mounting requires the use of Federal Signal Model SF Semi-Flush Mounting Plate accessory. This accessory mounts to a user-provided two-gang plaster ring attached to a recessed 4-inch square electrical box. To mount the horn in this manner:

1. Attach the Semi-Flush Mounting Plate accessory to plaster ring using the (4) 6-32 by 1/4-inch screws provided.
2. Connect the wires per the Electrical Connections section below.
3. Mount the horn to the Semi-Flush Mounting Plate accessory using the two 8-32 by 1-5/8-inch screws provided. Install the two 10-32 by 5/8-inch tapping screws into the two unused screw openings on the horn. See Figure 2.

Figure 2 Semi-Flush Mounting

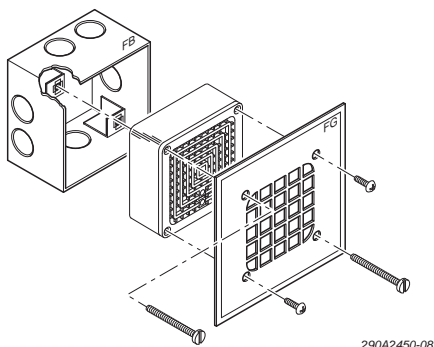


Flush Mounting

Flush wall mounting requires the use of Federal Signal Model FB Flush Wall Mount Box and FG Flush Mount Grille accessories. To flush mount the horn:

1. Mount the Model Flush Wall Mount Box wall box into the wall with the box edge flush with the finished wall.
2. Connect the wires per the Electrical Connections section below.
3. Mount the horn and Flush Mount Grille accessory to the Flush Wall Mount Box wall box using the two 8-32 by 1-5/8-inch screws provided.
4. Install the two 10-32 by 5/8-inch tapping screws into the two unused screw openings on the horn. See Figure 3.

Figure 3 Flush Mounting

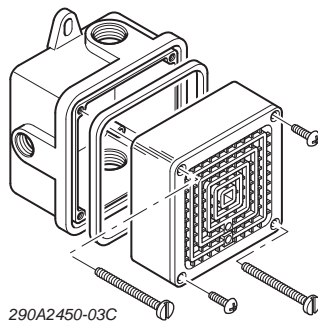


Weatherproof Box Mounting

Weatherproof surface mounting requires the use of Federal Signal Model WB Weatherproof Back Box accessory. To mount the horn in this manner:

1. Mount the Weatherproof Back Box to the mounting surface using the appropriate user-supplied hardware.
2. Connect conduit/cabling to the Weatherproof Back Box box as required.
3. Plug all unused conduit entries with the provided plugs.
4. Connect the wires per the Electrical Connections section.
5. Mount the horn to Weatherproof Back Box using the two 8-32 by 1-5/8-inch screws provided.
6. Install the two 10-32 by 5/8-inch tapping screws into the two unused screw openings on the horn. See Figure 4.

Figure 4 Weatherproof Box Mounting

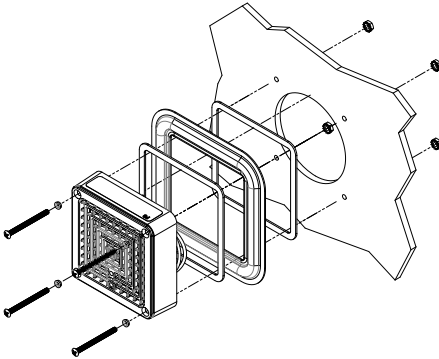


Weatherproof Panel Mounting

Weatherproof panel mounting requires the use of the Federal Signal Model TR accessory. To mount the horn in this manner:

1. Make a cutout in the panel per the template provided with the Model TR.
2. Attach the horn and trim ring to panel using the four 8-32 by 1-5/8-inch screws, four nylon screw collars, and four 8-32 locknuts provided with the Model TR. See Figure 5.

Figure 5 Weatherproof Panel Mounting



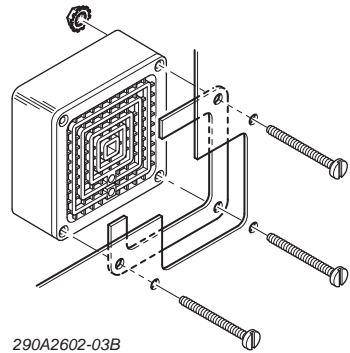
3. Connect the wires per Electrical Connections section below.

Recessed Weatherproof Panel Mounting

Recessed weatherproof panel mounting requires the use of the Federal Signal Panel Mount Gasket Kit (part number K8435666A). To mount the horn in this manner:

1. Make a cutout in the panel per the template provided with Panel Mount Gasket Kit K8435666A.
2. Attach the horn to the panel using the four 8-32 by 1-5/8-inch screws, gasket, and four 8-32 locknuts provided with Panel Mount Gasket Kit K8435666A. See Figure 6.

Figure 6 Recessed Weatherproof Panel Mounting



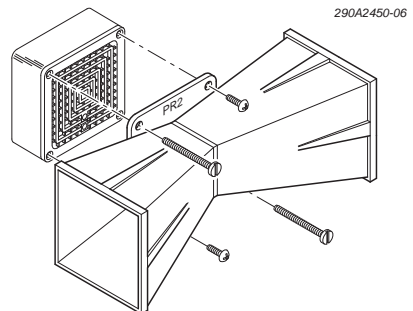
3. Connect wires per Electrical Connections section below.

PR2-NM Projector Mounting

The Model PR2-NM may be added to any of the installations described on this sheet. To mount the projector:

1. Secure the projector to the horn using the two 10-32 by 5/8-inch tapping screws provided.
2. Connect the wires per the Electrical Connections section below.
3. Secure the horn and projector to the backbox using the two 8-32 by 1-5/8-inch screws provided. See Figure 7.

Figure 7 Projector Mounting



Electrical Connections

The Model 350 is provided with two leads for electrical connections. To make the connections:

1. Connect the line (L or L1) power source lead to the black wire and connect the neutral (N or L2) power source lead to the white wire with user-supplied connectors.

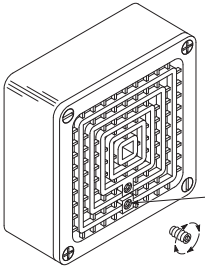
2. Connect the ground to the green ground screw if required.

Optional Volume Control

The 350 horn is shipped with the volume set for maximum sound output. However, you can reduce the sound level with the provided 10-32 hex socket head set screw. To adjust the volume:

1. Before installing the set screw, thread the provided 10-32 hex head tapping screw into the hole on the front of the horn shown in Figure 8.

Figure 8



SOUND HAZARD: Wear hearing protection when working with this horn.

PELIGRO DE SONIDO: Lleve protección auditiva cuando trabaje con la bocina.

DANGER DU SON: Porter une protection auditive lors de l'utilisation le klaxon.

ALLEN-HEAD ADJUSTMENT SCREW:
For softer sound, turn clockwise

Tornillo de ajuste con cabeza allen
(para un nivel de sonido más suave, gire
en sentido horario)

Vis de réglage à tête allen (pour un niveau
sonore plus faible, tournez dans le sens des
aiguilles d'une montre)

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2. Remove the tapping screw, and then thread the set screw into the threaded hole.
3. Use a 3/32-inch hex key wrench to rotate the set screw clockwise until the desired sound level is reached.

Testing/Operating

After installation, test the system to verify that each signal operates. Establish a program for periodic testing of the device. Provide a copy of these instructions to all operating personnel.

Ordering Accessories

See Table 2 for available accessories.

Table 2 Accessories

Description	Model/Part Number
Semi-Flush Mounting Plate	SF
Flush Wall Mount Box	FB
Flush Mount Grille	FG
Weatherproof Back Box	WB
Panel Mount Trim Ring	TR
Panel Mount Gasket Kit	K835666A
Double Projector	PR2-NM

Maintenance and Service

Technical Assistance: Contact our Technical Support Team at +1 708-587-3587 or signalsupport@fedsig.com.

Repair Service: A return authorization is required. Contact your Authorized Distributor or Federal Signal Customer Support. Defective products under warranty will be repaired or replaced at Federal Signal's discretion.

Product Returns: Returns require authorization from Federal Signal. Contact your Authorized Distributor for more information on our return policy or to request a return.



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Additional translations available at signaling.fedsig.com

Traducciones adicionales disponibles en signaling.fedsig.com

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SCAN ME