

SPL

POWERTONE® ADJUSTABLE LOUDSPEAKERS (With or without Strobe Warning Light)

SAFETY MESSAGE

People's lives depend on your safe installation, test, operation, and maintenance of our products. Read, understand and follow all safety precautions. Refer to "Safety Messages for Equipment Used in Fire-Protective Signaling Systems" and any other documentation shipped with equipment before performing any system related duty. Failure to follow all safety precautions and instructions may result in property damage, serious injury, or death to you or others.

A. GENERAL.

The Model SPL loudspeakers are Underwriters Laboratories listed for "Fire Protective Signalling Use" (category designation UUMW). The loudspeakers are designed to reproduce electronically generated warning tones that command rapid recognition of fire alarm and other emergency alerting signals. Either a 25 or 70 VRMS AC signal source can be used. In addition, this loudspeaker can reproduce full range voice communication. An in-line capacitor (supplied) provides the isolation necessary for supervisory use.

Speaker/strobe models have a 24Vdc strobe factory installed on the grille or re-entrant housing. All strobes are listed by Underwriters Laboratories in their respective categories. For additional information regarding the attached strobe, refer to Model V1971 strobe instruction sheet (CPG Part No. 2561090) or Model VST strobe instruction sheet (CPG Part No. 2561310).

Speaker styles include: round or square front grilles (textured vinyl-clad metal), or a high-impact plastic re-entrant housing for various applications.

The speaker or speaker/strobe model is supplied with wiring terminals and strain reliefs for speaker and optional strobe in/out wiring (see figure 1). An optional auxiliary terminal can be supplied on the speaker.

B. POWER TAP ADJUSTMENT.

See figures 1 and 2. Multiple power settings are achieved via an adjustable contact clip. The unit is set at the factory to the 1/4 watt position. To change the power (volume), carefully pull the power selector clip straight out of the slot and push it straight into the desired power setting slot (1/4, 1/2, 1, or 2-watt) as indicated and push down until the clip is fully engaged. See figure 2 for the proper location to pull and push on the clip.

WARNING

The power selector clip supplied is manufactured of a spring steel material and is shipped from the factory so that a tight fit is achieved on the circuit board. Improper field removal and insertion such as twisting, prying, misalignment or sideways movement of the clip can result in a sprung or loose clip. If a clip appears to be loose fitting, either replace it with a new clip or be sure to adjust it so that a tight force-fit is assured. Failure to follow the above guidelines can result in intermittent and/or non-functional operation.

C. INSTALLATION.

WARNING

To avoid electrical shock, do not attempt to install wires when power is on.

1. Electrical Connections.

WARNING

An uninsulated section of a single conductor must NOT be looped around a terminal and used as two separate connections. The wire must be severed to provide electrical supervision of the connection.

Use 2 x 12-18 AWG wiring for the speaker terminals and 2 x 14-18 AWG for the strobe terminals. (User-supplied #6 or #8 crimp-on spade lugs may be used for 12 AWG attachment to the strobe terminals.)

Strip 3/8" of insulation from all wiring leads. Attach the appropriate wires to the corresponding terminals on the back of the speaker as shown in figures 1, 2, and 3. (Speaker wires are connected to terminals "S+" and "S-" and optional strobe wires are connected to terminals "L+" and "L-".) Tighten the screws to ensure that the wires are firmly held in place.

Speaker Type	Power Tap	Power (W)	UL Sound Level @ 10' dB(A)
Flush Grille or Re-Entrant Housing with and without strobe	1/4 Watt	0.29	78
	1/2 Watt	0.57	80
	1 Watt	1.14	83
	2 Watt	2.16	86

Table 1. Wattage vs. UL Sound Output, dB(A) for Series C SPL Speakers.

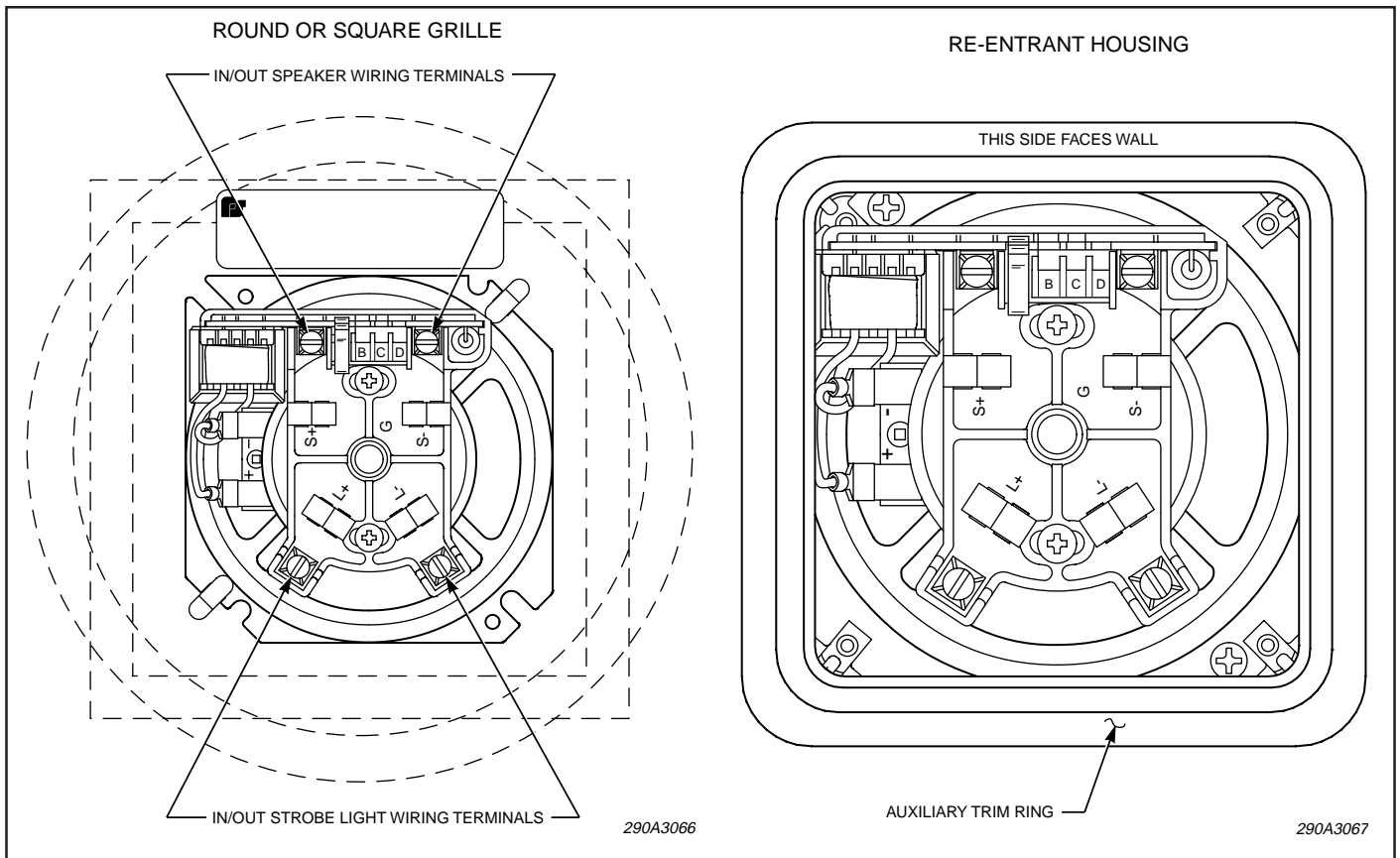


Figure 1. Rear View of Model SPL Grill and Re-Entrant Speakers.

To select the desired wattage, refer to paragraph B. and see figure 2. Using the removable contact clip, set the desired output level (1/4, 1/2, 1, or 2-watt).

An optional #6-32 auxiliary terminal may be added by carefully pressing the knurled terminal into the insulator housing's center raised boss until it is flush with the top of the boss as shown in figure 2.

When the speaker is supplied with a factory installed strobe, two additional terminals are located on the back of the speaker as shown in figure 1. See figures 3 and 4. Connect the appropriate wires to the corresponding strobe terminals. Note that the wires are held in place by the terminal's captivating nut. Tighten the screws and ensure that the wires are firmly held in place.

2. Mounting (see figures 5 and 6).

NOTE

Placement of the Model SPL grill model within a standard 4 x 4 electrical box requires positioning the rear of the speaker correctly with respect to conduit entryways (see figure 5). Four entryways into the 4 x 4 box cannot be utilized due to the speaker's rear geometry. Be sure to note the site conduit layout prior to grill speaker installation.

Both the round and square grille speakers will fit an NB backbox (standard 4 x 4 electrical box) or an NBL backbox. Re-entrant housings fit either a NB or NBL

backbox with or without a surface mount trim plate (TP or TPSF). Re-entrant housings will also fit an FBL backbox with a TP flush mount trim plate. An auxiliary trim ring is also supplied (see figure 1) for mounting arrangements.

Use the two #8-32 x 1-1/4" (supplied) mounting screws and mount the speaker or speaker/strobe as shown in figure 6.

WARNING

Do NOT loosen the screws that mount the black plastic insulator to the back of the speaker magnet. Damage to the speaker transformer may result. Route or shorten field wiring so speaker easily fits flush in back box prior to tightening mounting screws into box. Never force speaker into box.

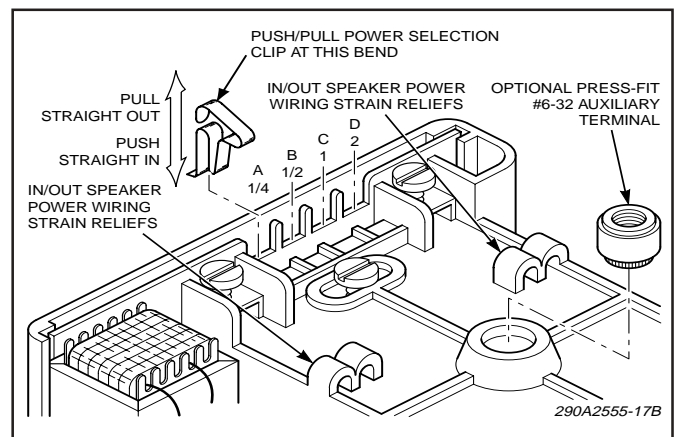


Figure 2. Power Adjustment.

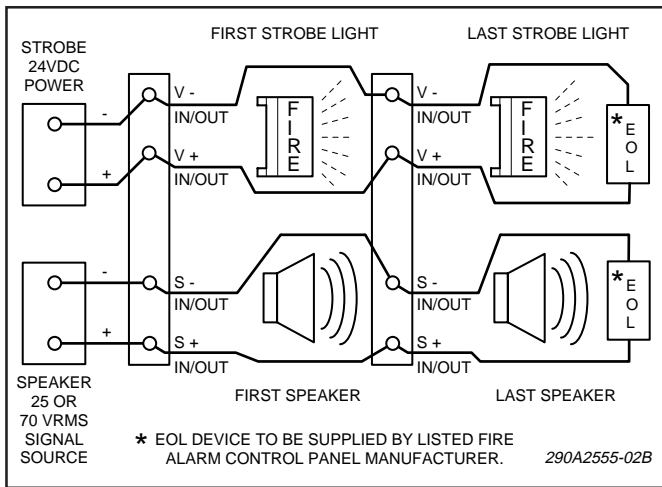


Figure 3. Model SPL Wiring.

Failure to follow the above guidelines may result in intermittent or nonfunctional operation.

D. TESTING/OPERATING.

WARNING

Under certain conditions these devices are capable of producing sounds loud enough to cause hearing damage. Adequate hearing protection should be worn if standing within close proximity to device while testing. Recommendations in the OSHA Sound Level Standard (29CFR 1910) should not be exceeded.

1. After installation is complete, be sure to test the system to verify that each speaker and optional strobe light operates satisfactorily. If it is found that the sound level is too low for its location, a higher wattage tap may be selected. Carefully remove the speaker and move the contact clip to a higher wattage tap (see Figure 2). Reinstall the speaker and retest.

2. After completion of initial system test, establish a program for periodic testing of this device. Refer to NFPA 72, local Fire Codes and the authority having jurisdiction for this information.

3. Provide a copy of these instructions for the Safety Engineer, system operator(s) and maintenance personnel.

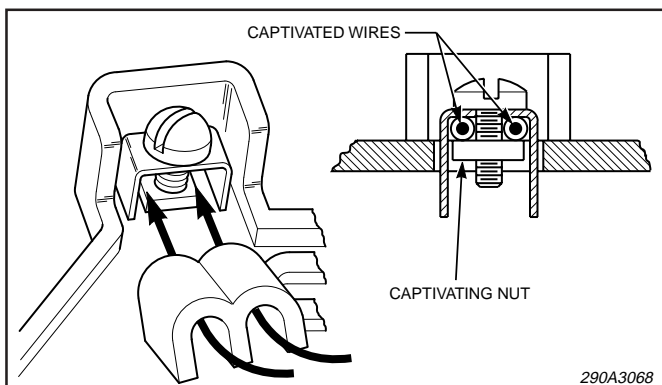


Figure 4. Optional Strobe Wiring.

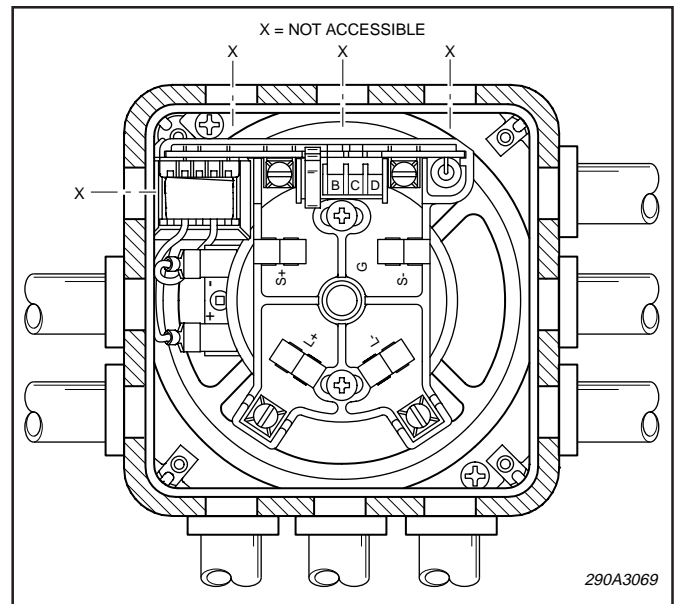


Figure 5. 4 x 4 Electrical Box Conduit Entryways for SPL Grill Speakers.

E. MAINTENANCE.

If cleaning of the Model SPL's front face is required, a mild soap solution is recommended as the cleaning agent.

NOTE

Although not advised, if painting/touch-up of the grille model's vinyl face is necessary, a vinyl-based paint is required for coverage.

1. Periodically check this device to verify that there are no foreign substances in, or in front of, the speaker which will reduce its effectiveness.

2. Testing should be periodically performed. Refer to NFPA 72, local Fire Codes and the authority having jurisdiction for information.

3. In the event a volume adjustment or other repair is required, be sure to refer to the Safety Message For Maintenance Personnel before proceeding.

WARNING

Unauthorized repair/servicing of the unit may result in degradation of performance and/or property damage, serious injury, or death to you or others. If a malfunctioning unit is encountered, do not attempt any field repair/retrofit of parts.

F. SERVICE.

This product is covered by a 5 year limited warranty. See CPG terms and conditions for details.

The factory will service your equipment or provide technical assistance with any problem that cannot be handled locally with satisfaction or promptness.

If any unit is returned to factory for repair, it can be accepted only if we are notified by mail or phone in advance

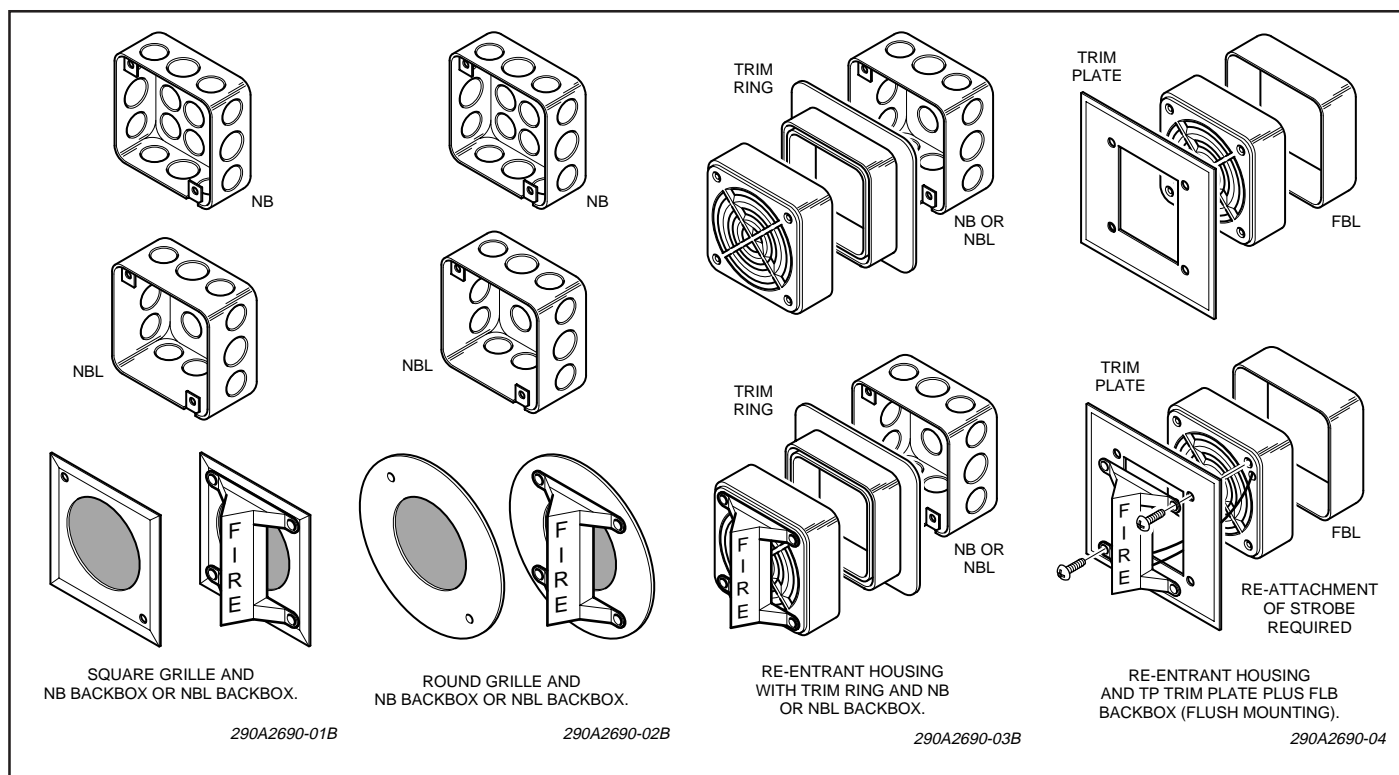


Figure 6. Mounting.

of its arrival. Such notice should clearly indicate service requested and give all pertinent information regarding nature of problem and, if possible, its cause.

Communications and shipments should be addressed to:

Technical Service Department
 Commercial Products Group
 2519 - 4th Avenue
 Moline, IL 61265
 800.521.8219 • FAX 800.225.4109

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