

ASLP

POWERTONE® AMPLIFIED SPEAKER (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 messages and instructions. 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.

I. GENERAL.

This amplified speaker is a continuous duty, vandal-resistant, polarized, 24 Volt dc, indoor/outdoor, amplified speaker for use with fire alarm systems. It is suitable for use in offices, hallways, plant areas or anywhere ambient noise levels are not exceedingly high, or where sound dispersal by multiple sources is desired. Weatherproof, flush, semi-flush or surface mounting options are available. Any one of ten plug-in tone cards (purchased separately) may be used (see table 1). In addition, one of two available Model PTCK plug-in connector cards can be used. The Model PTCK plug-in connector cards will allow use of externally generated tone or voice signals (see table 1) from a remote audio amplifier, such as CPG's PowerTone System.

Speaker/strobe units include a factory installed strobe on the housing. The speaker/strobe models are available in a 24 Vdc configuration. All strobes are listed by Underwriters Laboratories in their respective categories. For additional information regarding the attached strobe and message label(s) attachment, refer to Model V1971 strobe instruction sheet (CPG Part No. 2561088 or 2561090) or Model VST strobe instruction sheet (CPG Part No. 2561310). Model V1971 may be used outdoors when Model VW outdoor kit is employed; otherwise, Model V1971 is for indoor use only. Model VST may be used for indoor use only.

II. SPECIFICATIONS.

Operating Voltage	24 Vdc
Current (depends on tone card or signal used—not including optional strobe light)	0.07A max./0.025A standby
Weight (approx.)	1.7 lb. (0.771kg)
Size	4-1/2" (114mm) high, 4-1/2" (114mm) wide, 2-1/8" (54mm) deep.
Size does not include electrical back box or any trim plates.	
Construction	UL Listed flame retardant high impact thermoplastic enclosure.

Approval Agency Listings:

Underwriters Laboratories Inc.
 Model ASLP and ASLP with VALS: File S6476 (Guide UUMW and ULSZ) Listed as a "FIRE PROTECTIVE SIGNALING SPEAKER" when used with a Model PTCK25 or PTCK70 connector card or as an "AUDIBLE SIGNAL APPLIANCE FOR FIRE ALARM SERVICE" when used with a Model TC-WL, TC-YP, TC-HL, TC-BL, TC-YW, TC-HN, TC-BP, TC-ST, TC-SW, or TC-TW tone card.

Audibility information is shown in table 1.

III. INSTALLATION.

A. Unpacking.

After unpacking the amplified speaker, examine it carefully for possible damage that may have occurred in transit. If equipment has been damaged, immediately file a claim with carrier stating extent of damage. Carefully check all shipping labels and tags for special instructions before removing or destroying them.

B. Electrical Connection.

DANGER

To avoid electrical shock, do not connect wires when circuits are energized.

NFPA 72, National Electrical Code, as well as local codes must be adhered to in the installation of these models. All electrical wiring must be routed through approved conduit and fittings as specified.

1. Tone Card Installation.

WARNING

Property damage, serious injury, or death could occur if independent conductors are terminated together; both wires of the same polarity must be used as two separate connections. NFPA 72 requires that the wires be terminated independently to provide electrical supervision of the connection.

a. See figure 1. Connect the device's red (+) leads to the power source positive (+) lead. Connect the device's black (-) leads to the power source negative (-) lead.

b. Plug the desired tone card into the socket as shown in figure 2.

c. To complete the installation, proceed to paragraph III.C. Mounting Arrangements.

2. PTCK Connector Kit Installation.

WARNING

Property damage, serious injury, or death could occur if independent conductors are terminated together; both wires of the same polarity must be used as two separate connections. NFPA 72 requires that the wires be terminated independently to provide electrical supervision of the connection, for both the 24 Vdc speaker power and 25 VRMS or 70 VRMS audio lines.

a. See figure 3. Connect the device's red (+) leads to the power source positive (+) lead. Connect the device's black (-) leads to the power source negative (-) lead.

b. Plug the desired PTCK connector card (purchased separately) into the socket as shown in figure 2.

c. Connect the white leads from the connector card to the audio input and outputs.

Tone Card	Sound	Audible Frequency	Repetition Rate	Audibility	
				UL dB(A)	Sound Pressure
TC-WL Wail	Conventional siren	600 - 1250 Hz	8 Cycles/min.	82	
TC-YP Yelp	Rapid Siren	600 - 1250 Hz	3.6 Hz	82	
TC-HL Hi-lo	Alternating High & Low	Low tone 560 Hz; Hi tone 760 Hz	50 Cycles/min.	79	
TC-BL Bell	Bell, struck repeatedly	500 - 1200 Hz, adj.	30 -150 Cycles/min. adj.	79	
TC-YW Yeow	Descending high to low - repeated	Hi freq. 1200 Hz low freq. 600 Hz	40 Cycles/min.	82	
TC-HN Horn	Steady Horn	470 Hz	Continuous	79	
TC-BP Beep	Slow intermittent horn	470 Hz	50 Cycles/min.	75	
TC-ST Stutter	Rapid intermittent horn	470 Hz	5 Hz	75	
TC-SW Slow Whoop	Slow ascending, low to high - repeated	Low freq. 500 Hz; Hi freq. 1200 Hz	15 Cycles/min.	82	
TC-TW Temporal Slow Whoop	NFPA coded slow whoop (fire alarm use only)	Low freq. 500 Hz; Hi freq. 1200 Hz.	6.5 sec. full cycle	79	
Connector Card Model		At Rated Voltage			
PTCK25		25 VRMS		78*	
PTCK70		70 VRMS		78*	

* Based on pink noise measurement.

Table 1. Tone and Connector Card Ratings for Models ASLP.

NOTE

Check with authority having jurisdiction for proper application of EOL resistor and power supervision relay required (see figure 3).

d. To complete the installation, proceed to paragraph III.C. Mounting Arrangements.

3. Model ASLP (Strobe Light Option).

DANGER

A high voltage shock hazard may be present inside the strobe light, even if power is not connected. It is recommended that strobe light NOT be opened. If access to the printed circuit board assembly is required (removal or replacement of damaged unit), disconnect unit from power source and wait 5 minutes. When opening device, DO NOT touch components or flash tube. Discharge the capacitor by touching an insulated wire across both ends of the flashtube.

a. See figure 1. Connect the strobe light's red (+) lead to the power source positive (+) lead. Connect the strobe light's black (-) lead to the power source negative (-) lead. If independent control of the strobe light(s) is not needed, the leads may be joined with the ASLP's power leads.

WARNING

Property damage, serious injury, or death could occur if independent strobe conductor wires are terminated together; both wires of the same polarity must be used as two separate connections. NFPA 72 requires that the wires be terminated independently to provide electrical supervision of the connection.

b. See figures 1, 2, and 3. Perform the procedure in paragraph III.B.1. Tone Card Installation or paragraph III.B.2. PTCK Connector Kit Installation as applicable.

C. Mounting Arrangements (see figure 4).

Using the appropriate optional trim or adapter plates and electrical boxes, the amplified speaker can be installed indoors or outdoors. It can be flush mounted (totally recessed into mounting surface), semi-flush mounted (grille protrudes from mounting surface) or surface mounted (mounted on an electrical box attached to the mounting surface or, in some cases, this assembly may be mounted over an existing electrical box). After mounting method has been selected, determine mounting location and proceed with applicable instructions below.

WARNING

Property damage, serious injury, or death could occur if an accumulation of water, snow, dust, etc. resides in the speaker grille, severely reducing or preventing operation of this device. Mount the unit so speaker grille is facing horizontally or slightly downward.

1. Weatherproof Mounting.

This method requires a Federal Model WPB weatherproof box, adapter ring (Part No. 8476121), and gasket (Part No. 8476122).

NOTE

Electrical entrance can be made through threaded opening in side of WPB for 1/2" conduit, or a weatherproof cord grip for Type 16-2 SJO cable, or through a 7/8" knockout in the back

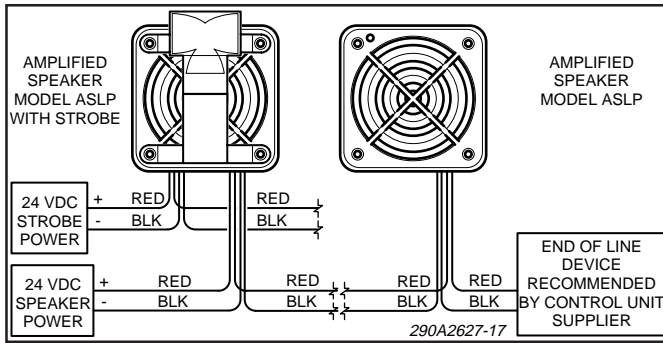


Figure 1. Typical Tone Card Installation Wiring.

of the WPB for using an appropriate weatherproof conduit fitting.

- a. Place rear of WPB box against mounting surface. Using box mounting holes as a template, scribe hole location marks on mounting surface.

CAUTION

Before drilling holes in any surface, ensure that both sides of surface are clear of anything that could be damaged.

- b. Secure WPB box to a wooden mounting surface with #10 or #12 x 1" wood screws. If mounting on metal, drill 9/32" diameter holes and secure device with 1/4" screws, lock washers and nuts.

2. Flush Mounting (not weatherproof).

This method requires a Federal Model TP trim plate and a Model FBL electrical box.

- a. Attach TP plate to ASLP's grille using two screws found in corners of grille.
- b. Mount FBL box in wall using the supplied #10 x 1" screws.

3. Semi-Flush Mounting (not weatherproof).

This method requires an adapter ring (CPG Part No. 8476121), gasket (CPG Part No. 8476122), and a Model NBL electrical box.

- a. Mount NBL box in wall using the supplied #10 x 1" screws.
- b. Position adapter ring, with the gasket placed in the

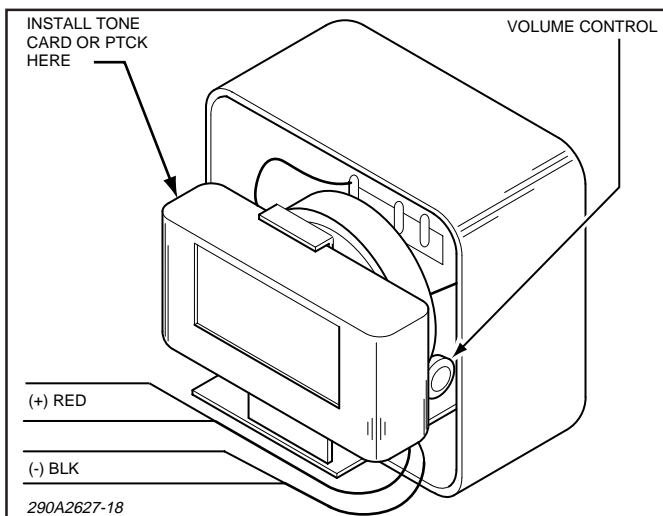


Figure 2. Tone/Connector Card Installation and Volume Control Location.

groove in its face, against mounting surface over NBL box. Position the ASLP over adapter ring and attach to NBL box with #8-32 x 3" oval head screws.

4. Surface Mounting (not weatherproof).

This method requires a CPG Model NBL electrical box. An optional adapter ring (CPG Part No. 8476121) and gasket (CPG Part No. 8476122) may be necessary, depending upon user's mounting requirements.

- a. Place rear of NBL box against mounting surface. Using box mounting holes as a template, scribe hole location marks on mounting surface.

CAUTION

Before drilling holes in any surface, ensure that both sides of surface are clear of anything that could be damaged.

- b. Secure NBL box to a wooden mounting surface with #10 or #12 x 1" wood screws. If mounting on metal, drill 9/32" diameter holes and secure device with 1/4" screws, lock washers and nuts.

5. Surface Mounting with Concealed Conduit (not weatherproof).

This method is suggested when mounting location is an existing electrical box which can not accommodate this device. It requires a Federal Model NBL electrical box and CC adapter plate kit.

- a. Using flat head screws supplied with kit, attach CC plate to existing electrical box.
- b. Mount insulated bushing supplied into center knockout opening in back of NBL box and attach box to CC plate with the supplied #10-32 x 1/4" screws.

IV. TESTING/OPERATING.

A. After installation is complete, be sure to test the system to verify that each amplified speaker and optional strobe light operates satisfactorily. If it is found that the unit is too loud for its location, an internal volume control can be adjusted. Remove the device from the electrical box and turn the volume control (see figure 2) to the desired loudness.

B. 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.

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

V. MAINTENANCE.

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

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

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

VI. SERVICE.

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

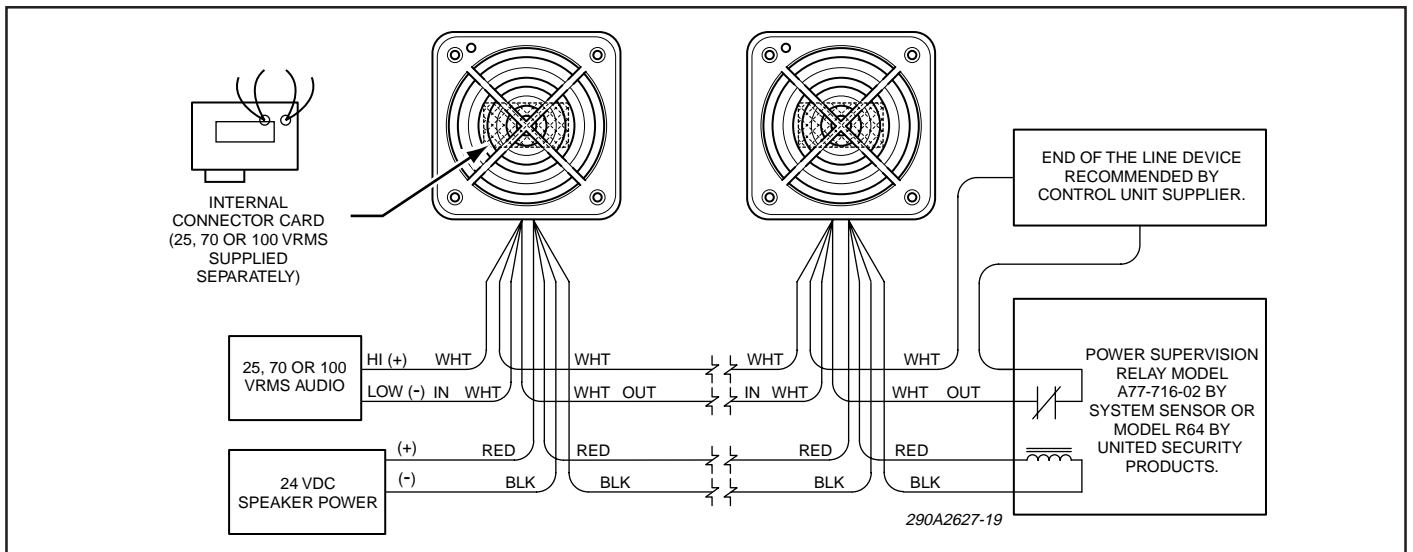


Figure 3. Typical Connector Card (PTCK) Installation Wiring.

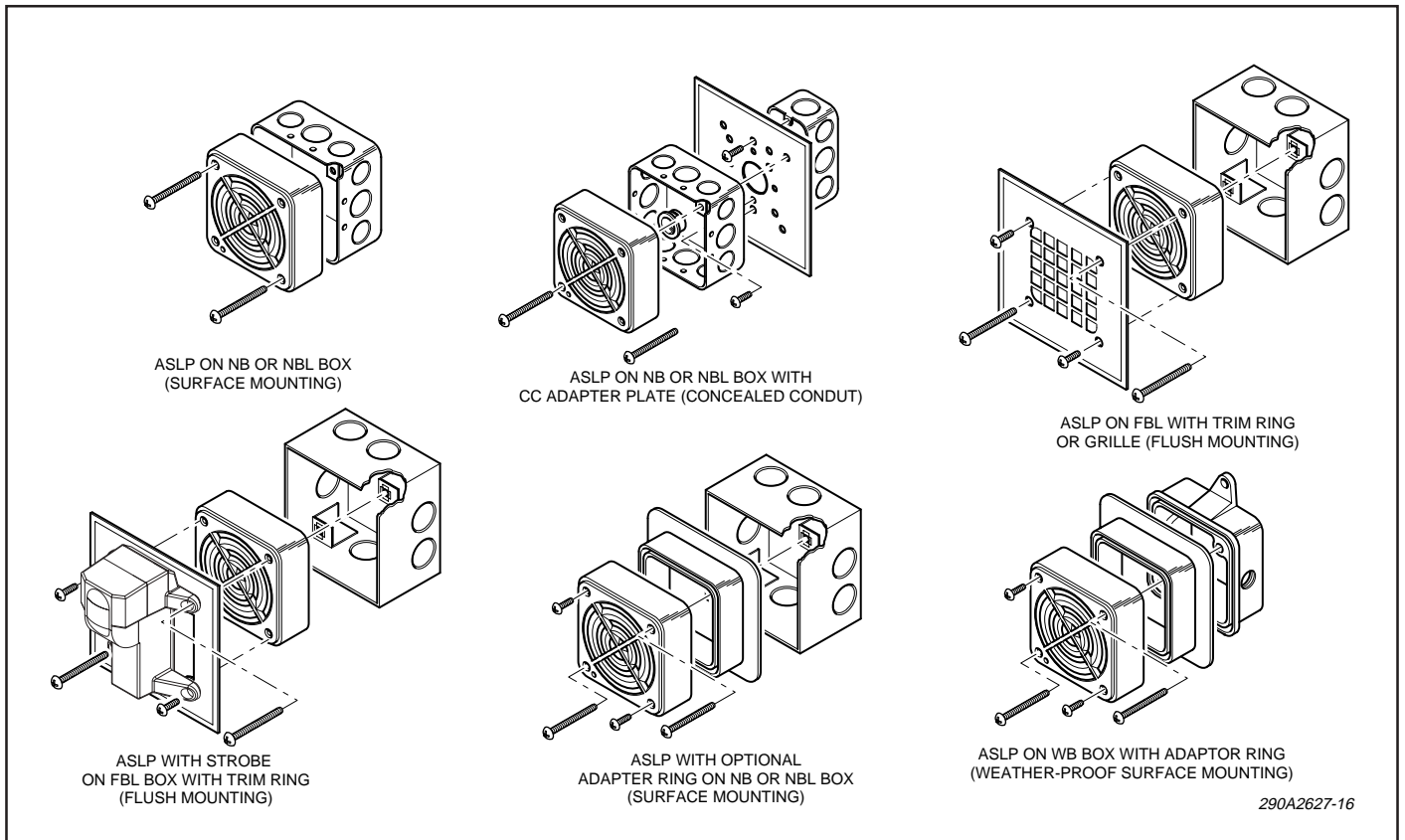


Figure 4. Mounting Arrangements for Model ASLP.

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 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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