



ONE SYSTEMS[®]
ACOUSTIC EXCELLENCE[®]

SP.PMT INSTALLATION MANUAL POLE MOUNT SYSTEM WITH TILT CAPABILITY v1.0

The One Systems SP.PMT Pole Mount System is a flexible suspension system designed to allow specific One Systems loudspeakers to be mounted to pole structures while providing tilt aiming for added flexibility. The only models approved for use with the SP.PMT are the ONE.SP6, ONE.SP8, ONE.SP12D and ONE.SP12T speakers.

NO OTHER LOUDSPEAKERS SHOULD BE SUBSTITUTED!

WARNINGS

The following actions **MUST** be performed **PRIOR** to beginning the installation of the SP.PMT:

1. This installation guide must be read and completely understood
2. The instruction manual “Rigging and Suspension of One Systems Products” must be read and understood.(This instruction manual is available at www.onesystems.com.)
3. The manufacturer of the mounting pole **MUST** be consulted to verify the applicability of the SP.PMT and ONE SYSTEMS loudspeaker model to the specific pole being used. The pole must be capable of supporting the weight of the SP.PMT, the loudspeaker and all associated rigging and **ALSO** meet all required safety factors specified by local and national codes and safe rigging practices.

The weight of the SP.PMT is 4.16 kg (9.2 lb). The combined weight of the SP.PMT and a ONE.SP6 is 12.16 kg (26.8 lb); the combined weight of the SP.PMT and a ONE.SP8 is 15.16 kg (33.5 lb); the combined weight of the SP.PMT and a ONE.SP12D is 26.16 kg (57.7 lb); the combined weight of the SP.PMT and a ONE.SP12T is 27.16 kg (59.9 lb).

4. The SP.PMT and its attached speaker should be installed only by people experienced in the overhead suspension of items and familiar with all applicable local and national codes governing installation of these products and also governing the attachment of these products to specific pole structures.

5. The installer should be experienced with the use of stainless steel banding systems and banding system tools.

6. The SP.PMT is constructed with structural steel and is coated with a dual-layer, zinc-rich powder coating.

NOTE: The SP.PMT and the ONE.SP speaker models suspended by it are only designed for use in inland, non-coastal applications (at least 16 km / 10 miles from salt air environments).

NOTE: Caution should be exercised when connecting One Systems speakers, suspension hardware and pole structures (in regard to dissimilar metals). Compatible metals and appropriate anode to cathode area ratios must be maintained. A structural engineer with galvanic corrosion experience should be consulted prior to installation.

CAUTION: All structures outdoors are subjected to wind forces. These forces must be considered when suspending any product outdoors. These forces must be considered when suspending any product outdoors. It is necessary to know the “Effective Projected Area” (EPA) of the loudspeaker and SP.PMT. See Appendix 1 of this installation guide for effective projected areas for each speaker rated for use with the SP.PMT. Periodic inspections of the rigging, loudspeaker enclosure and installation are strongly recommended.

IMPORTANT NOTE: All products used in direct weather installations can be subjected to high wind speeds. For wind speed exposure over 74 miles per hour (119.1 kilometers per hour, 64.3 knots), the loudspeaker enclosure, bracket, banding and Link assembly or safety must be inspected for signs of damage or fatigue.

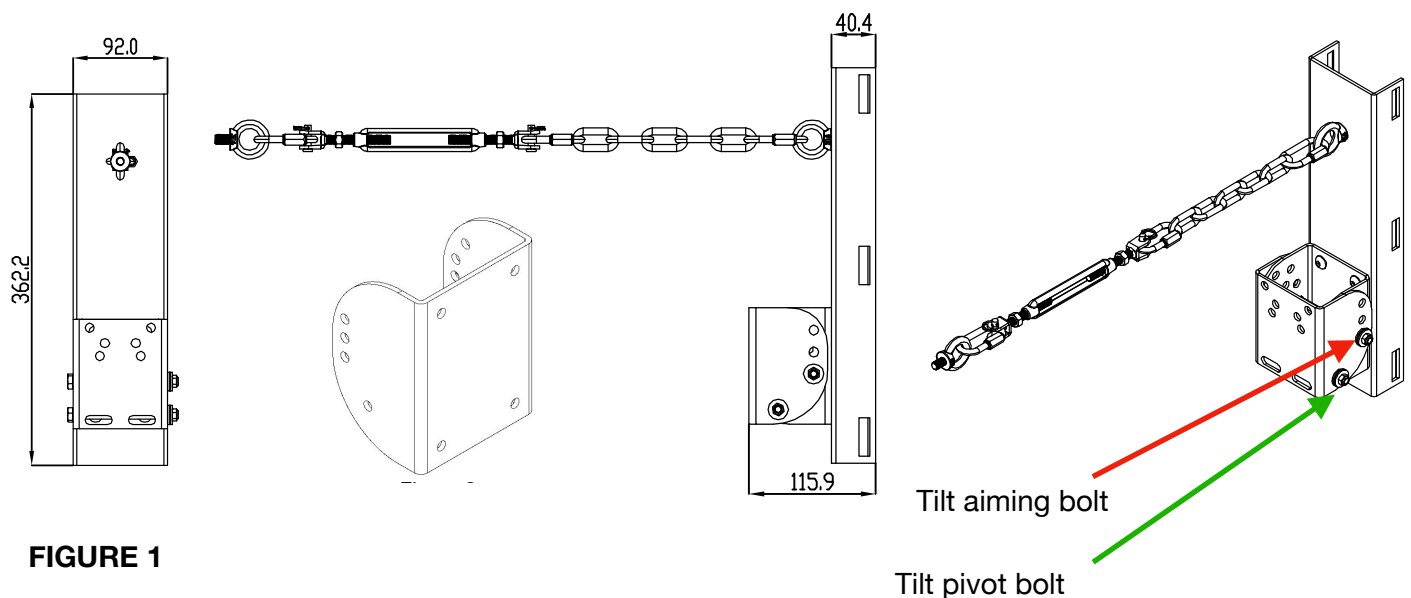
INSTALLATION OF THE SP.PMT

The SP.PMT may be used on round or square poles. The SP.PMT is designed for pole mounting ONLY! **DO NOT** try wall mounting the SP.PMT.

For square / rectangular poles the minimum flat dimension must be 3.75 inches (95.25 mm) at the speaker’s mounting height and for round poles the minimum required diameter is 4 inches (101.6 mm) at the speaker’s mounting height. The SP.PMT was designed for use with the ONE.SP6, ONE.SP8, ONE.SP12D and ONE.SP12T speaker models. NO SUBSTITUTIONS ARE ALLOWED!

NOTE: One Systems does not imply suitability of specific poles or pole diameters. Each pole must be verified by the pole manufacturer or others, as to the structural integrity of the pole for use with the total load of the SP.PMT, the loudspeaker and all required safety factors.

The SP.PMT is shown below in Figure 1. The SP.PMT allows a maximum down tilt of 35 degrees adjustable



The SP.PMT consists of three parts: the pole bracket, the loudspeaker bracket and the Link. Prior to mounting the pole bracket to the pole, the speaker mount section should be removed. To remove the speaker mount section, remove the pan pivot bolt and the pan aiming bolt.

NOTE: There are M8 forged shoulder eyebolts supplied with the SP.PMT. Make certain that two of them are mounted to the SP.PMT’s back plate (pole bracket) before attempting to mount the bracket assembly to a pole structure!

NOTE: Instructions for mounting the Band-It bands and buckles are supplied by Band-It.

The SL.PMT has three slots on each side for mounting the pole bracket assembly on a pole. ALL THREE slots MUST be used. Each slot MUST be DOUBLE WRAPPED (two INDEPENDENT bands per slot!) using the specified Band-It straps and buckles ONLY! DO NOT substitute any other straps. IT IS NECESSARY TO USE ALL MOUNTING SLOTS TO INSURE A SAFE AND SECURE MATE TO THE ASSOCIATED SURFACE!

IMPORTANT: It is REQUIRED that each of the three band slots be wrapped TWICE (TWO INDEPENDENT SINGLE WRAPS PER SLOT). This should not be confused with “double wrapping”, which is two wraps of the band through a single buckle. This means that a total of 6 bands and 6 buckles are required for a single SP.PMT bracket. Two independent single wraps per slot will insure a strong and secure mounting of the bracket to the pole. Insure that the two buckles are separated from each other in each slot! The image below illustrates the double wrapping required for each of the three slots.

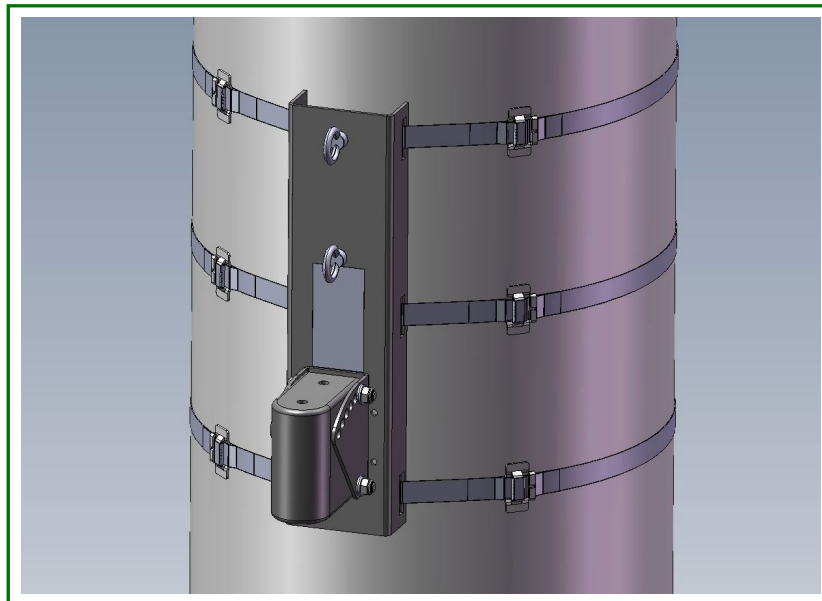


FIGURE 2

IT IS CRITICAL THAT THE MATING SURFACE (Pole) BE CAPABLE OF SUPPORTING THE LOAD OF THE SP.PMT BRACKET, THE LOUDSPEAKER AND ALL SUSPENSION HARDWARE, AS WELL AS PROVIDING THE PROPER SAFETY FACTORS. DO NOT ATTEMPT TO SUSPEND THE BRACKET AND LOUDSPEAKER UNTIL THE STRUCTURAL CHARACTERISTICS OF THE MATING SURFACE (Pole) ARE UNDERSTOOD. DO NOT INSTALL THE POLE MOUNT BRACKET AND LOUDSPEAKER IF THE MATING SURFACE (Pole) IS NOT CAPABLE OF SUPPORTING THE ENTIRE ASSEMBLY WEIGHT, AS WELL AS PROVIDING THE REQUIRED SAFETY FACTORS!

IMPORTANT: There are 3 slots indicated by the red arrows in the image below. Each of the 3 slots must be utilized to insure a secure mount to a pole. ALL 3 slots must use double wrapped bands (Two independent bands wrapped in each slot)! The image below shows the band slots and all these locations MUST be double wrapped (two independent band assemblies per slot as per the image above).

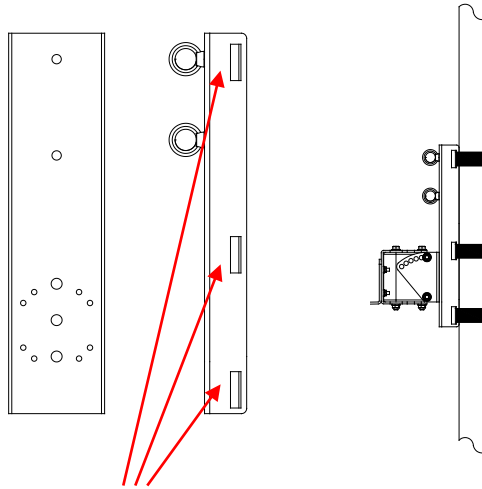


FIGURE 3

The red arrows indicate the 3 slots used to band the SP.PMT to a pole structure

Mount the SP.PMT bracket assembly to the pole at the desired height on the pole. The bracket is mount to the pole using BAND-IT stainless steel bands. **DO NOT SUBSTITUTE** bands of other material or other widths! There are 3 locations for banding on the SP.PMT and **ALL 3 slots MUST BE USED.**

The required banding and buckle material for non-marine / non-coastal environments is:

BAND-IT	# C206R9 stainless steel bands
BAND-IT	# C25699 buckles
BAND-IT	# C00169 tensioning tool

The stainless steel banding is Type 201SS 0.030 inches (0.762 mm) thick and 0.750 inches (19 mm) wide. These banding materials are only intended for use in “inland” environments (which is all the SP.PMT and ONE.SP speakers are designed for).

ANY QUESTIONS REGARDING THE BANDING SYSTEM SHOULD BE REFERRED TO BAND-IT TECHNICAL SUPPORT

WARNING: Do NOT Substitute banding materials or banding dimensions.

Installation instructions from BAND-IT should be followed exactly. Operating instructions are supplied with the tensioning tool. (ALL BAND-IT parts and tools must be purchased separately from BAND-IT or from their distributors. These parts and tools are not supplied by and are not available from One Systems).

The stainless steel banding material, buckles, and tensioning tools are available from the following sources (or through other distributors recommended by these sources):

BAND-IT IDEX, Inc.
 4799 Dahlia Street
 Denver, CO 80216 USA
 800-525-0758

FELIX PONCE
Calle Ignacio Zaragonza No. 8
Colonia Ahuehuetes Atizapan 52953
Edo. de Mexico
(52) 555825 8502

BAND-IT Company Limited
Speedwell Industrial Estate
Stavely, Nr. Chesterfield
Derbyshire, S43 3 PF England
Home Sales (44) 1246-479479
Export Sales (44) 1246-479480

BAND-IT Clamps (ASIA) Pte. Ltd.
11 Second Chin Bee Road
Singapore 618777
65-62658853

BAND-IT Shanghai Sales Office
207 Room
Wanbao International Business Centre
#660 Xinhua Road
Shanghai, China 200052
021-62826348-308

1. The loudspeaker bracket should be attached to the loudspeaker's U-Bracket (ONE.SP speaker's U-Bracket) using the supplied stainless steel bolts and washers. DO NOT SUBSTITUTE ANY PARTS.
2. The combination of the U-Bracket and the loudspeaker bracket from the pole mount should be attached to the speaker.
3. The loudspeaker with its U-Bracket attached may now be attached to the pole bracket.

USE EXTREME CAUTION! The loudspeaker and bracket are heavy and it is likely that the desired mounting location is high off the ground. This process should never be attempted by a single person.

TWO OR MORE PEOPLE ARE REQUIRED TO MOUNT THE LOUDSPEAKER ENCLOSURE WITH ITS U-BRACKET ATTACHED TO THE POLE BRACKET! Safety harnesses should always be worn when working from an elevated platform.

4. First, insert the metric bolt into the tilt pivot bolt location shown in Figure 1 and secure, but do not fully tighten using the supplied nylon insert nut.

5. Next, insert the tilt bolt into the proper slot. The SP.PMT allows the loudspeaker to be oriented from a 0 degree down tilt to a maximum down tilt of 35 degrees adjustable in 5 degree increments. After being positioned, the bolts should be tightened using the supplied nylon insert nuts and washers.

UNDER NO CIRCUMSTANCES SHOULD THE LOUDSPEAKER'S DOWN TILT EXCEED 35 DEGREES FROM VERTICAL!

After the loudspeaker and U-Bracket are attached to the main bracket, the Link assembly must be installed. The Link (see Figure 4 below) consists of stainless steel quick links, a stainless steel turnbuckle, and several links of stainless steel chain.

THE SP.PMT SHOULD ONLY BE INSTALLED USING THE LINK!

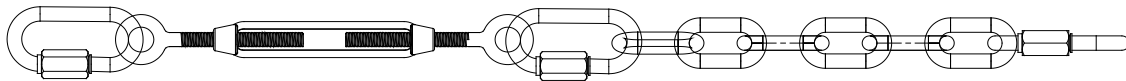


FIGURE 4

CAUTION: DO NOT REMOVE THE PAN PIVOT BOLT AFTER INSTALLATION!

The pan angle may be adjusted by removing the tilt aiming bolt, setting the desired angle and then re-inserting the bolt. After the tilt angle is set, positioning of the Link offers additional aiming angles. Positioning the Link on the lower position will provide support for short aiming angles (0 - 15 degrees) and positioning it on the higher position will provide support for greater downward tilt angles (20 - 35 degrees).

When choosing the tilt angle, also remember that One Systems recommends a downward angle of at least 5 degrees to help minimize moisture intrusion into the loudspeaker's enclosure.

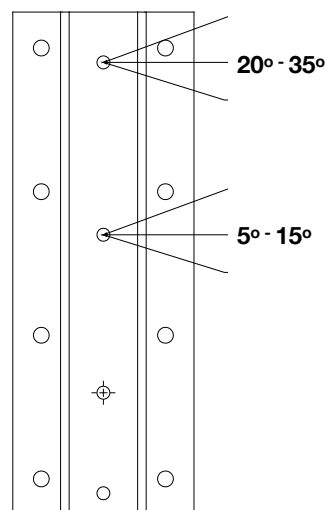
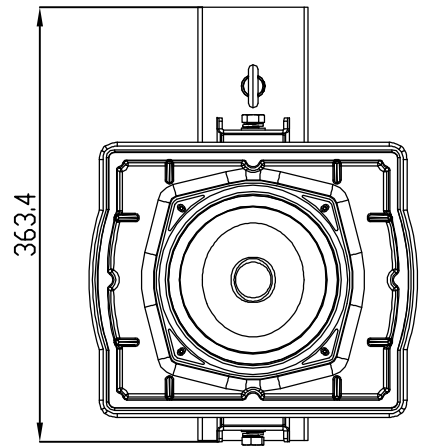
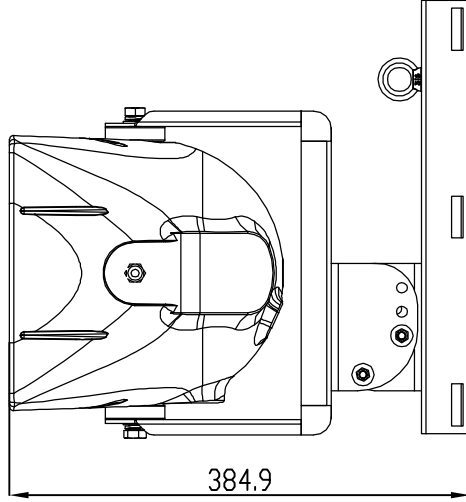
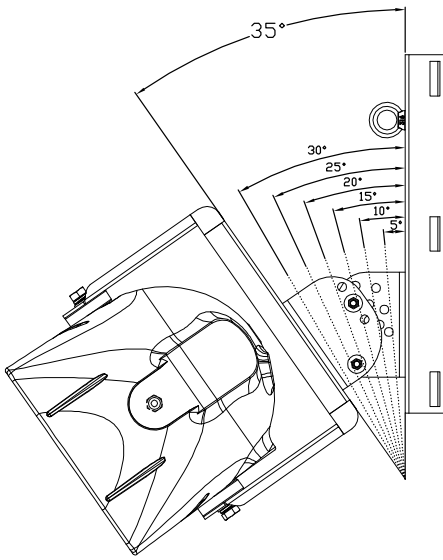
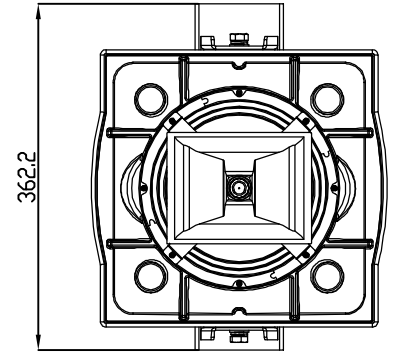
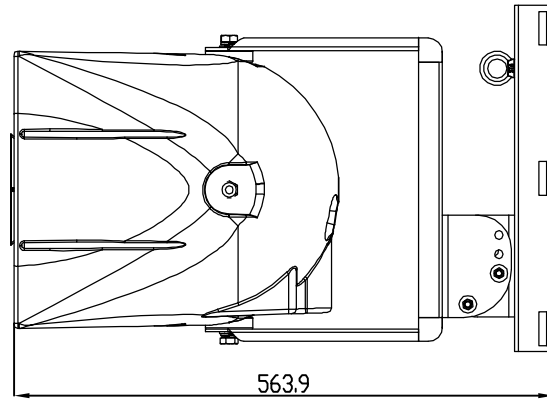
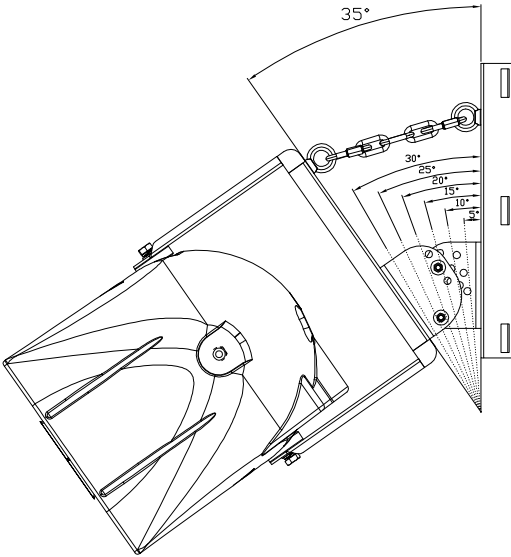


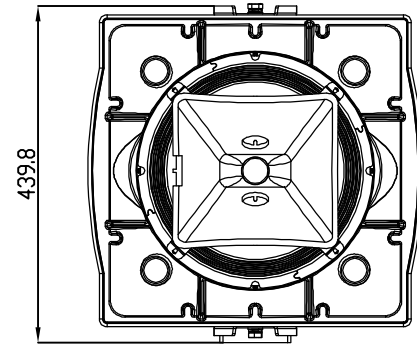
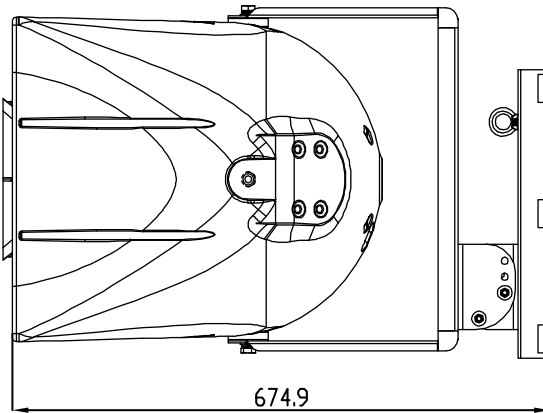
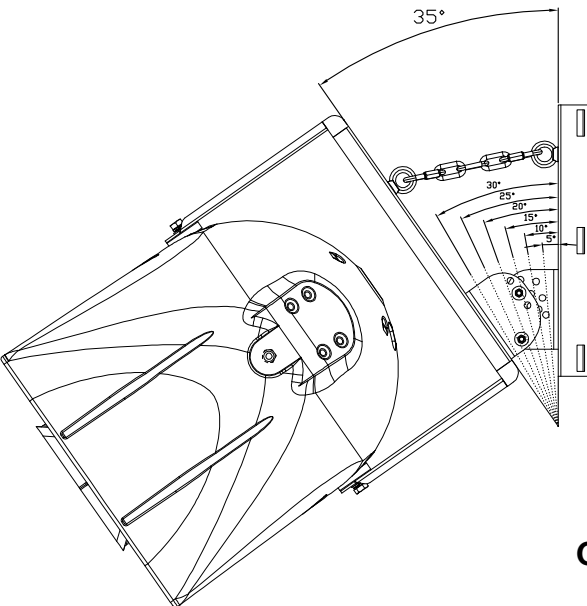
FIGURE 5



ONE.SP6 mounted on the SP.PMT



ONE.SP8 mounted on the SP.PMT



ONE.SP12 mounted on the SP.PMT

APPENDIX 1 Projected Area Values

The values below should be supplied to the specific pole manufacturer for safety calculations. These values were determined by adding the projected areas of the high frequency horns, the woofer cones and ports to the cross sectional area of the front of each speaker listed below. The Effective Projected Area (EPA) will vary based on wind direction. The values shown are for wind directions directly into the front of the enclosure and represent maximum values.

ONE.SP6 - - - 112.22 in² / 724 cm² (using drag coefficient 1.2)

ONE.SP8 - - -160.11 in² / 1,033 cm² (using drag coefficient 1.2)

ONE.SP12 (both models) - - - 318.83 in² / 2,057 cm² (using drag coefficient 1.2)



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