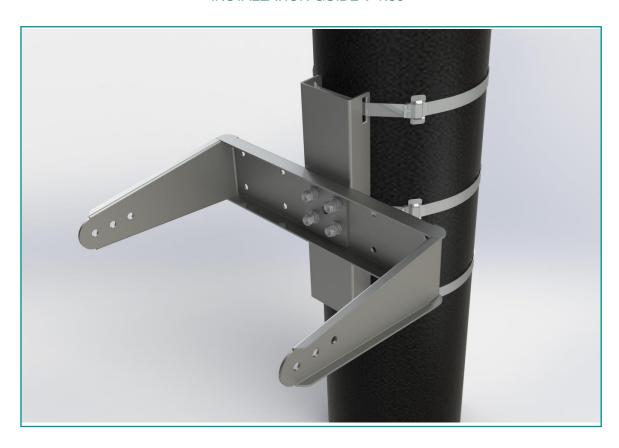


### SP.PMK POLE MOUNT BRACKET

**INSTALLATION GUIDE V 1.00** 



The One Systems SP.PMK is an easy to install and flexible bracket designed to allow the One Systems ONE.SP loudspeakers to be mounted to pole structures. The only products approved for use with the SP.PMK are the ONE.SP6, ONE.SP8, ONE.SP12D and ONE.SP12T speaker systems.

#### NO OTHER LOUDSPEAKERS SHOULD BE SUBSTITUTED!

#### **WARNINGS**

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

- 1. This installation guide must be completely read and understood!
- 2. The instruction manual "Rigging and Suspension of One Systems Products" must be read and understood. This guide can be found at: <a href="https://www.onesystems.com">www.onesystems.com</a>.

### **WARNINGS** (cont'd)

3. The structure of the mating surface MUST be capable of supporting the combined weight of the pole mount bracket, the loudspeaker, and all associated rigging and cabling. The mounting structure must satisfy the required safety factors specified by local and national codes, as well as safe rigging practices.

The weight of the SP.PMK is 3.629 kg (8 lb). The combined weight of the SP.PMK and a ONE.SP6 is 11.629 kg (25.6 lb). The combined weight of the SP.PMK and a ONE.SP8 is 14.629 kg (32.3 lb). The combined weight of the SP.PMK and a ONE.SP12D is 25.629 kg (56.5 lb). The combined weight of the SP.PMK and ONE.SP12T is 26.629 kg (58.7 lb).

- 4. The SP.PMK pole mount bracket should be installed only by someone experienced in the overhead suspension of items. They should be familiar with applicable local / national codes governing the installation of these types of products and those governing the attachment of these types of products to specific pole structures.
- 5. Heed all safety warnings.
- 6. As a backup to the main mount, we recommend the use of another SP.PMK or other type of secondary safety mount.

**NOTE**: Caution should be exercised when connecting One Systems rigging to other dissimilar metals. One Systems SP Series speakers and their associated rigging components are **NOT** rated for use in marine applications or highly corrosive environments.

**CAUTION**: All structures outdoors are subjected to wind forces. These forces must be considered when suspending any product outdoors. It is necessary to know the "Effective Projected Area" (EPA) of the loudspeaker prior to installation of the loudspeaker and the SP.PMK. The effective areas are shown below. Periodic inspections of the rigging, loudspeaker enclosure and installation are strongly recommended.

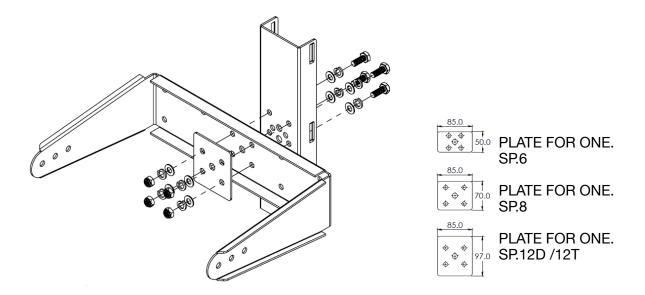
**IMPORTANT NOTE**: All products in direct weather installations can be subjected to high wind speeds. The working load limit and safety factor ratings are provided for static vertical (gravitational) loads only. For use in high wind areas, One Systems recommends consultation with a licensed structural engineer to calculate an appropriately re-rated safety factor.

The SP.PMK is made up of 3 distinct parts, as shown below:

- 1. Pole Mount Bracket
- 2. Clamping Plate (3 Types for respective ONE.SP speaker models)
- 3. Loudspeaker U-Bracket (included with each ONE.SP speaker model)

The bushings used in each ONE.SP enclosure are manufactured from 304-grade stainless steel. As such, only the 304-grade stainless steel screws and washers that are included with each speaker are suitable for attaching the enclosure to its U-Bracket.

### **INSTALLATION OF THE SP.PMK**



### 1. MOUNT THE U-BRACKET TO THE POLE MOUNT BRACKET BY USING THE CORRECT CLAMPING PLATE.

There are three different plates included in the SP.PMK Pole Mount Kit. Only 1 of the plates will match the holes in the U-Bracket for the specific speaker being used. All of the fasteners and plates necessary for attaching the U-Bracket are included.

### 2. MOUNT THE POLE MOUNT BRACKET TO THE POLE.

The SP.PMK may be used on round or square poles. For square / rectangular poles, the minimum flat dimension must be 3.75 inches (95.25 mm) at the bracket's mounting height and for round poles, the minimum diameter is 4 inches (101.6 mm) at the bracket's mounting height.

**NOTE**: One Systems cannot imply the suitability of specific pole diameters or poles. Each pole must be verified by the pole manufacturer or a structural engineer as to the structural suitability of the pole for use with the total load of the SP.PMK, the loudspeaker and all required safety factors. The SP.PMK is designed for pole mounting ONLY! DO NOT WALL MOUNT THE SP.PMK!

NOTE: Instructions for mounting the Band-It bands and buckles are supplied by Band-It. The SP.PMK has three slots for attaching the pole bracket assembly to 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 ONLY! DO NOT substitute any other strapping. 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 to mount a single SP.PMK 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!

IT IS CRITICAL THAT THE MATING SURFACE (Pole) BE CAPABLE OF SUPPORTING THE LOAD OF THE SP.PMK BRACKET, THE ATTACHED 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 SUFACE (Pole) ARE UNDERSTOOD. DO NOT INSTALL THE POLE MOUNT BRACKET AND LOUDSPEAKER IF THE POLE IS NOT CAPABLE OF SUPPORTING THE ENTIRE ASSEMBLY WEIGHT, AS WELL AS PROVIDING THE REQUIRED SAFETY FACTORS!

**IMPORTANT**: There are 3 slots 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 combined in each slot)! The image below shows the SP.PMK mounted to a round pole. As shown, ALL three band slots must be used and all locations MUST be double-wrapped.

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

The required materials are:

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

The stainless steel band is Type 201SS 0.030 inches (0.762 mm) thick and 0.750 inches (19 mm) wide.

**WARNING**: DO NOT substitute band materials or banding dimensions. Installation instructions from BAND-IT should be precisely followed. Operating instructions are supplied with the tensioning tool (All BAND-IT parts and tools must be purchased separately. These parts and tools are not supplied by or available through One Systems). The stainless steel banding material, buckles and tensioning tools are available from the following locations (or through distributors recommended by these business locations):

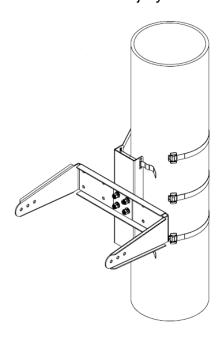
BAND-IT IDEX, Inc. 4799 Dahlia St. Denver, Colorado 80216 USA. 1-800-525-0758

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

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

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

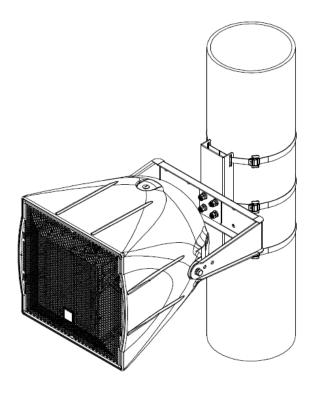
USE EXTREME CAUTION! The loudspeaker and bracket are heavy and it is likely that the desired mounting location is high in the air. This process should never be attempted by a single person. TWO PEOPLE ARE REQUIRED TO MOUNT THE LOUDSPEAKER SYSTEM TO THE POLE AND BRACKET. Safety harnesses should always be worn when working from an elevated platform. The loudspeaker and loudspeaker section of the bracket may now be joined to the pole section and the required pan and tilt angles selected. This is a two person job and extreme care should be exercised to avoid serious injury.



## 3. MOUNT THE ONE.SP SERIES LOUDSPEAKER INSIDE THE U-BRACKET AND FASTEN SECURELY.

The system's enclosure must be mounted with the rubber gaskets between the enclosure and the U-Bracket to prevent slippage. The required bolts are included with each ONE.SP speaker model.





4. ADD ADDITIONAL BACK-UP SAFETY MEASURES AS REQUIRED. AN ADDITIONAL MOUNTING POINT CAN BE USED AS A SECONDARY SAFETY. THIS MAY NOT BE LOCATED ON THE SP.PMK USED FOR SUSPENDING THE LOUDSPEAKER.

Since this mounting point or secondary safety is not included with the SP.PMK Pole Mount, an image is not supplied here.

# 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 Areas (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 in<sup>2</sup> / 724 cm<sup>2</sup> (using drag coefficient 1.2)

**ONE.SP8 - - -** 160.11 in<sup>2</sup> / 1,033 cm<sup>2</sup> (using drag coefficient 1.2)

**ONE.SP12D/ ONE.SP12T - - -** 318.83 in<sup>2</sup> / 2,057 cm<sup>2</sup> (using drag coefficient 1.2)

### **DIMENSIONS OF THE SP.PMK POLE MOUNT BRACKET**

