



**ONE SYSTEMS**<sup>®</sup>  
ACOUSTIC EXCELLENCE<sup>®</sup>

## PT10/M PAN/TILT BRACKET INSTALLATION MANUAL

The PT/10M is an easy to install and flexible system designed to allow ONE SYSTEMS loudspeaker products to be mounted to walls or other suitable flat surfaces. The only products approved for use with the PT10/M are as follows

104/HTH  
106/HTH

### **NO OTHER LOUDSPEAKERS SHOULD BE SUBSTITUTED!**

The following actions **MUST** be performed **PRIOR** to beginning the installation of the PT10/M:

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 instruction manual is available, along with other technical papers, at [www.onesystems.com](http://www.onesystems.com) under the “Documentation” tab.
3. The structure of the mating surface **MUST** be capable of supporting the combined weight of the pan and tilt bracket, the loudspeaker and all associated rigging; and must satisfy the required safety factors specified by local and national codes, as well as safe rigging practices. All associated rigging is the responsibility of others! The PT10/M weighs 0.274kg (0.6 lbs)
4. The PT10/M pan and tilt 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.

**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 PT10/M. See Appendix 1 of this installation manual for effective projected areas for each enclosure rated for use with the PT10/M.

**IMPORTANT NOTE:** All products 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 and safety must be inspected for signs of damage or fatigue (secondary safety is the responsibility of others)!

## PT10/M Installation

The One Systems PT10/M is designed for use with the 104/HTH and 106/HTH family of One Systems products only.

### **DO NOT SUBSTITUTE OTHER LOUDSPEAKER ENCLOSURES!**

The PT10/M has been designed as a low cost yet flexible pan and tilt system and is intended for use with small format, low Q loudspeaker systems. The PT10/M offers 10 degree aiming increments and will provide up to 5 steps within the nominal 100 degree pattern of either the 104HTH or the 106HTH. Figure 11 represents the PT10/M pan and tilt bracket.

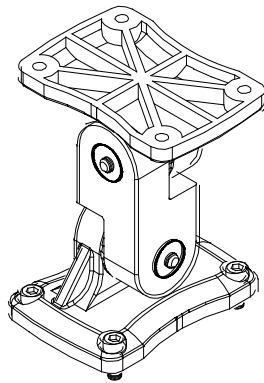


Figure 11

There are two center pieces that may be used for aiming with the PT10/M bracket. Each “center piece” offers an aiming resolution of 20 degrees, but substitution of the center pieces will yield an aiming resolution of 10 degrees.

Figure 12a shows the two center pieces. The 10 degree aiming resolution is achieved by substituting the appropriate center piece to achieve a TOTAL resolution of 10 degrees between the two center pieces. These two center pieces are interchangeable and may be used to set the desired angles.

Note the “rotated clock” section in “Part 2” of Figure 11a. This section is rotated 10 degrees from the part labeled “Part 1” and is what allows the aiming increments to be adjusted in 10 degree steps.

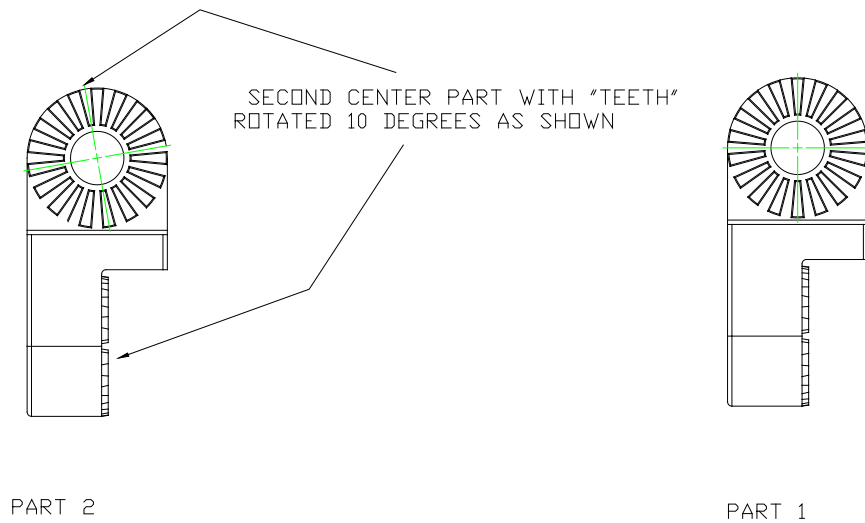


FIGURE 11a

Figure 12 shows a One Systems 104/HTH mounted to a PT10/M. There are 4 each M5 stainless steel bolts that are supplied with the PT-10M for mounting to either the 104/HTH or the 106/HTH. Once the PT10/M is mounted to the specific loudspeaker enclosure the two stainless steel bolts on the center piece of the PT10/M may be loosened to allow the bracket to be rotated in both the “pan” and “tilt” axis. Once proper loudspeaker aiming is achieved both of these bolts must be securely fastened to insure the assembly will not move.

**NOTE:** It is strongly recommended that a “temporary” thread locker be used to secure the two M6 bolts that set both the pan and the tilt angles of the PT10/M.

**NOTE:** It is necessary to fit an additional/secondary safety assembly between the loudspeaker enclosure and the mounting surface. This safety assembly is not supplied by One Systems. The safety assembly must conform to local and national codes!

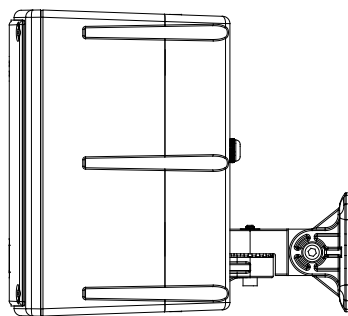


Figure 12

# 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 enclosure listed below. Each enclosure will present a different EPA based on wind direction. The values listed below are for wind loads directly into the front of the enclosure and represent maximum values.

104HTH.....67 in<sup>2</sup> (43,000mm<sup>2</sup>)

106HTH.....136 in<sup>2</sup> (88,000mm<sup>2</sup>)

**The products referenced in this manual are in conformity with the following standards or other normative documents: Machinery Directive 2006/42/EC**