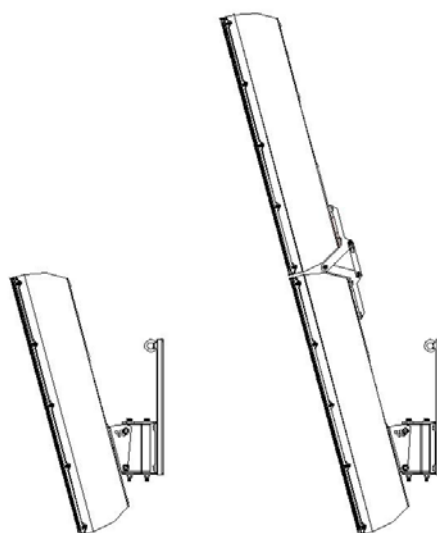




# Pan and Tilt Bracket Installation Guide PTB-82

January 2015



PTB-82 with OPALine-82 enclosure mounting configurations

The On Point Audio PTB-82 is an easy to install and flexible system designed to allow the OPALine-82 loudspeaker enclosures to be mounted to wall or other structural flat surfaces. **The PTB-82 is NOT approved for ceiling mounting!** The only product

approved for use with the PTB-82 is the OPALine-82 enclosure. **NO** other products may be substituted!

**NOTE:** The PTB-82 was designed to be mounted on walls or other structural flat surfaces **ONLY!**

**NOTE:** The OPALine-82 enclosure and PTB-82 are for **INDOOR** use only! **DO NOT USE IN OUTDOOR ENVIRONMENTS!**

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

The following actions **MUST** be performed **PRIOR** to beginning the installation of the PTB-82 and OPALine-82 enclosure:

1. This installation guide must be completely read and understood.
2. The instruction manual “Rigging and Suspension of On Point Audio Products” must be read and understood. (This instruction manual is available along with other technical papers at [www.onpointaudio.com](http://www.onpointaudio.com))
3. The structure of the mating surface **MUST** be capable of supporting the combined weight of the PTB-82 bracket, the OPALine-82 loudspeakers and all associated rigging. The mounting surface must satisfy the required safety factors specified by local and national codes, as well as safe rigging practices. The OPA-PTB weighs 0.75kg (1.65 lb.). The OPALine-82 enclosure weighs 2.8kg (6.2 lb.). A maximum of two (2) OPALine-82 enclosures may be suspended from a single PTB-82 bracket. The combined weight of two OPALine-82 enclosures is 5.6kg (12.4 lb.). If two enclosures are used the weight of the TBEC coupling bracket must also be added. The TBEC-82 weighs 0.2kg (0.44 lb.)
4. The PTB-82 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 structures.

**CAUTION:** The PTB-82 bracket and OPALine-82 enclosure are designed for **INDOOR** use and installation **ONLY!** **DO NOT INSTALL IN OUTDOOR ENVIRONMENTS!**

## INSTALLATION

The PTB-82 consists of two parts: the wall bracket and the loudspeaker bracket. PTB-82 wall bracket and loudspeaker bracket are shown in Figure 1.

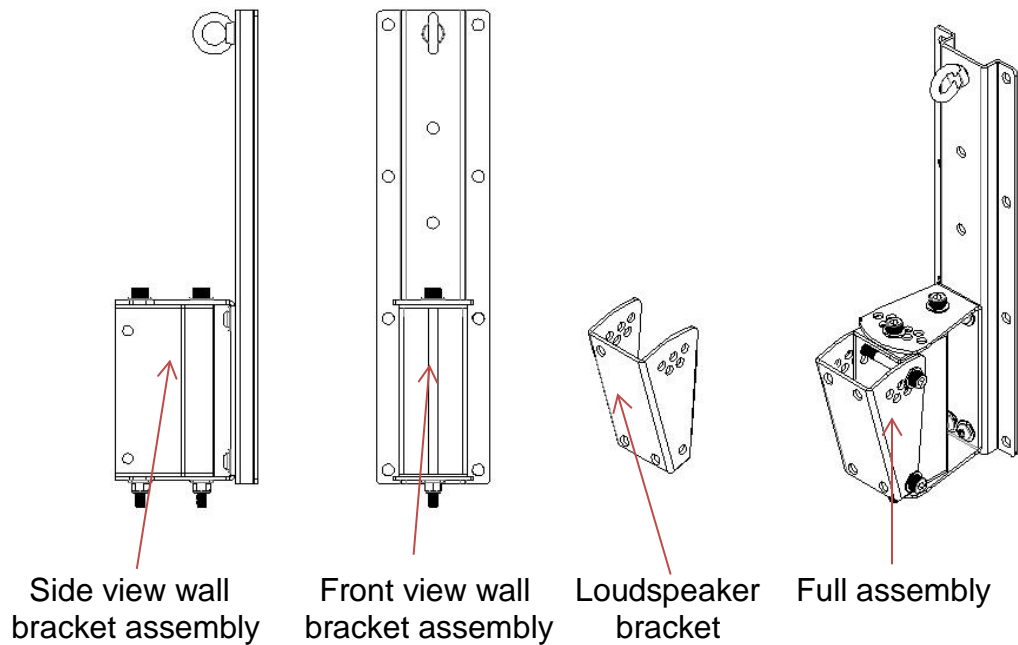
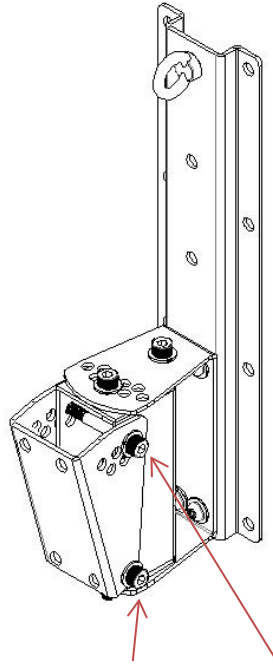


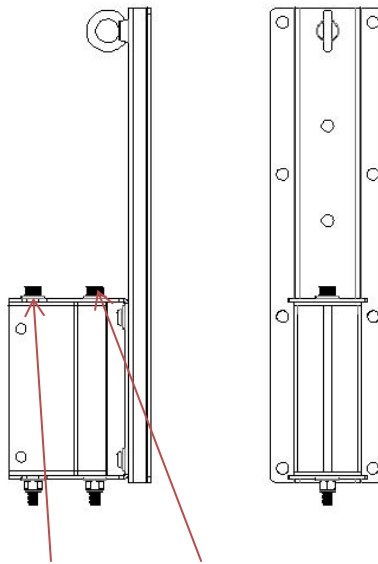
Figure 1

Prior to mounting the wall bracket to the wall or appropriate flat surface, the loudspeaker bracket section should be removed. The loudspeaker bracket is removed by taking out the two M5 bolts that hold the loudspeaker bracket to the wall bracket assembly. The M5 bolts are shown in figure 1a below.



Remove the M10 bolts shown above  
Figure 1a

**NOTE:** The M5 bolts associated with the “pan” axis should be left in place, as shown in  
Figure 2 below.



Leave the “pan axis” M5 bolts in place  
Figure 2

The wall bracket section should now be mounted to the wall surface. The PTB-82 has 8 mounting holes for allowing fasteners to join the bracket and loudspeaker assembly to the mating surface.

**IT IS NECESSARY TO USE ALL 8 MOUNTING HOLES TO ENSURE A SAFE AND SECURE MATE TO THE ASSOCIATED SURFACE!**

All fasteners associated with the mounting of the PTB-82 bracket and loudspeaker assembly to the mating surface are the responsibility of others. The design and structural capacity of mating surfaces (such as walls) vary greatly and specific fasteners are designed for use with specific mating surfaces. On Point Audio does not recommend any mating fasteners and strongly urges the installer to consult with one experienced in suspension of products from the specific mating surfaces and the appropriate choice of fasteners for those specific surfaces.

The wall bracket section should be secured firmly to the mating surface using the appropriate fastening system. The fastening system should be determined by the structure of the mating surface.

**IT IS CRITICAL THAT THE MATING SURFACE BE CAPABLE OF SUPPORTING THE LOAD OF THE PTB-82 BRACKET, THE OPALINE-82 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 ARE UNDERSTOOD. DO NOT INSTALL THE PTB-82 BRACKET AND OPALINE-82 LOUDSPEAKERS IF THE MATING SURFACE IS NOT CAPABLE OF SUPPORTING THE ENTIRE ASSEMBLY WEIGHT, AS WELL AS PROVIDING THE REQUIRED SAFETY FACTORS!**

After the PTB-82 wall section of the bracket is securely mounted to the mating surface, the loudspeaker section should be mounted to the OPALine-82 loudspeaker using the fasteners supplied. (DO NOT SUBSTITUTE FASTENERS) The loudspeaker mount section of the bracket is shown in figures 3a and 3b.

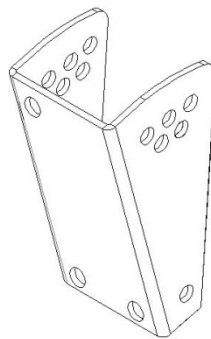


Figure 3a Loudspeaker bracket

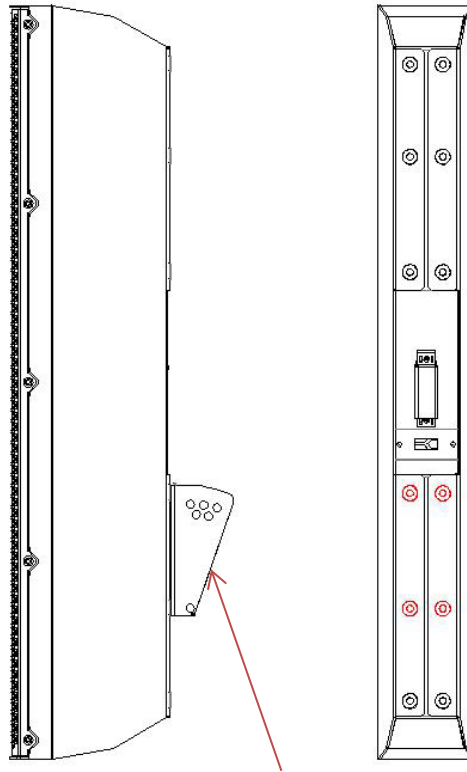


Figure 3b showing Loudspeaker bracket mounted to the OPALine-82 enclosure

***DO NOT SUBSTITUTE MOUNTING LOCATIONS!***

**NOTE:** There are 4 each M5 bolts, flat washers and lock washers supplied in the mounting kit of the PTB-82. There is **ONLY** one approved location to mount the PTB-82 loudspeaker bracket. This position is shown above in red. There are four M5 mounting locations immediately below the input section of the OPALine-82. As indicated in red above, these are the **ONLY** approved locations. **DO NOT** mount the PTB-82 bracket to the M5 locations above the input section! Use all of the supplied washers and lock washers!

The image shown below, figure 3c, illustrates the only approved mounting location for the PTB-82 loudspeaker bracket.

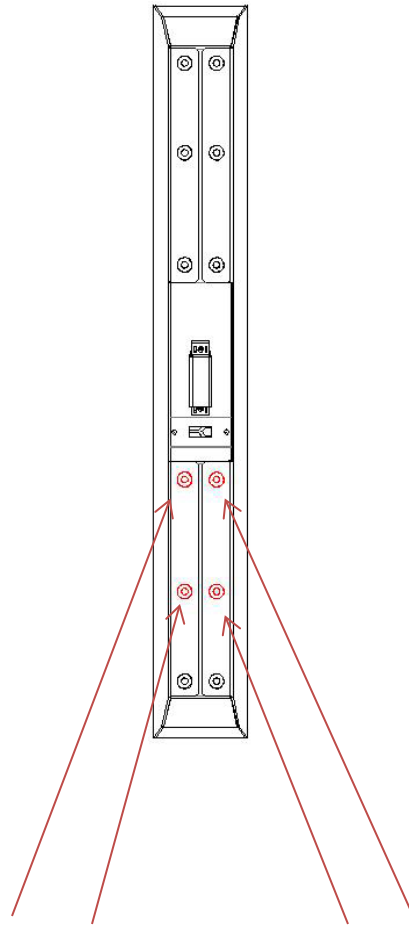


Figure 3c shows the **ONLY** approved mounting location for the PTB-82 loudspeaker bracket. This is immediately below the input section. **DO NOT** mount the PTB-82 loudspeaker bracket above the input section!

The loudspeaker and loudspeaker section of the bracket may now be joined to the wall 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.

**USE EXTREME CAUTION!** The loudspeaker is 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 OR MORE PEOPLE ARE REQUIRED TO MOUNT THE OPALINE-82 LOUDSPEAKER ENCLOSURE TO THE PTB-82 bracket.** Safety harnesses should always be worn when working from an elevated platform.

The OPALine-82 enclosure, with loudspeaker bracket attached, should be mounted to the wall section of the PTB-82.

The M5 tilt pivot bolt should be inserted first and secured, but not completely tightened, using the nylon insert M5 nuts and washers that are supplied. The tilt pivot bolt is shown below in Figure 5. At this point the M5 tilt aiming bolt (Figure 5a) should be inserted into the desired angle and the nylon insert nuts and washers applied. Then the tilt axis bolts should be partially tightened. (see below for FULL tightening recommendations after the aiming bolt has been set to the proper angle)



Figure 5 showing the tilt pivot bolt. This must be inserted first.

Figure 5a below shows the tilt aiming bolt. This can only be inserted **AFTER** the tilt pivot bolt is installed and partially tightened!

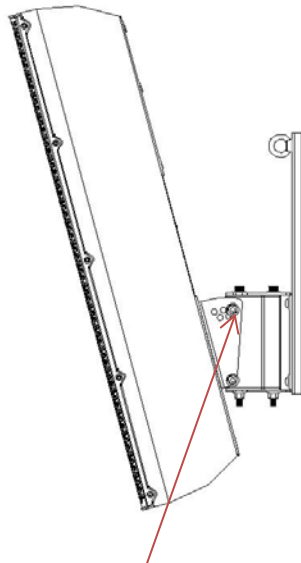
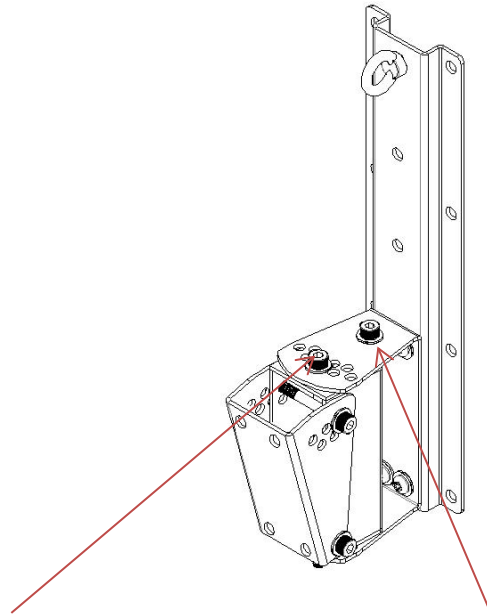


Figure 5a showing tilt aiming bolt



Now the pan angle can be adjusted if needed. **NOTE: The pan pivot bolt should NOT be removed.** The pan angle can be adjusted by removing the pan angle aiming bolt as shown below in Figure 5b.



Pan angle aiming bolt

Pan angle pivot bolt (DO NOT REMOVE)

Figure 5b

Once both the tilt and pan angles are set, make sure that ALL aiming and pivot bolts for both the pan and tilt axis are tight and properly secured!

It is also possible to configure two OPALine-82 enclosures from a single PTB-82 bracket. This is shown below in figure 6.

**NOTE: A maximum of two (2) OPALine-82 enclosures may be suspended with a single PTB-82 bracket. DO NOT ATTEMPT TO SUSPEND MORE THEN TWO OPALINE-82 ENCLOSURES!**

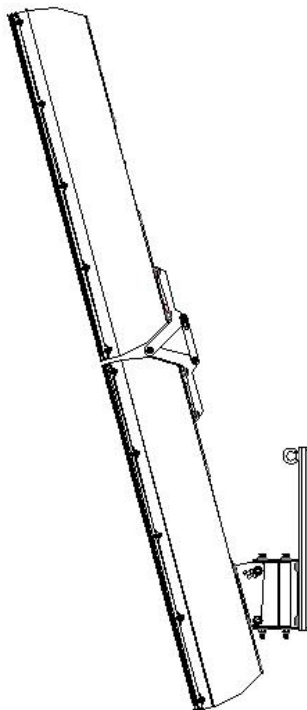


Figure 6

As shown above, the PTB-82 must be mounted to the lower enclosure as shown in Figure 6.

The TBEC-82 coupling bracket is used to mate the two OPALine-82 enclosures. Installation information for the TBEC-82 may be found on the On Point Audio web site. The TBEC-82 will allow up-tilt on the top OPALine-82 enclosure.

Secondary safety cables are **STRONGLY** recommended and should be secured to a structural point **NOT** associated with the PTB-82 bracket.

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

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