PPA T45, PPA T45 NET, PPA T45 NET D
Personal PA® DSP FM Wideband Transmitters

Optional Receiver Models PPA R38, PPA R37, PPA R37-8
System Connection Overview

The PPA T45 is an FM Wide-Band transmitter operating in the 72-76 MHz bandwidth. Three models are available - a standalone FM Transmitter (PPA T45), one with Ethernet control (PPA T45 NET) and one with Ethernet control and a Dante™ Input (PPA T45 NET D). Ethernet control allows the transmitter settings to be changed over a network with hard-wired or wireless devices. The Dante™ Input allows audio from networked Dante™ devices to be played through the transmitter.

Compatible Williams Sound receivers include the PPA R38, PPA R37 and PPA R37-8 body pack receivers.

Developed for hearing assistance in places of public access, the PPA T45 models are designed for those who need help overcoming background noise, reverberation, or distance from the sound source. They include a complete audio processor optimized for the needs of hearing impaired people and are easily integrated with an existing sound system, or used with a microphone as a stand-alone system.

The PPA T45 transmitter models operate as a small FM radio station. The transmitter takes audio directly from one of it’s inputs (audio sources like a microphone, sound system, mixer board, or Dante™ device) and broadcasts the audio on an FM channel. FM radios can be worn by listeners to hear the audio. The broadcast can be received up to 1000 ft* from the transmitter. Listeners can sit anywhere in the broadcast area and listen to the audio at the volume level they need without disturbing others.

*Range is dependent on the environment.
Receiver Model PPA R37

PPA R37 is a 17-channel receiver operating on the 72-76 MHz bandwidth. Features include, seek-button channel selection, channel-lock capability, battery-saving Sleep Mode, on/off volume control, power/low battery indicator, and stereo/mono earphone jack.

PPA R37 controls

Operating the PPA R37 Receiver

1. Insert two (2) AA batteries ensuring correct polarity. If rechargeable NiMH batteries are to be used with the receiver and a Williams Sound charger, make sure the Alkaline/NiMH switch inside the battery compartment is set to NiMH before charging.

2. Insert the headphone, earphone or neckloop into the headphone jack.

3. Turn receiver on by turning up the volume control. The green power LED will turn on.

4. Press the Channel Seek button inside the battery compartment once to seek an active transmitter. If more than one transmitter is being used, push the seek button additional times until you locate the signal you want to hear. The receiver will retain the channel setting when the unit is turned off.

5. To lock or unlock a selected channel, turn the power off. While holding the seek button, turn the power back on. When locked, the receiver will remain on the current channel regardless of channel seek button presses.

6. For more information about the R37 receiver, refer to the PPA R37 User Manual. You can download any of the receiver manuals from our website at www.williamssound.com.

Battery and channel selections
**LED Flash Codes**

<table>
<thead>
<tr>
<th>Light Code</th>
<th>Indicates</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 blink</td>
<td>Channel locked</td>
<td>Seek press remains on current channel</td>
</tr>
<tr>
<td>2 blinks</td>
<td>Channel unlocked</td>
<td>See press tunes to next channel present</td>
</tr>
<tr>
<td>3 blinks</td>
<td>Channel unlocked; no other channels present</td>
<td>Seek press attempts to find another channel</td>
</tr>
<tr>
<td>On-Off-On-Off</td>
<td>Batteries are low</td>
<td>Batteries need to be replaced or recharged</td>
</tr>
<tr>
<td>(continuous)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fade-on, Fade-off</td>
<td>No transmitter present on current channel</td>
<td>Sleep/Power Save mode (extends battery life)</td>
</tr>
</tbody>
</table>

**Receiver Model PPA R37-8**

The PPA R37-8 is an eight channel receiver, operating on 72-76 MHz bandwidth. It features a channel selection knob, on/off volume control, LED power and low battery indicator, and an earphone jack.

**PPA R37-8 controls**

- **HEADPHONE JACK**
- **CHANNEL SELECTOR KNOB**
- **"ON"/LOW BATTERY INDICATOR**
- **ON/OFF, VOLUME CONTROL SWITCH**

**Operating the PPA R37-8 Receiver**

Turn the receiver on by rotating the Volume control knob. The ON indicator should illuminate RED. Refer to the channel selection chart to choose from 8 standard frequencies. Turn the channel selector knob to the desired channel.

**IMPORTANT: Make sure the receiver frequency matches the transmitter frequency!**

Adjust the volume to a comfortable listening level. To turn the receiver off, rotate the Volume control knob to the left until it clicks off. The ON indicator should not be lit. To prolong the battery life of the unit, turn the receiver off when it is not in use. For more information about the R37-8 receiver, refer to the PPA R37-8 User Manual. You can download any of the receiver manuals from our website at www.williamsound.com.

**Connecting Earphones/Headphones**

Plug the earphone/headphone into the headphone jack on the top of the unit. The PPA R37-8 only works with monophonic earphones. If stereo headphones are used, sound will be heard only in one side. The PPA R38 and PPA R37 will work properly with stereo or mono headphones. Williams Sound evaluates each earphone and headphone used with the PPA R38, PPA R37 and PPA R37-8 receivers; we can only assure optimum performance when Williams Sound earphones and headphones are used.

**Battery Installation (All Receiver Models)**

Install two (2) AA alkaline or NiMH rechargeable batteries. Open the battery compartment by lifting the tab on the back of the receiver with a finger. To remove depleted batteries, pull up on the fabric strip. IMPORTANT: If Alkaline (non-rechargeable) batteries are being installed, slide the battery selection switch above the battery compartment to the “Alkaline” position. If installing NiMH (or rechargeable) batteries, slide the battery selection switch to the “NiMH” position. Press the batteries into place over the fabric strip. Be sure to observe proper polarity (+/-). Damage due to improper battery installation may void the warranty on the product. Close the battery door. When the sound becomes weak or distorted, replace or recharge the batteries. NOTE: The “ON” indicator on top of the unit will flash to indicate low battery.