



# QUICK SETUP GUIDE

## **Personal PA™ Value Pack System** Wide-Band FM Wireless Listening System

Model PPA VP

Transmitter Model PPA T27  
Receiver Model R35

MFRM 010A

## SYSTEM OVERVIEW

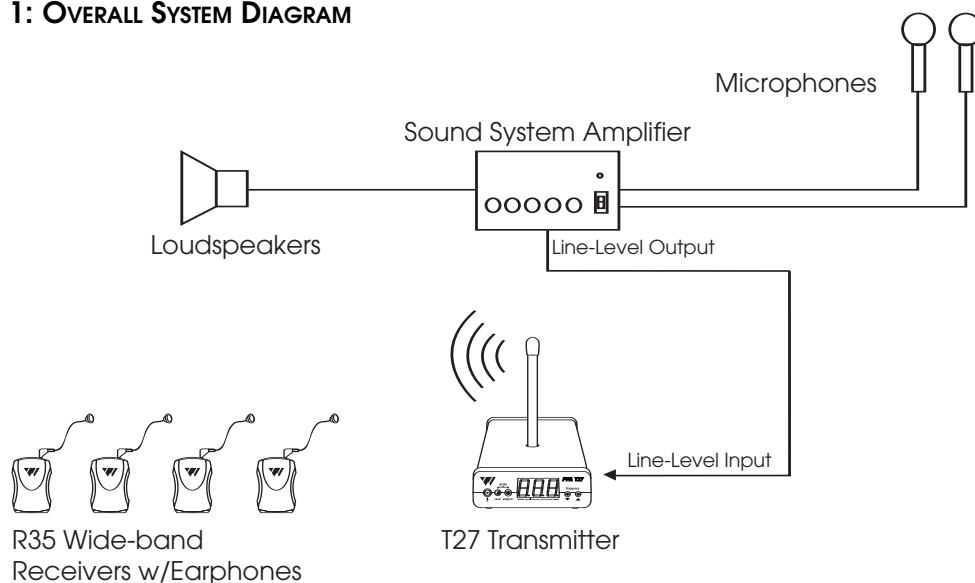
Thank you for purchasing the Personal PA Value Pack System from Williams Sound Corporation. The PPA VP System is a Wideband FM Listening System which operates in the 72-76 MHz frequency band. Designed for hearing assistance in places of public access, the PPA VP is for those who need help overcoming background noise, reverberation, or distance from the sound source. The versatile PPA VP is easily integrated with your existing sound system or can be used with a microphone as a stand-alone system.

The system has two principal parts: the T27 Transmitter and the R35 Receiver. Much like a miniature radio station, the Transmitter and microphone pick up the sounds you want to hear and broadcast them over an FM radio signal. The receivers are used to pick up the broadcast up to 500 feet away.

To avoid difficulties, please read through these instructions as you begin to use the system. Then save the manual for questions that arise as you continue to use your PERSONAL PA Value Pack System.

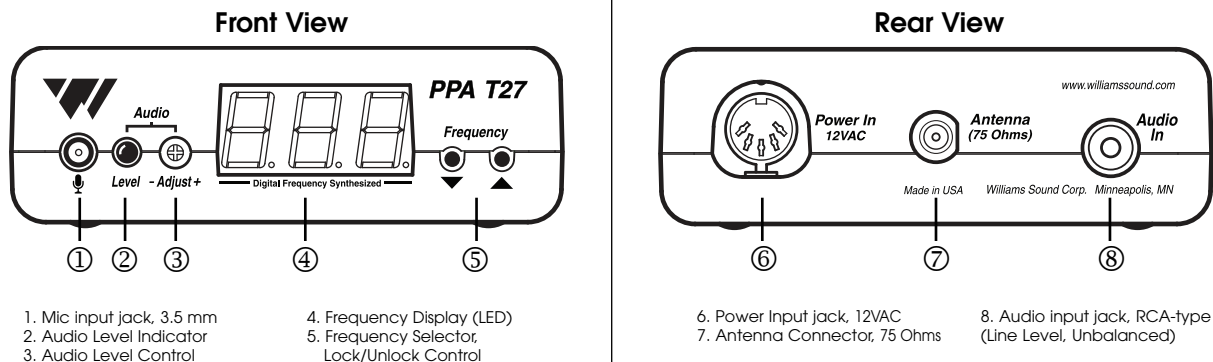
If you have any problems with this Williams Sound product, don't hesitate to call us toll-free at 1-800-843-3544.

**FIG. 1: OVERALL SYSTEM DIAGRAM**



# SETTING UP THE PPA VP

**FIG 2: Features & Controls**



## ► STEP 1: SELECT LOCATION

Position the PPA T27 transmitter near the sound system or mixer from which it will receive audio.

## ► STEP 2: INSTALL THE ANTENNA

Gently thread the ANT 021 rubber duckie antenna onto the stud recessed in the hole on the top of the transmitter. Note: The antenna output on the back of the unit has been defeated, as specified by FCC Rules. To use a remote antenna, contact your dealer or Williams Sound.

## ► STEP 3: CONNECT THE POWER

Locate the power supply cord equipped with the 5-pin DIN connector, then plug the connector into the "Power In" jack located in the back of the T27. Plug in the power supply into the AC outlet. On power up, the number "8" will scroll across the T27 display 3 times while the system initializes. The system will then display the default system frequency (72.9 MHz) *or* the last selected frequency set by the user.

## ► STEP 4: SELECT THE FREQUENCY

The T27 has 17 available channels in the 72-76 MHz bandwidth. By default, the T27 frequency is set to 72.900 MHz. To change the frequency on the T27, press and release the down "v" or up "^" frequency selector button until the desired frequency is displayed. After 3 seconds of no activity, the frequency selection will be set.

**Check to make sure the receiver being used is operating on the same frequency as the transmitter!**

**NOTE:** You can **LOCK** this selection to prevent others from accidentally changing the frequency.

To **LOCK** the frequency you have selected, press and hold *both* down "v" and up "^" frequency selector buttons for 3 seconds until the word "Loc" appears on the display. The frequency is now *locked*. Should the user press the frequency selector button while in "Lock" mode, the word "Loc" will be displayed for 2 seconds.

To **UNLOCK** the frequency selected, press and hold *both* down "v" and up "^" frequency selector buttons for 3 seconds until the transmitter displays "Un" then "Loc" on the display. The frequency is now *unlocked*. The user is now free to change the frequency channels on the T27 as needed.

► **STEP 5: CONNECT THE AUDIO SOURCE**

On the back of the T27, an RCA-type “Audio In” jack is available for connecting a line-level, unbalanced audio source. On the front of the T27, a 3.5mm “Mic Input” jack is available to connect a Williams Sound electret microphone. Connect the desired audio source to the T27 transmitter and proceed to Step 6.

► **STEP 6: ADJUST THE AUDIO LEVEL**

With the audio source playing, use a small screwdriver or tuning wand to rotate the “Adjust” control on the front of the T27 1) **clockwise to increase** the audio level; or 2) **counterclockwise to decrease** the audio level. Refer to the LED audio “Level” indicator on the front of the T27 as you make your adjustments:

**Audio Level LED Indicator**

- 1.) **Never On** = Audio source is TOO LOW.
- 2.) **Blinks occasionally** = Audio source is OPTIMAL.
- 3.) **Always on** = Audio source is TOO HIGH.

► **STEP 7: LISTEN WITH AN FM RECEIVER**

**IMPORTANT:** The FM receiver being used with the T27 transmitter will need to be on the same frequency and bandwidth as the transmitter. To retune the FM receiver, follow the tuning instructions included with that unit. For R35 tuning instructions, see page 6.

Install the receiver batteries, plug in the earphone, turn on the receiver and walk around the listening area. The signal should be clear and quite loud when the volume is turned up. See pages 5-7 for detailed R35 receiver instructions.

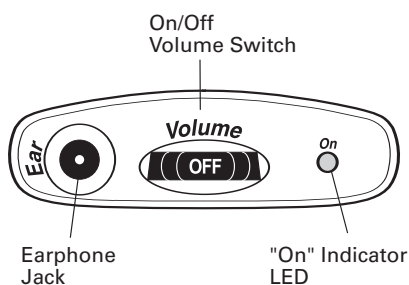
FCC Warning Statement

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

## PPA R35 RECEIVER INSTRUCTIONS

The PPA R35 is a single-channel receiver operating on the 72-76 MHz bandwidth. It features volume on/off control, LED power and low battery indicator, and an earphone jack. *Instructions:*

FIG. 3



R35 Top



R35 Front

### BATTERY INSTALLATION

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 will illuminate RED to indicate low battery.

### CONNECTING EARPHONES

Plug the earphone into the "EAR" jack on the top of the unit. Only monophonic earphones will operate properly. If stereo headphones are used, sound will be heard only in one side of the headphones.

Williams Sound evaluates each earphone and headphone used with the PPA R35 receiver; we can only assure optimum performance when Williams Sound earphones and headphones are used.

### OPERATING THE RECEIVER

NOTE: If you're using the PPA T27 transmitter, make sure the transmitter is on and receiving good audio input. Also, make sure the T27 is transmitting on the same frequency as the receiver. If the R35 receiver needs to be re-tuned (most Williams Sound receivers are set at the factory at 72.9 MHz), see page 6 for *frequency change instructions*.

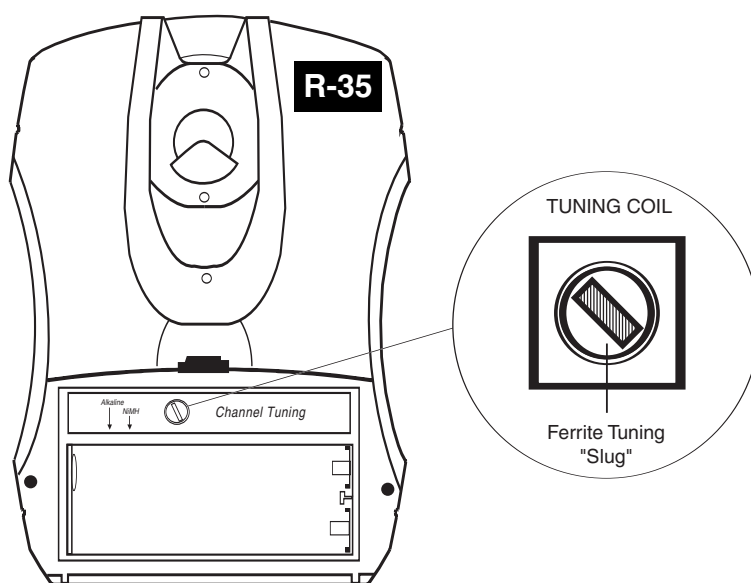
Turn the receiver on by rotating the volume control knob clockwise. The receiver's ON indicator should illuminate green. Adjust the volume control for your comfort. To turn the receiver off, rotate the volume control knob counter-clockwise until it clicks off. The receiver's ON indicator should go dark.

To maximize battery life, remember to turn the receiver off when it's not in use.

## PPA R35 FREQUENCY CHANGE INSTRUCTIONS

Selecting a frequency for the R35 receiver requires an adjustment to the internal tuning coil. See Figure 4 to locate the coil to be adjusted. A plastic tuning wrench (PLT 005) will be needed to adjust the receiver's tuning coil. Note: By default, Williams Sound R35 receivers are set at the factory to **72.9 MHz**.

FIG. 4



**The Receiver must be tuned with a weak and somewhat noisy signal. If tuned too close to the transmitter, with a strong signal, the most accurate tuning of the receiver is not possible.**

### To Change the Frequency to Another Channel:

- STEP 1:** Set the transmitter to the channel desired and remove the antenna.
- STEP 2:** Connect an audio source to the transmitter such as a CD or cassette player or microphone.
- STEP 3:** Move the receiver about 25 feet away from the transmitter to set the tuning.
- STEP 4:** Open the battery compartment.
- STEP 5:** Locate the Tuning Coil (see Figure 4). The tuning coil is a small, square, shiny metal can with a tuning slug in the top center.
- STEP 6:** With the earphone or headphone supplied with the receiver plugged into the Ear Jack, turn the volume control to a comfortable level, and listen for the transmitted signal.
- STEP 7:** Gently put the tip of the tuning tool into the slot in the tuning slug. Be careful not to push hard on the slug so as not to damage the threads in the coil, and do not screw it down more than 3 turns into the coil.

- STEP 8:** Turn the tuning slug in a counter-clockwise direction about two turns. Then, slowly turn the tuning slug in the clockwise direction until the signal is heard. There may be two signal points heard. The one which is received first is a false response. Be sure to continue tuning slightly further to the correct point, which will be much louder. Tune back and forth to find the center of the point of best response to the audio source being heard.
- STEP 9:** Mark down the date, and if a new frequency has been chosen, mark it down inside the receiver case for future reference.

## Important Notice:

Your Personal PA System operates on one of 10 FM radio frequencies in the 72.1MHz to 75.9MHz range. These frequencies are also used by the Fire Department in some cities for wireless call-boxes.

To avoid interfering with these vital services, Personal PA FM transmitters should not be operated on those channels in the cities listed below.

There is a label on the bottom of your transmitter that lists the operating frequency. The standard frequency is 72.9MHz.

If your transmitter is going to interfere with a local fire call-box, call us toll-free **1-800-843-3544** for assistance. Your local dealer can re-tune the system to a different frequency or you can exchange the system for one on an alternate frequency.

### **DO NOT USE a 72.1MHz (Channel A) System in:**

California: Hayward

### **DO NOT USE a 72.5MHz (Channel C) System in:**

Alaska: Juneau, Ketchikan

California: Culver City, Fresno, Lodi, Long Beach, Madison

Illinois: Chicago

Kentucky: Lexington

New Jersey: Camden

Ohio: Canton

Oregon: Klamath Falls

Utah: Salt Lake City

Washington: Ellensburg, Richland



**DO NOT USE a 72.9MHz (Channel E) System in:**

Alaska:	Anchorage
California:	Brea, Covina, West Covina, Novato
Colorado:	Denver
Ohio:	Cleveland, Marion City, Middletown, Springfield
Oklahoma:	Tulsa
Oregon:	Tualiton
Washington:	Mt. Vernon

**DO NOT USE a 75.5MHz (Channel F) System in:**

New Jersey:	Camden
Ohio:	Columbus

**DO NOT USE A 75.9MHz (Channel H) System in:**

California:	Contr Costa, Menlo Park, N. lake Tahoe, Richmond, Riverside
Louisiana:	Alexandria
New York:	Catskill
Ohio:	Canton

# ATTENTION!

Dear Williams Sound Customer:

Due to recent FCC Rule changes, the remote antenna connector on this transmitter has been defeated. If you need to use a remote antenna with this transmitter, please call Customer Service Toll-Free: **1-800-843-3544**. We are sorry for any inconvenience this may cause.

FRM 387A



## Five Year Warranty Registration

FRM 4041

Please complete the following information and return to Williams Sound within 2 weeks of your purchase. You may also register online: <http://www.williamssound.com/registration.aspx>

Name

Title

Street Address

Company

City

State

ZIP

Country

Phone Number

E-mail

What product did you purchase?

How did you find out about Williams Sound?

**Comments:**

10321 W. 70th Street • Eden Prairie, MN 55344 • 800.843.3544 • 952.943.2252 • FAX 952.943.2174 • [www.williamssound.com](http://www.williamssound.com)



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