

Personal PA® Tour Guide System

Wireless, Portable FM Listening System

MANUAL AND USER GUIDE

Transmitter Model PPA T36
Optional Receiver Models PPA R37, PPA R35-8



TGS PRO 737



TGS PRO MULTI

PERSONAL PA® FM Tour Guide System

TGS PRO 737, TGS PRO MULTI

Manual & User Guide

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System Overview

The Personal PA® Tour Guide System is a portable, high-performance, wireless listening system. It is composed of a PPA T36 Transmitter, microphone, and optional PPA R37 or R35-8 receivers equipped with headphones or earphones. The system allows one-way transmission of a tour guide's voice to group members using an FM radio signal. Using the system helps group members overcome background noise and distance from the person speaking.

The Personal PA® Tour Guide System can be used for large or small tour groups, and in noisy or quiet environments.

Your Personal PA® Tour Guide System has two principal parts: the transmitter and the 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 and headphones are used to pick up the broadcast up to 100 meters away.

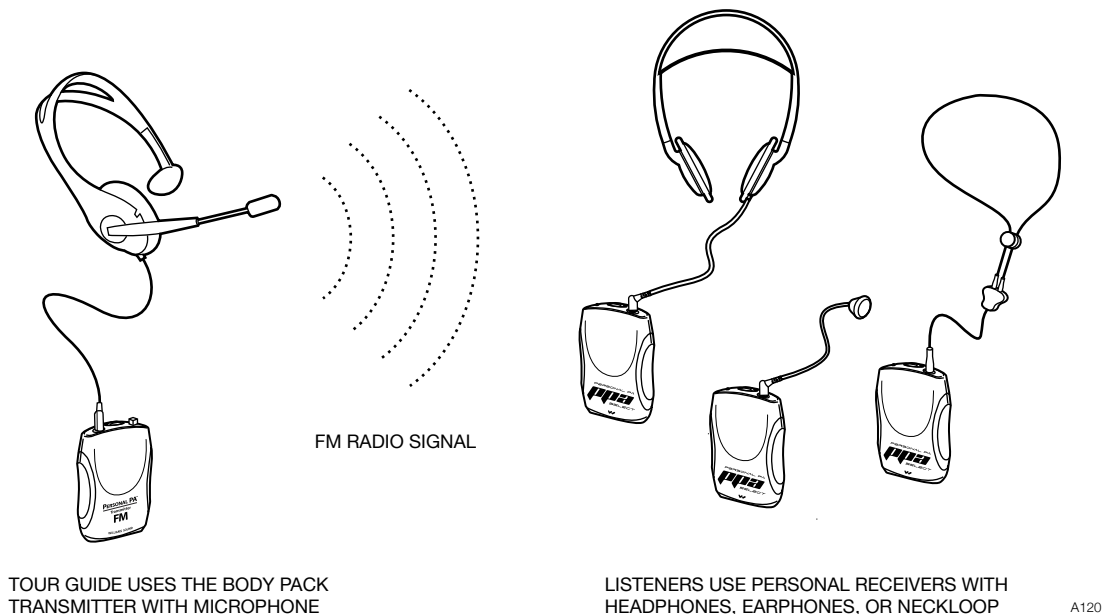
To avoid difficulties, please read through these instructions as you begin to use the system. Then save them for questions that arise as you continue to use your system.

If you have problems with the Personal PA® Tour Guide System, don't hesitate to call Williams Sound at 1-800-843-3544 or +1 952 943 2252.

System Components

- Body Pack Transmitter (PPA T36) with (2) AA batteries (BAT 001)
- Unidirectional headband microphone (MIC 100)
- (10) Receivers (PPA R37 or R35-8) w/batteries (BAT 001)
- Instruction manual
- System carry case (CCS 030 S)

Figure 1: How the Tour Guide System Works



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Safety Information

HEARING SAFETY:

CAUTION!

The tour guide system is designed to amplify sounds to a high volume level which could potentially cause hearing damage if used improperly.

To protect your hearing and the hearing of others:

1. Make sure the volume on the receiver is turned down before putting on the earphone or headphone. Then adjust the volume to a comfortable level.
2. Set the volume level on the receiver at the minimum setting that you need to hear.
3. If you experience feedback with the receiver (a squealing or howling sound), reduce the volume setting and move away from the T36 transmitter's microphone.
4. Do not allow children or other unauthorized persons access to the receiver.

BATTERY SAFETY AND DISPOSAL:

CAUTION!

The transmitter and receiver may be supplied with alkaline batteries. Do not attempt to recharge alkaline batteries, which may explode, release dangerous chemicals, cause burns, or other serious harm to the user or product.

PACEMAKER SAFETY:

CAUTION!

5. Before using this system with a pacemaker or other medical device, consult your physician or the manufacturer of your pacemaker or other medical device.
6. If you have a pacemaker or other medical device, make sure that you are using this product in accordance with safety guidelines established by your physician or the pacemaker manufacturer.

Recycling Instructions

Help Williams Sound protect the environment! Please take the time to dispose of your equipment properly.

Product Recycling Instructions:



Please do NOT dispose of your Williams Sound equipment in the household trash. Please take the equipment to an electronics recycling center; OR, return the product to the factory for proper disposal.

Battery Recycling Instructions:

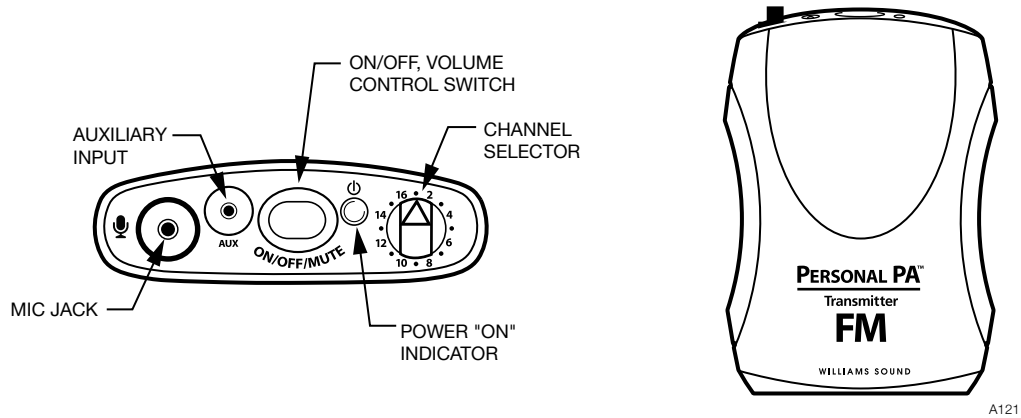


Please do NOT dispose of used batteries in the household trash. Please take the batteries to a retail or community collection point for recycling.

Using the T36 Transmitter

1. Make sure there are two alkaline or rechargeable AA batteries in the transmitter. If batteries are not installed, see Battery Information on page 11.
2. Plug the microphone cord into the “Mic Jack” on top of the transmitter (Figure 2).

Figure 2: T36 Top View



3. Optionally, plug in a desired audio source such as a CD or MP3 player using the “Auxiliary Input” jack (WCA 087 stereo auxiliary input cable included). If mic and auxiliary sources are used together, the audio will be mixed. If only auxiliary source is desired, the mic can be muted. **Do not remove the mic from the “Mic Jack” as the cable is also the transmitting antenna!**
4. Turn the unit on: press and hold the “ON/OFF/MUTE” button for three seconds. The “Power On” indicator should illuminate green.
5. Select the desired operating frequency. Use the “Channel Selector” knob to select any of the 16 available channels on 72-76 MHz. Refer to the channel selection chart, Figure 3.

Make sure the receiver being used is operating on the same frequency as the T36 transmitter!

NOTE: Up to eight T36’s can operate simultaneously on channels 1-8 (Figure 3) when used with an R35-8 receiver.

6. Position the headset microphone boom as close to the speaker’s mouth as possible without actually touching. Lapel clip microphones should be attached to a collar or lapel, as close to the speaker’s mouth as possible.

The transmitter can be placed in a pocket, or clipped onto a belt or waistband.
7. When you pause from speaking, you may mute the microphone by pressing the “ON/OFF/MUTE” button once momentarily. The “ON/OFF/MUTE” button will flash red. To unmute the mic, press the “ON/OFF/MUTE” button once momentarily again.

IMPORTANT: When the T36 transmitter is not being used, remember to turn the unit OFF by pressing and holding the “ON/OFF/MUTE” button for three seconds. The “Power On” indicator should not be lit.

Figure 3: Channelization Chart

| T36 CH | Letter | Freq. (MHz) | R35-8 CH |
|--------|--------|-------------|----------|
| 1 | A | 72.1 | 1 |
| 2 | B | 72.3 | 2 |
| 3 | O | 72.6 | 3 |
| 4 | P | 72.8 | 4 |
| 5 | I | 74.7 | 5 |
| 6 | R | 75.4 | 6 |
| 7 | G | 75.7 | 7 |
| 8 | H | 75.9 | 8 |
| 9 | C | 72.5 | - |
| 10 | K | 72.2 | - |
| 11 | N | 72.4 | - |
| 12 | D | 72.7 | - |
| 13 | E | 72.9 | - |
| 14 | J | 75.3 | - |
| 15 | S | 75.6 | - |
| 16 | T | 75.8 | - |

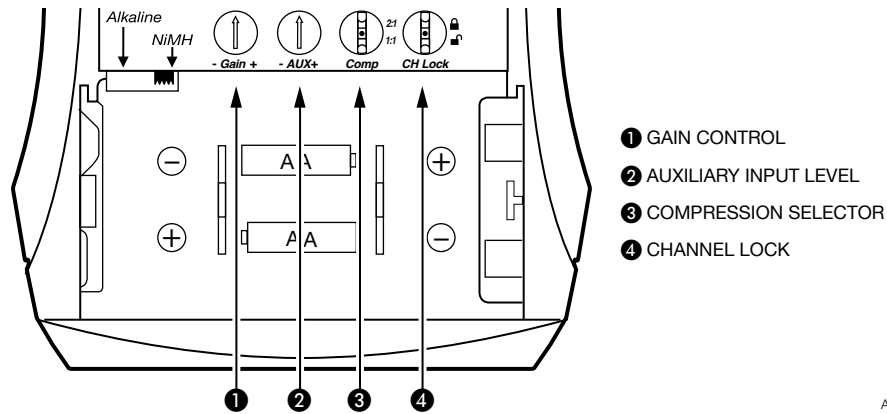
Using the T36 Transmitter, cont.

Gain Control

The gain control can be used to adjust the volume level on both the microphone and auxiliary input.

To adjust the volume level, open the battery door and locate the Gain Control (Figure 4). Use the supplied plastic screwdriver and rotate to increase “+” or decrease “-” the gain.

Figure 4: T36 Controls



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Auxiliary Input Level

The auxiliary input level can be used to adjust the auxiliary input level only.

To adjust, open the battery door and locate the Auxiliary Input Level (Figure 4). Use the plastic screwdriver and rotate to increase “+” or decrease “-” the input level.

Note: When using an auxiliary audio source, if the “Aux Input Level” is set too high, there can be increased audio distortion and decreased battery life.

Note: When using an auxiliary input source, the mic must be plugged in to the “Mic Jack” in order to transmit audio!

Compression Selector

By default, the T36 compression is set to “Off” for normal operation, or “1:1” compression. For hearing assistance applications, the compression selector can be set to “On” for “2:1” compression.



To change this setting, open the battery door and locate the Compression Selector (Figure 4).

To turn on compression (2:1), slide the “Comp” switch to the position marked “2:1.” To turn off, slide the “Comp” switch to the position marked “1:1.”

Channel Lock

By default, the T36 channels are unlocked to allow the user to change frequencies as needed. If desired, channels can be locked to prevent users from changing the channels.

Note: The Channel Lock only locks the electronic frequency; it does not physically lock the channel selector knob.

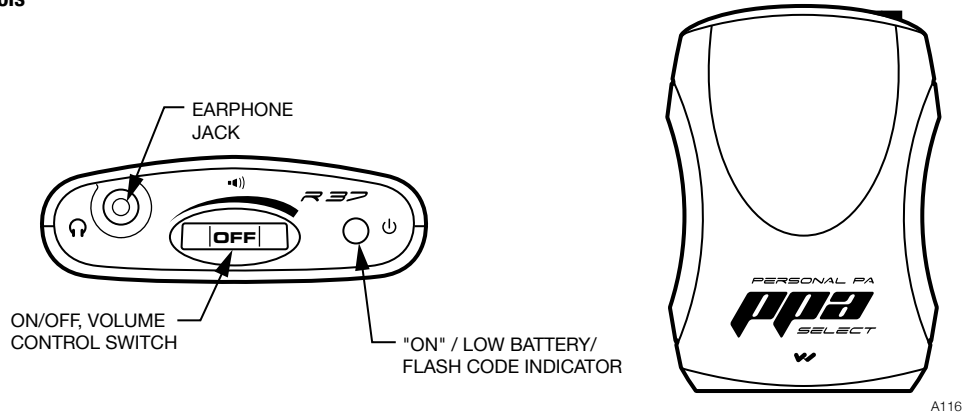
To lock or unlock channels, open the battery door and locate the Channel Lock (Figure 4). To lock the current channel, slide the “CH Lock” switch to the position marked “”. To unlock the channels, slide the “CH Lock” switch to the position marked “”.

Wideband FM Receivers

Receiver Model PPA R37

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

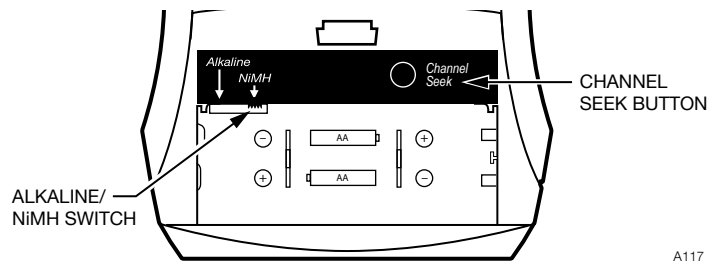
Figure 5: R37 Controls



Operating the 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. See Figure 6.
2. Insert the headphone, earphone or neckloop into the stereo output 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. See Figure 6. 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.

Figure 6: Battery and channel selections



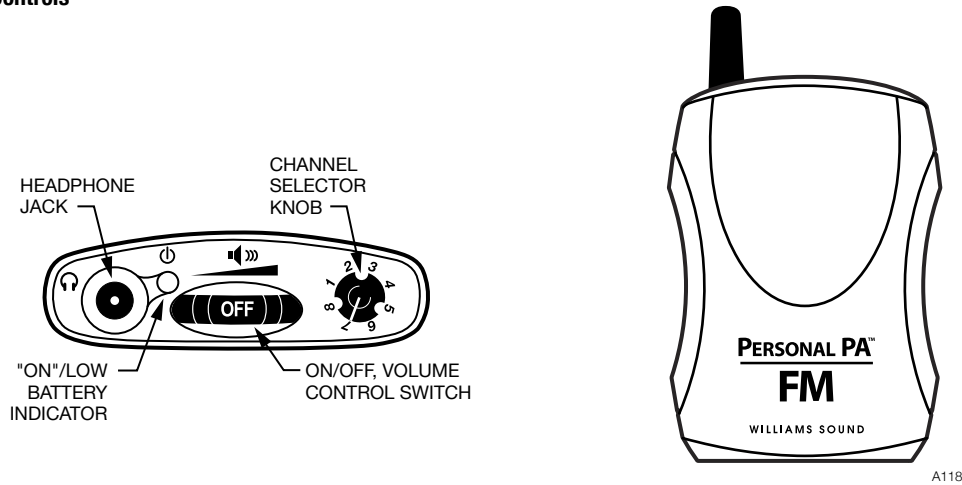
LED Flash Codes

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

Receiver Model PPA R35-8

The PPA R35-8 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 (See Figure 7).

Figure 7: R35-8 Controls



Battery Installation

Make sure there are two alkaline or rechargeable AA batteries in the receiver. If batteries are not installed, see Battery Information on page 11.

Connecting Earphones and Headphones

Plug the earphone into the “Headphone/Earphone” jack on the top of the unit. Only monophonic earphones and headphones will operate properly. If stereo headphones are used, sound will be heard only in one side. Williams Sound evaluates each earphone and headphone used with the PPA R35-8 receiver; we can only assure optimum performance when Williams Sound earphones and headphones are used.

Operating the Receiver

Turn the receiver on by rotating the Volume control knob. The ON indicator should illuminate RED. Refer to the channel selection chart in Figure 8 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.

Figure 8: Channelization Chart

| T36 CH | Letter | Freq. (MHz) | R35-8 CH |
|--------|--------|-------------|----------|
| 1 | A | 72.1 | 1 |
| 2 | B | 72.3 | 2 |
| 3 | O | 72.6 | 3 |
| 4 | P | 72.8 | 4 |
| 5 | I | 74.7 | 5 |
| 6 | R | 75.4 | 6 |
| 7 | G | 75.7 | 7 |
| 8 | H | 75.9 | 8 |
| 9 | C | 72.5 | - |
| 10 | K | 72.2 | - |
| 11 | N | 72.4 | - |
| 12 | D | 72.7 | - |
| 13 | E | 72.9 | - |
| 14 | J | 75.3 | - |
| 15 | S | 75.6 | - |
| 16 | T | 75.8 | - |

Belt Clip Removal/Installation

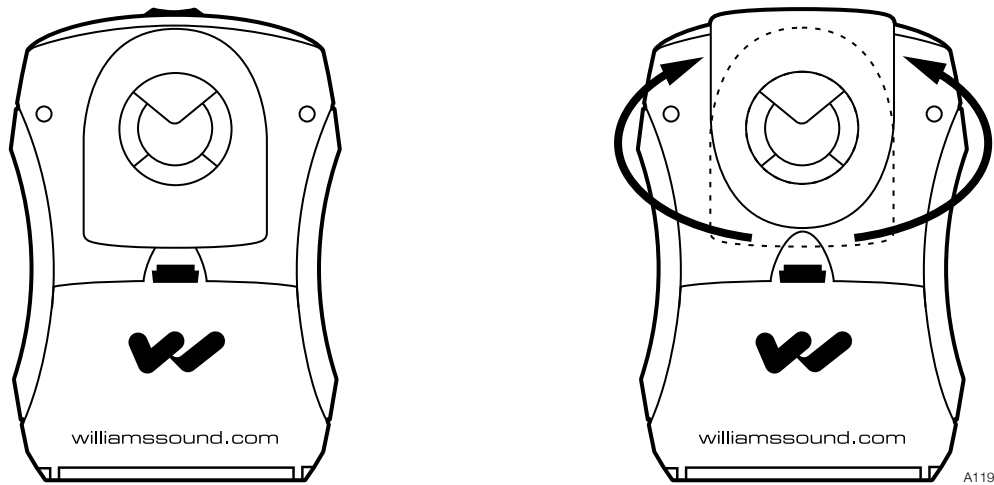
To Install:

Position the belt clip on the rear of the transmitter or receiver unit as shown in Figure 9. Turn the belt clip 180° left or right as shown in Figure 9B. The belt clip is now installed and ready for use.

To Remove:

Turn the belt clip 180° so the edge points toward the top of the unit as shown in Figure 9. Gently pull the belt clip away from the unit to remove.

Figure 9: Belt Clip Installation and Removal



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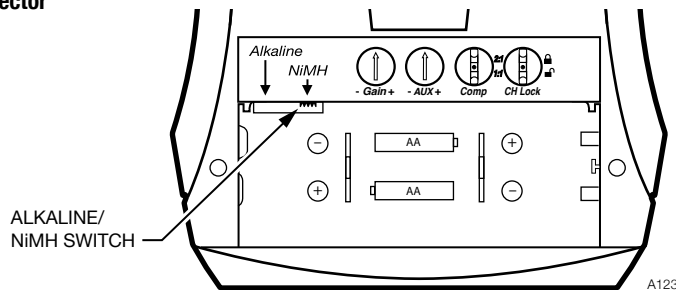
Battery Information

Installation/Removal

Open the battery compartment by lifting the tab on the back of the transmitter or receiver with your finger. To remove depleted batteries, pull up on the fabric strip.

IMPORTANT: If non-rechargeable batteries are being installed, slide the battery selection switch in the battery compartment to the “alkaline” position. See Figure 10 below. If installing NiMH (or rechargeable) batteries, slide the battery selection switch to the “NiMH” position.

Figure 10: Battery Switch Selector



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. Power LED indicator will flash or turn red when the batteries are getting low (see Low Battery Indicator on chart below). Continue to use equipment until sound becomes weak or distorted, or until the equipment quits operating, then replace or recharge batteries. Do not leave dead batteries in the transmitter or receivers. The power indicator light may remain on, even with a battery that is weak. The chart below shows typical battery life with these units:

Typical Battery Life

| Model | Battery Type | Battery Life | Low Battery Indicator |
|-----------|---------------------------------|--------------|-----------------------|
| PPA T36 | Alkaline AA batteries (BAT 001) | 30 hours | Power LED flashes |
| | Rechargeable AA NiMH (BAT 026) | 20 hours | |
| PPA R37 | Alkaline AA batteries (BAT 001) | 50 hours | Power LED flashes |
| | Rechargeable AA NiMH (BAT 026) | 32 hours | |
| PPA R35-8 | Alkaline AA batteries (BAT 001) | 50 hours | Power LED flashes |
| | Rechargeable AA NiMH (BAT 026) | 32 hours | |

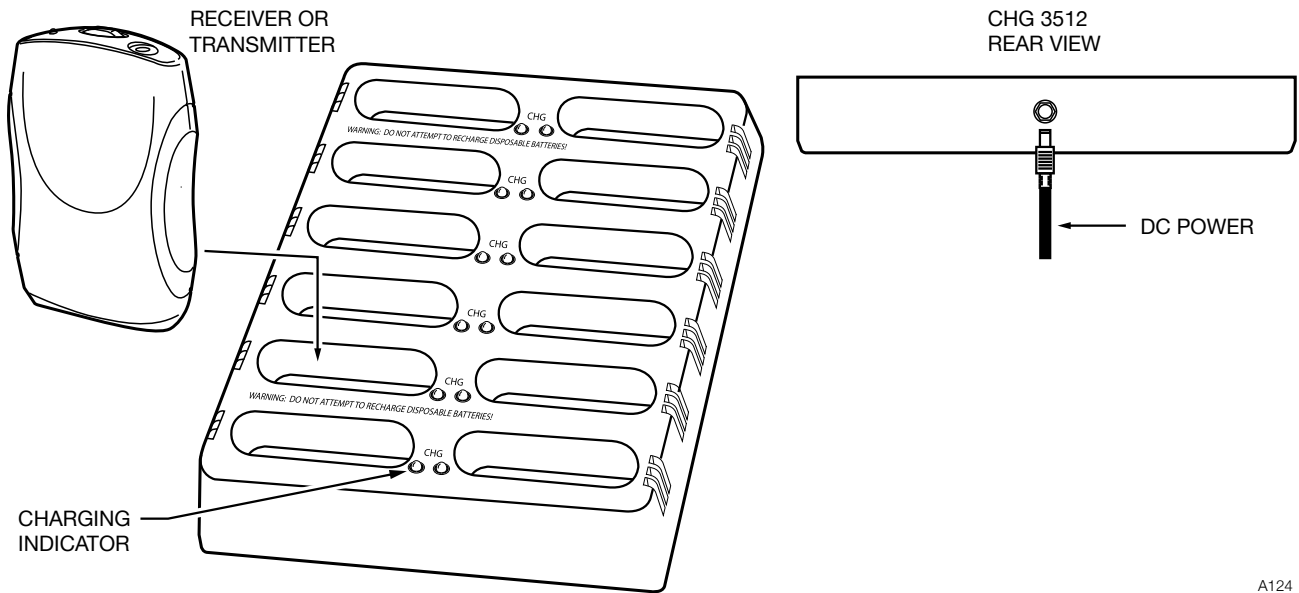
!! IMPORTANT WARNINGS !!

**DO NOT ATTEMPT TO RECHARGE ZINC CARBON (“HEAVY DUTY”), ALKALINE, OR LITHIUM BATTERIES!
DO NOT ATTEMPT TO RECHARGE SINGLE-USE BATTERIES!**

These batteries may heat up and explode, causing possible injury and damage to the equipment. Avoid shorting the plus and minus battery terminals together with metal objects. Battery damage and burns can result! Use only Williams Sound supplied chargers and rechargeable batteries!

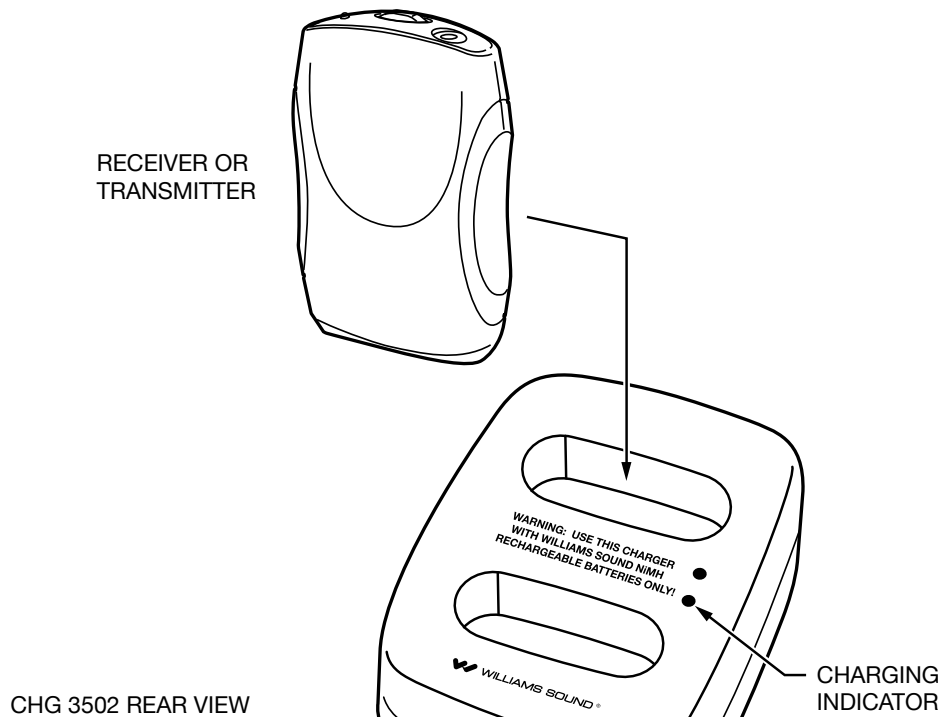
Optional Battery Chargers

Fig: 11A: CHG 3512 / 3512 PRO Multi-Charger



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Fig: 11B: CHG 3502 Dual-Bay Charger



For more information on available chargers, visit www.williamssound.com or call +1 952 943 2252.

Tips for Using the System

The nominal operating distance between the transmitter and receiver is about 46 meters (150 feet). The operating range will vary in different buildings and surroundings. In some locations, the signal may momentarily disappear. This is called a “drop-out” and is due to reflection and cancellation of the radio signal. Moving a few feet should restore the signal.

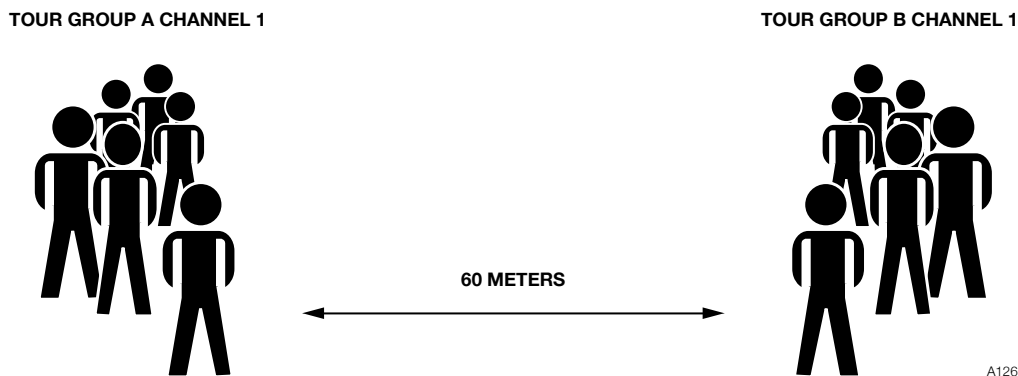
Keep the transmitter and receiver units at least 1 meter (3 feet) apart. If the transmitter gets too close to a receiver, it may overload the receiver, causing noisy reception or blocking of the signal.

Do not use more than one transmitter on the same channel (frequency) at the same time unless they are physically separated by more than 60 meters (200 feet). Operating more than one transmitter on the same channel at the same time in the same place will result in interference.

Using Multiple Systems for Multiple Groups:

For multiple tour groups within the same facility, multiple Tour Guide Systems may be operated on the same channel at the same time by maintaining physical separation of more than 60 meters (200 feet) between groups. The physical separation of groups takes advantage of the FM capture effect which causes receivers to lock onto the closest transmitter.

Figure 12: Tour Guide Group Separation



In Case Of Difficulty

If your Tour Guide System is not working, check the following:

1. Read through the manual and user guide carefully to verify proper setup and installation of your system.
2. Make sure the batteries are fresh or completely charged and that the “plus” and “minus” terminals are installed correctly.
3. If the rechargeable batteries work for a short period of time (less than 1 hour) even after they are fully charged, they must be regenerated. Leave them in the receiver or transmitter with the unit turned on for 5 - 6 hours. Then turn receiver or transmitter off, place it in the charger, and fully charge the receiver and transmitter (refer to charger instruction manual). This should restore normal battery life. Rechargeable batteries will gradually lose their capacity over time and may need to be replaced every 1-2 years.
4. Make sure the microphone is plugged into the T36 Transmitter and the earphone or headphone is plugged into the PPA R37 or R35-8 Receiver.
5. Move the transmitter and receiver closer together. You may be out of range. When using the system indoors, it's normal for the signal to momentarily disappear in certain locations. This is called a “drop-out.” Moving a few feet will restore the signal.
6. Do not try to use more than one transmitter on the same channel in close proximity to each other. **MORE THAN ONE TRANSMITTER ON THE SAME CHANNEL WILL RESULT IN INTERFERENCE IF THEY ARE CLOSE TOGETHER.** Keep the transmitters at least 60 meters (200 feet) apart or use separate channels for each system used.
7. If you are still hearing interference on the receivers, turn the transmitter off and listen with a receiver. If you hear the interference with the transmitter off, you need to change to a clear channel (see pages 8-9). Call your Williams Sound representative at 1-800-843-3544 or +1 952 943 2252 for details.

Notice

Williams Sound assumes no liability for improper use or operation of this equipment. The user is cautioned to operate the volume controls at the lowest acceptable level, and in a manner that will not cause damage to hearing. Ear pieces and accessories should be worn using good judgement and for their intended purpose.

Users are cautioned that changes or modifications not expressly approved by Williams Sound could void the user's authority to operate the equipment.

Limited Warranty

Williams Sound products are engineered, designed, and manufactured under carefully controlled conditions to provide you with many years of reliable service.

Effective January 1, 2012, Williams Sound warrants the Personal PA® FM Listening transmitters and receivers (models PPA T35, PPA T27, PPA T36, PPA R37, and PPA R35-8) against defects in materials and workmanship under normal use and conditions for the useful lifetime of the product from date of purchase.

This warranty is available to the original end purchaser of the product and CAN BE transferred to subsequent purchasers of the product.

Microphones, earphones, headphones, batteries, chargers, cables, carry cases, and most other accessory products carry a 90-day warranty.

Williams Sound has no control over the conditions under which this product is used. Williams Sound, therefore, disclaims all warranties not set forth above, both express and implied, with respect to the Personal PA® FM Listening System, including but not limited to, any implied warranty of merchantability or fitness of use of such equipment including, without limitation, any warranty that the use of such equipment for any purpose will comply with applicable laws and regulations. Williams Sound shall not be liable to any person or entity for any medical expenses or any direct, incidental or consequential damages caused by any use, defect, failure or malfunctioning of the product, whether a claim for such damages is based upon warranty, contract, tort or otherwise, the sole remedy for any defect, failure or malfunction of the products is replacement of the product. No person has any authority to bind Williams Sound to any representation or warranty with respect to the Personal PA® FM Listening System. Unauthorized repairs or modifications will void the warranty. This warranty is void if damage occurred because of misuse, or if the product has been repaired or modified by anyone other than a factory authorized service technician. Warranty does not cover normal wear and tear on the product or any other physical damage unless the damage was the result of a manufacturing defect. Williams Sound is not liable for consequential damages due to any failure of equipment to perform as intended. Williams Sound shall bear no responsibility or obligation with respect to the manner of use of any equipment sold by it.

This warranty does not cover reimbursement for your costs of removing and transporting the product for warranty service evaluation or installation of any replacement product provided under this warranty.

The exclusions and limitations set out above are not intended to, and should not be construed so as to contravene mandatory provisions of applicable law. If any part or term of this Disclaimer of Warranty is held to be illegal, unenforceable, or in conflict with applicable law by a court of competent jurisdiction, the validity of the remaining portions of this Disclaimer of Warranty shall not be affected, and all rights and obligations shall be construed and enforced as if this Limited Warranty did not contain the particular part or term held to be invalid. The terms of the warranty are governed by the laws of the State of Minnesota.

Prices and the specifications of the products are subject to change without notice.

*For Complete Warranty Statement go to: www.williamssound.com/warranty-statement

If you experience difficulty with your system, call Toll-Free for customer assistance:

1-800-843-3544 (U.S.A.) or +1 952 943 2252 (Outside the U.S.A.)

If it is necessary to return the system for service, your Customer Service Representative will give you a Return Authorization Number (RA) and shipping instructions.

Pack the system carefully and send it to:

Williams Sound

Attn: Repair Dept.

10300 Valley View Road

Eden Prairie, MN 55344 USA

Your warranty becomes effective the date you purchase your system. Your returned warranty card is our way of knowing when your warranty begins. Please take a moment to fill out and mail the enclosed card. You may also register your product online: www.williamssound.com/register. This information will help us serve you better in the future. Thank you!

System Specifications

Transmitter, Model PPA T36

| | |
|-------------------------------|---|
| Dimensions: | 4.1" L x 2.8" W x 1.1" H (104 mm x 71 mm x 28 mm) |
| Weight: | 2.6 oz (74 g), no batteries |
| Color: | Black, shatter-resistant PC/ABS plastic |
| Battery Type: | Two (2) AA 1.5 V non-rechargeable Alkaline batteries (BAT 001), 70 mA nominal current drain, 30 hours approx. life Two (2) AA 1.5 V NIMH rechargeable batteries (BAT 026), 70 mA nominal current drain, 20 hours per charge approx., recharges in 14-16 hours, uses CHG 3502 or CHG 3512 Charger |
| Operating Frequencies: | Selectable, 16 channels, 72.1 – 75.9 MHz* (channels 1-8 correspond with R35-8 receiver channels and PPA R1600) |
| Stability: | ± .005%, frequency synthesized, crystal reference, PLL |
| Modulation: | Wide-band FM, 75 kHz pk, 75 µS pre-emphasis |
| RF Output: | 80 mV/m at 3 m (max. allowed by FCC rules) |
| Frequency Response: | 200 Hz to 13 kHz, ± 3 dB at 1% max. THD |
| Signal-to-Noise Ratio: | 65 dB (typical) transmitted |
| Transmit Antenna: | Integral with microphone cord |
| Microphone: | Electret type, 3.5 mm mono phone plug |
| External Controls: | Momentary push button: push and hold 3 seconds for power On/Off, push and release for microphone mute On/Off; Rotary sixteen channel switch (with internal channel lock switch) |
| Mic Input: | 3.5 mm mono phone jack with electret mic bias, internal adjustable gain with 25 dB range |
| Aux Input: | 2.5 mm stereo phone jack, internal adjustable gain with 60 dB range |
| Audio Compression: | 1:1 or 2:1 ratio selected with internal slide switch |
| Compatible Receivers: | PFM R31, PFM R32, PFM R33, PFM R36, PPA R35, PPA R35-8, PPA R1600 |
| Approvals/Directives: | FCC, Industry Canada, RoHS, WEEE |
| Warranty: | Lifetime PLUS Limited Warranty. (90 days on accessories) |

PPA Select™ Receiver (Model PPA R37)

| | |
|-------------------------------|--|
| Dimensions: | 4.1" x 2.85" x 1.38" (104 x 72 x 35mm) |
| Weight: | 4.6oz (130g) with batteries. 2.6oz (73g) without batteries |
| Color: | Black |
| Battery Type: | (2) AA Alkaline or 2 x AA NiMH |
| Battery Life: | Two (2) AA non-rechargeable alkaline batteries (BAT 001), approx. 50 hrs (2) AA rechargeable NiMH batteries (BAT 026), 1500 mAh, approx. 32 hrs |
| Current Consumption: | 52mA nominal |
| Temperature Range: | - 0 to 50C |
| Channels | 17, accessed via seek button in battery compartment |
| Operating Freq.: | 72.1, 72.2, 72.3, 72.4, 72.5, 72.6, 72.7, 72.8, 72.9, 74.7, 75.3, 75.4, 75.5, 75.6, 75.7, 75.8, 75.9 MHz* |
| Intermediate Freq.: | 75 kHz |
| FM Deviation: | 75 kHz |
| De-Emphasis: | 75 µS |
| LED Indicator: | Power: Green; Low Battery: Flashes Green |
| AFC Range: | ± 120 kHz |
| Sensitivity: | 2 µV at 12 dB Sinad with squelch defeated |
| Input Overload: | 100 mV |
| Frequency Response: | 200 – 15 kHz |
| Modulation: | FM, +/- 75 kHz peak deviation |
| Signal-to-Noise Ratio: | 65 dB min @ 100 uV |
| Receive Antenna: | Integral with earphone/headphone cord |
| Audio Output: | 35 mW max, peak into 16 ohms |
| Output Connector: | 3.5 mm stereo/mono phone jack |
| Earphone: | Earbud-type with foam cushion, 3.5 mm plug, 32 Ω |
| Auto Shut-off | Enters sleep mode after approx 6 mins of no RF signal |
| Approvals: | FCC, Industry Canada, RoHS, WEEE |
| Warranty: | Lifetime PLUS Limited Warranty. 90 days on cords, earphones, headphones, batteries and other accessories |

*DISCLAIMER: FCC RULES LIMIT USE OF THIS EQUIPMENT TO "AUDITORY ASSISTANCE."

NOTE: SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

This device complies to "RSS-Gen Issue 2 June 2007" for Industrie Canada and FCC part 15.105(b) for the United States. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device. This device complies with ICES-003 class B. Test data is available from the manufacturer on request.

Personal PA® Receiver (Model PPA R35-8)

| | |
|-------------------------------|--|
| Dimensions: | 4.5" H x 2.85 W x 1.2" D (115 mm x 72 mm x 30 mm) |
| Weight: | 4.6 oz (130 g) |
| Color: | Black |
| Battery Type: | Two (2) AA non-rechargeable alkaline batteries (BAT 001), approx. 50 hours battery life or Two (2) AA rechargeable NiMH batteries (BAT 026), 1400 mAh, approx 32 hours battery life |
| Current Consumption: | Nominal 40 mA |
| Operating Freq: | 72-76 MHz*: 8 channels: 72.1, 72.3, 72.6, 72.8, 74.7, 75.4, 75.7, or 75.9 MHz. All Channels Not Available on the PPA T20 Transmitter |
| Intermediate Freq: | 10.7 MHz |
| FM Deviation: | +/- 75 kHz |
| De-emphasis: | 75 uS |
| LED Indicator: | Power: Red. Low Battery: Flashes |
| Sensitivity: | 2 uV at 12 dB SINAD with squelch defeated |
| Input Overload: | 20 mV |
| Frequency Response: | 40 Hz to 15 kHz +/- 3 dB |
| Signal to Noise ratio: | 60 dB at 100 uV |
| Receive Antenna: | Integral with earphone/headphone cord |
| Audio Output: | 35 mW, max 16 ohm load |
| Output Connector: | 3.5 mm mono phone jack |
| Squelch: | Located inside battery door. Factory set for 25 dB S/N. Squelch may be set with JFD-7104-5 from Sprague Goodman or any flat tipped tuning tool with tip size .095 X .016 |
| Notes: | The R35-8 is NOT field tunable. The eight channels have been carefully selected to inhibit inter-modulation interference. |
| Approvals: | FCC, Industry Canada, RoHS, WEEE |
| Warranty: | Lifetime PLUS Limited Warranty. 90 days on cords, earphones, headphones, batteries, and other accessories |

***DISCLAIMER: FCC RULES LIMIT USE OF THIS EQUIPMENT TO "AUDITORY ASSISTANCE."**

NOTE: SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

