

Group Sight-Seeing Tours • Factory and Plant Tours • College Campus Tours • Museum Tours  
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# TGS PRO 737

Personal PA® Tour Guide System



The Personal PA® Tour Guide System, model TGS PRO 737, helps tour group members with hearing difficulties overcome background noise and distance from the guide. Use it in factories, museums, power plants—anywhere hearing assistance is needed. System includes one (1) T46 transmitter with MIC 100 microphone, ten (10) PPA R37 receivers, batteries and system carry case. System operates on 72-76 MHz bandwidth for hearing assistance.



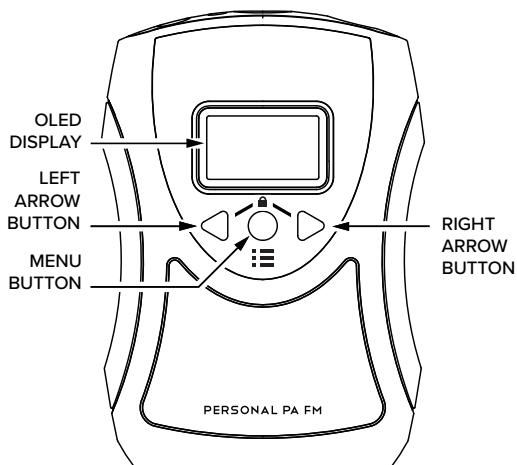
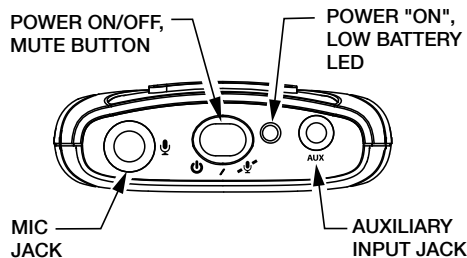
PPA R37N RECEIVER



PPA T46 TRANSMITTER

# Personal PA® Tour Guide System

## PPA T46 Transmitter



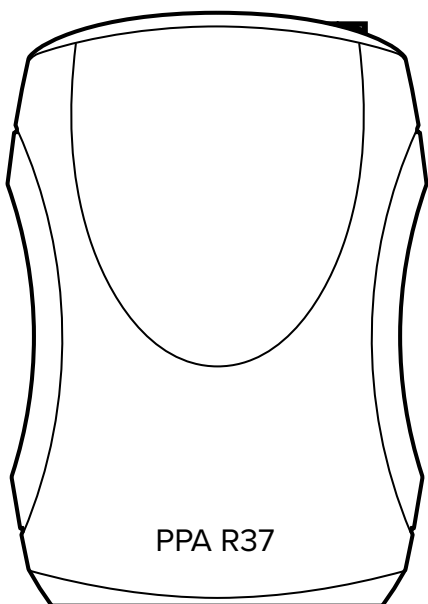
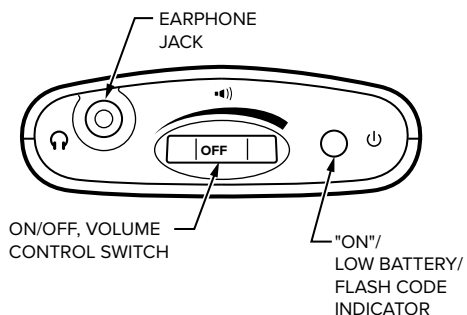
<b>Dimensions:</b>	4.1" L x 2.8" W x 1.1" D (104 mm x 71 mm x 28 mm)
<b>Weight:</b>	2.6 oz (74 g), no batteries
<b>Color:</b>	Black/Silver
<b>Enclosure Material:</b>	Shatter-resistant PC/ABS plastic with textured scratch-resistant aluminum faceplate
<b>Battery Type options:</b>	Two (2) AA 1.5 V non-rechargeable Alkaline batteries (BAT 001-2), 75 mA nominal current drain, up to 30 hours battery life Two (2) AA 1.5 V NiMH rechargeable batteries (BAT 026-2), 75 mA nominal current drain, up to 20 hours battery life per charge, recharges in 14–16 hours, uses CHG 3502 or CHG 3512 Charger
<b>Operating Frequencies:</b>	Selectable, 17 channels, 72.1 – 75.9 MHz*. Switchable 8 or 17 Channel Mode. (8-channel mode setting corresponds with PPA R35-8 receiver channels)
<b>Stability:</b>	± .005%, frequency synthesized, crystal reference, PLL
<b>Modulation:</b>	Wide-band FM, 75 kHz peak, 75 μS pre-emphasis
<b>RF Output:</b>	80 mV/m at 3 m (max. allowed by FCC rules)
<b>Frequency Response:</b>	180 Hz to 13 kHz, ± 3 dB at 1% max. THD
<b>Signal-to-Noise Ratio:</b>	65 dB (typical) transmitted
<b>Transmit Antenna:</b>	Integral with microphone cord
<b>Microphone:</b>	Electret type, 3.5 mm mono plug
<b>External Display:</b>	OLED for status and menu information. Status: Ch/Freq, Mic Audio Level, Auxiliary Input Audio Level, Battery Status, Mic Mute, Channel Lock, Dual-Preset mode. Menu: Ch/Freq display mode select, Volume, Aux Input, Compression, 17 or 8-channel mode, screen time out, screen brightness, restore default settings
<b>External Controls:</b>	Momentary push button: push and hold 3 seconds for power On/Off, push and release for microphone mute On/Off. "Up", "Down" and "Menu" buttons for accessing and changing transmitter settings. Battery type switch (Alkaline or NiMH) located behind the battery compartment door
<b>External Indicators:</b>	Power LED - Green, flashes when battery is low
<b>Mic Input:</b>	3.5 mm mono jack with electret mic bias, adjustable gain with 25 dB range
<b>Aux Input:</b>	2.5 mm stereo jack, adjustable gain with 60 dB range
<b>Audio Compression:</b>	1:1 (off) or 2:1 (on) selectable in menu
<b>Compatible Receivers:</b>	PFM R31, PFM R32, PFM R33, PFM R36, PPA R35, PPA R37, PPA R35-8, PPA R1600,
<b>Approvals/Directives:</b>	FCC, Industry Canada, RoHS, WEEE
<b>Warranty:</b>	Lifetime PLUS Limited Warranty, 90 Days on most accessories.

**NOTE: FCC REGULATIONS, SECTION 15.21, REQUIRES THE USER TO COMPLY WITH THE RULES OF TRANSMITTER OPERATION. ANY CHANGES OR MODIFICATIONS MADE BY THE USER NOT EXPRESSLY APPROVED FOR COMPLIANCE MAY RESULT IN THE LOSS OF ALL PRIVILEGES AND AUTHORITY TO OPERATE THE EQUIPMENT**

# Personal PA® Tour Guide System

## PPA R37 Receiver

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.



Dimensions:	4.1" L x 2.85" W x 1.38" D (104 mm x 72 mm x 35 mm)
Weight:	4.6 oz (130 g) with batteries, 2.6 oz w/o batteries (73g)
Color:	Black
Battery Type:	Two (2) AA non-rechargeable alkaline batteries (BAT 001), approx. 48 hours battery life Two (2) AA rechargeable NiMH batteries (BAT 026), 1600 mAh, approx 30 hours battery life
Current Consumption:	Nominal 52 mA
Operating Freq.:	17 channels: 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 or 75.9 MHz*.
FM Deviation:	+75 kHz
De-Emphasis:	75 µS
LED Indicator:	Power: Bright Green. Low Battery: Flashes.
Sensitivity:	2 µV at 12 dB Sinad with squelch defeated
Input Overload:	100 mV
Frequency Response:	200 Hz to 15 kHz, ± 3 dB
Signal-to-Noise Ratio:	65 dB at 100 µV
Receiver Antenna:	Integral with earphone/headphone cord
Audio Output:	35 mW, max. 16 ohm load
Output Connector:	3.5 mm stereo phone jack, accepts either stereo or mono plug
Approvals:	FCC, Industrie Canada, RoHS, WEEE
Warranty:	Lifetime PLUS Limited Warranty, 90 Days on most accessories.

**THIS DEVICE COMPLIES TO "RSS-GEN ISSUE 2 JUNE 2007" FOR INDUSTRY 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 UNDESIRE OPERATION OF THE DEVICE.**

**THIS DEVICE COMPLIES WITH ICES-003 CLASS B. TEST DATA IS AVAILABLE FROM THE MANUFACTURER ON REQUEST.**

**\*DISCLAIMER: FCC RULES LIMIT USE OF THIS EQUIPMENT TO AUDITORY ASSISTANCE AND LANGUAGE INTERPRETATION.**

**NOTE: SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.**

# Personal PA<sup>®</sup> Tour Guide System

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## Architectural/Engineering Specifications

### PPA T46 Transmitter:

The PPA T46 is a wide-band body-pack transmitter and shall operate on 17 selectable frequencies between 72MHz and 76MHz. It shall operate for up to 30 hrs with two AA Alkaline batteries and be housed in a black plastic enclosure. It shall have battery recharge ability utilizing Williams AV drop-in chargers.

The T46 shall have a 3.5 mm microphone jack and a 2.5 mm auxiliary audio input jack. The microphone cord will serve as the transmitting antenna. It shall have three buttons on the front to access channel select, master and aux gain, compression on/off, channel lock and screen adjustments. There shall be an OLED screen on the front of the T46 displaying current operating status and menu information.

The T46 shall have the ability to operate in dual channel mode whereby the user can switch between two different transmitting channels, each with its own set-up parameters.

There shall be a power switch which also serves as a microphone mute control on the top bezel of the transmitter.

The T46 shall have wide band modulation at 75 KHz peak with a frequency response of 200 Hz to 16 KHz.

The PPA T46 shall be covered under a limited lifetime parts and labor warranty.

This transmitter shall be the Williams AV model PPA T46.

### PPA R37 Receiver:

The PPA R37 receiver shall be encased in black, PC/ABS impact-resistant plastic with a hinged battery door. The receiver shall be a body-pack style and include a detachable belt-clip for hands-free operation. Receiver shall have a 3.5mm stereo/mono jack to accommodate stereo or mono low impedance earphones, headphones and neckloops. Receiver shall have a combination volume control with power on/off rotary dial. It shall have a green LED indicating battery and system status codes. The PPA R37 shall have access to 17 wideband channels between 72-76MHz. Channel selection shall be made by pushing the seek button inside the battery compartment. Receiver shall have channel-lock capability.

Receiver shall have a slide switch inside the battery compartment to select Alkaline or rechargeable NiMH rechargeable battery operation. It shall have charger contacts on the bottom of the receiver for use with Williams AV drop-in chargers CHG 3512 and CHG 3502. The PPA R37 shall operate up to 48 hrs with two AA Alkaline batteries, and up to 30 hrs with two AA NiMH rechargeable batteries (BAT 026).

Receiver shall provide a maximum out of 35mW at 16 ohms with an earbud-type earphone. The system's audio frequency response shall be 200Hz to 15kHz  $\pm$  3dB and the signal-to-noise ratio shall be 65dB min. The receiver sensitivity shall be 2 $\mu$ V or better at 12dB Sinad with squelch defeated. The PPA R37 shall accept up to  $\pm$ 75kHz FM deviation and have a 75 $\mu$ s de-emphasis time constant.

The PPA R37 shall have FCC, Industry Canada approvals and be compliant with RoHS and WEEE regulations. The receiver shall be covered by Lifetime PLUS Limited Warranty, excluding earphones, headphones and batteries.