

# PPA 377

## Personal PA® FM Listening System



The PPA 377 features the T35 high performance transmitter: powerful microprocessor, sleek digital display, easy-to-use menu controls. The T35 configures itself to the appropriate setting, taking the guesswork out of complicated audio installation. Operating up to 1000 feet, the T35 is ideal for auditoriums, theaters or other large venues where excellent coverage area is essential. System includes four impact-resistant PPA R37 single-channel receivers. The PPA R37 receiver features easy to use, seek-button channel selection with access to 17 pre-set wideband frequencies between 72-76 MHz. The PPA 377 complies with 2010 ADA guidelines and is covered by Lifetime PLUS Limited Warranty\*.

The R37 receiver utilizes 3.5 mm stereo/mono jack for use with stereo or mono headphones.

### System Includes:

- (1) T35 Transmitter
- (4) PPA Select™ Receivers (PPA R37)
- (2) NKL 001 Neckloops
- (4) EAR 013 Earphones
- (1) ANT 025 Whip Antenna
- (1) WCA 013 Audio Cable
- (1) TFP 016 Power Supply
- (1) IDP 008 ADA Wall Plaque
- (8) BAT 001 AA Alkaline Batteries

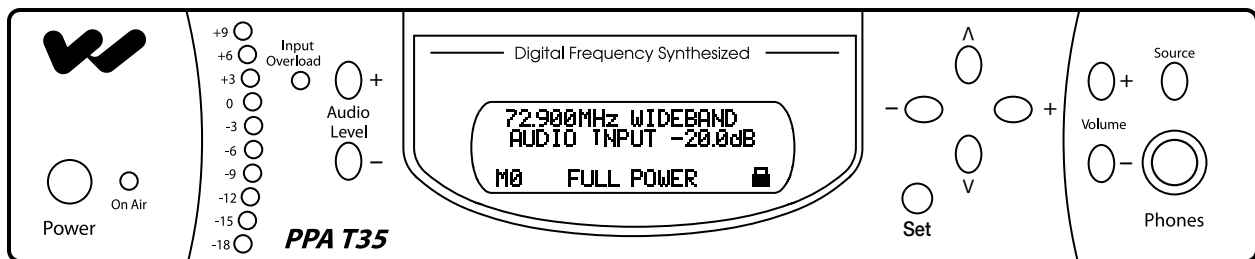
Optional 8-channel receivers (PPA R35-8N) are available for multi-channel applications.

# Personal PA<sup>®</sup> FM Listening System

## PPA T35 Transmitter:

<b>Dimensions, Weight:</b>	8.45" (21.5 cm) W x 8.18" (20.8 cm) D x 1.72" (4.4 cm) H, 3.1 lbs (1.4 kg)
<b>Color:</b>	Black with white legends
<b>Rack Mount:</b>	One EIA rack space high, 1/2 space wide 1-2 units can be mounted in a single rack space with optional RPK 005 (single) or RPK 006 (double) Rack Mount Kits
<b>Power:</b>	Wall mount Class II transformer (TFP 016) Input: 120 VAC, 60 Hz, 17 W Output: 24 VAC, 500 mA with 3-pin Molex <sup>®</sup> plug Approvals: UL, CSA listed
<b>Temperature Range:</b>	Operating: 0° C to 40° C (+32° F to +104° F) Storage: -20° C to 70° C (-4° F to +158° F)
<b>Operating Freqs:</b>	72.1-75.9 MHz*, 17 wideband channels (selectable), 72.025-75.975 MHz, 77 narrowband channels (selectable)
<b>Frequency Accuracy:</b>	±.005% stability, 0-50° C
<b>Deviation:</b>	Wideband: ± 75 kHz maximum. Narrowband: ± 5 kHz maximum.
<b>Pre-Emphasis:</b>	Wideband: 75 µsec. Narrowband: 300 µsec
<b>RF Field Strength:</b>	Does not exceed 80 mV/m at 3 m
<b>Nominal Range:</b>	Up to 1000 ft (304 m) Note: Maximum transmitter range is achieved using the ANT 005 coaxial antenna
<b>Audio Proc. Functions:</b>	Reduced or Normal Compressor Gain Compression Slope Control High Pass and Low Pass Filter Frequency control
<b>Frequency Response:</b>	22 – 16000 Hz, +1, -3 dB (adjustable)
<b>Signal-to-Noise Ratio:</b>	74 dB transmitted

## T35 Front Panel:



A150

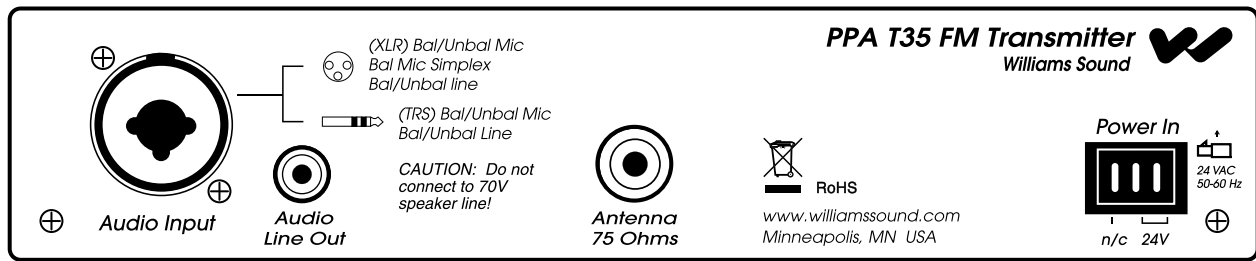
**\*DISCLAIMER: FCC RULES LIMIT USE OF THIS EQUIPMENT TO AUDITORY ASSISTANCE.**

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

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<b>Audio Level Control:</b>	Push-button audio level controls, adjustable to 0 to -50 dB
<b>Audio Level Indicators:</b>	10 LED array that reads +9 to -18 at 3 dB intervals
<b>Power On Indicator:</b>	Green LED indicates power on
<b>Phones Output:</b>	Mono signal, 1/4" TRS stereo jack, 67 mW, maximum in 50 ohms (adjustable 0 to -40 dB)
<b>Audio Input:</b>	Combination 3-pin XLR, 1/4" TRS jack
<b>Line Output:</b>	RCA jack, -10 dBV (.32 VRMS) output, impedance 100 Ω
<b>LCD Menu Controls:</b>	Applications Presets (Music, Voice, Hearing Assist)
<b>(Push-Button Selection)</b>	Bandwidth, Frequency, Audio Input Source (Microphone, Line, Simplex), High Pass Filter, Low Pass Filter, Compressor Slope, Compressor Gain, RF Output Power

## T35 Rear Panel:



A151

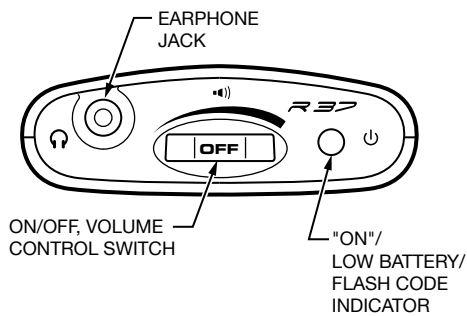
Input Levels (Bal or Unbal):	Nominal (1st Amber LED)	Maximum (Input Overload LED)	Absolute Maximum Ratings**
<b>Microphone Simplex-Mic:</b>	-60dBV (1 mV RMS)	-20 dBV (100 mV RMS)	+20dBV (10.0 V RMS)
<b>Line:</b>	-8dBV (400 mV RMS)	+16 dBV (6.3 V RMS)	+20 dB V (10.0 V RMS)
<b>Simplex Mode:</b>	12 volts simplex power (DIN 45596) on the 3-pin XLR connector		
<b>RF "Off" Timer:</b>	Turns off RF signal after 1 hour of no audio activity		
<b>Common Mode Rejection:</b>	> 57 dB @ 1 kHz, Mic or Line		
<b>Total Harmonic Distortion:</b>	< 0.25% @ -10 dB V audio line output, 1 kHz		
<b>Approvals:</b>	FCC, RoHS, WEEE		
<b>Warranty:</b>	Lifetime PLUS Limited Warranty, 90 Days on most accessories.		

**\*\*Note: Stresses above these ratings may cause permanent damage. Exposure for extended periods may degrade reliability.**

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## PPA R37 Receiver:



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

**\*DISCLAIMER: FCC RULES LIMIT USE OF THIS EQUIPMENT TO "AUDITORY ASSISTANCE FOR THE HANDICAPPED."**

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 undesired operation of the device.

This device complies with ICES-003 class B. Test data is available from the manufacturer on request.

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## Bid Specs

### PPA T35 Transmitter

The PPA T35 transmitter shall be microprocessor controlled with push button configuration. It shall have an operating range of up to 1000 feet. It shall have 17 wideband channels operating on 72.1–75.9 MHz. It shall have 77 narrowband channels operating on 72.025–75.975 MHz.

#### Front Panel:

The PPA T35 shall have a push button controlled LCD digital display. There shall be three pre-configured (selectable) application presets: Hearing Assist, Music and Voice. Configurations for Bandwidth, Frequency, Audio Input Source (Microphone, Line, Simplex), High Pass Filter, Low Pass Filter, Compressor Slope, Compressor Gain and RF Output Power shall be push button controlled. The audio level shall be adjustable by push button control. There shall be a 10 LED array showing audio level from +9 to -18 at 3dB intervals. The PPA T35 shall have a 1/4" phone jack with push button volume control. It shall have push button control for monitoring source audio or transmitted audio. It shall have an input overload indicator. It shall have an "on" indicator and power button.

#### Rear Panel:

The PPA T35 shall be powered by 24 VAC power supply via a 3-pin Molex<sup>®</sup> connector. It shall have a 75 ohm F-connector antenna. It shall have an ANT 025 whip antenna on the top panel directly connected to the circuit board. The transmitter shall have an RCA line output jack. It shall have a combination 1/4" phone/XLR audio input jack. It shall have an RF "Off" timer that turns off RF signal after 1 hour of no audio activity.

The PPA T35 shall have FCC, be compliant with RoHS and WEEE regulations and be powered by UL and CSA power supply. It shall have a Lifetime PLUS Limited Warranty, 90 Days on most accessories. It shall be compatible with Williams Sound FM equipment operating on 72-76 MHz.

The transmitter shall be a Williams Sound model number PPA T35.

### 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 Sound 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, Industrie Canada approvals and be compliant with RoHS and WEEE regulations. The receiver shall be covered by a Lifetime PLUS Limited Warranty, 90 Days on most accessories.

This receiver model shall be the Williams Sound model PPA R37.

### Domestic Sales

Williams Sound  
10300 Valley View Rd.  
Eden Prairie, MN 55344  
Ph: 800-328-6190 / 952-943-2252  
FAX: 952-943-2174  
Email: [info@williamssound.com](mailto:info@williamssound.com)  
Web: [www.williamssound.com](http://www.williamssound.com)

### International Sales

International Sales Department  
Williams Sound  
10300 Valley View Rd.  
Eden Prairie, MN 55344 USA  
Phone: +1 952 943 2252  
Fax: +1 952 943 2174  
Email: [info@williamssound.com](mailto:info@williamssound.com)  
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