

# Personal PA<sup>®</sup> 375 FM Listening System

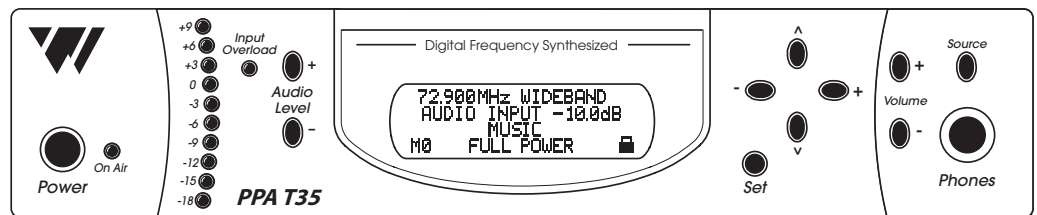
## Description:

The PPA 375 features the new T35 high performance transmitter: Powerful microprocessor, sleek digital display, easy-to-use menu controls. The T35 configures itself to the appropriate setting – taking the guess work 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 R35 single-channel receivers. The R35 receiver will operate up to 80 hours for long-lasting performance!

## PPA T35 Transmitter

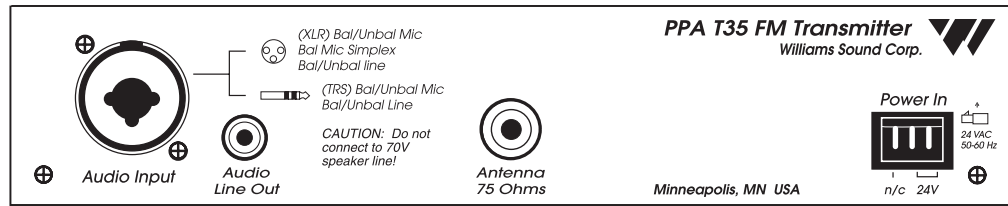
<b>Dimensions, Weight:</b>	8.45" (21.5 cm) W x 8.18" (20.8 cm) D x 1.72" (4.4 cm) H, 3.1 lbs. (1.4 kg)
<b>Color:</b>	Black with white legends
<b>Rack Mount:</b>	One EIA rack space high, 1/2 space wide 1-2 units can be mounted in a single rack space with optional RPK 005 (single) or RPK 006 (double) Rack Mount Kits
<b>Power:</b>	Wall mount Class II transformer (TFP 016) Input: 120VAC, 60Hz, 17W Output: 24VAC, 500mA 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>FCC ID:</b>	CNMT35
<b>Operating Freqs:</b>	72.1-75.9 MHz, 10 wideband channels (selectable), 7 non-standard wideband channels (selectable) OR 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: ± 5kHz maximum
<b>Pre-Emphasis:</b>	Wideband: 75 µsec. Narrowband: 300 µsec
<b>RF Field Strength:</b>	Does not exceed 8 mV/m at 3 m
<b>Nominal Range:</b>	Up to 1000 ft. (304 m)
<b>Note:</b>	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>	74dB transmitted

## T35 Front Panel



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

## T35 Rear Panel



Input Levels (Bal or Unbal):	Nominal (1st Amber LED)	Maximum (Input Overload LED)	Absolute Maximum Ratings*
Microphone Simplex-Mic:	-60dBV (1mVRMS)	-20dBV (100mVRMS)	+20dBV (10.0VRMS)
Line:	-8dBV (400mVRMS)	+16dBV (6.3VRMS)	+20dBV (10.0VRMS)
Simplex Mode:	12 volts simplex power (DIN 45596) on the 3-pin XLR connector		
RF "Off" Timer:	Turns off RF signal after 1 hour of no audio activity		
Common Mode Rejection:	> 57dB @ 1kHz, Mic or Line		
Total Harmonic Distortion:	< 0.25% @ -10dBV audio line output, 1kHz		
Warranty:	5 Year**		

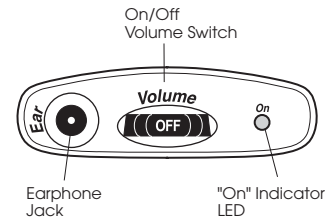
### Specifications subject to change without notice.

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

\*\*90 days on cords, antenna, power supply and accessories.

## PPA R35 Receiver

Dimensions:	4.1" L x 2.85 W x 1.2" H (104.1 mm x 72.4 mm x 30.4 mm)
Weight:	4.5 oz (127 g)
Color:	Gray
Battery Type:	Two (2) AA 1.5 V non-rechargeable Alkaline batteries (BAT 001), 14 mA nom. current drain, 80 hours approx. life
FCC ID:	CNM R35
Industry Canada Cert.:	In process
Operating Freq.:	Pre-Tuned, Adjustable, 72 MHz - 76 MHz *
Intermediate Freq.:	75 kHz
FM Deviation:	75 kHz
De-Emphasis:	75 $\mu$ S
AFC Range:	$\pm$ 120 kHz
Sensitivity:	2 $\mu$ V at 12 dB Sinad with squelch defeated
Input Overload:	20 mV
Frequency Response:	100 - 15 kHz, $\pm$ 3 dB
Signal-to-Noise Ratio:	65 dB at 10 $\mu$ V
Receive Antenna:	Integral with earphone/headphone cord
Audio Output:	35 mW, max. at 16 $\Omega$
Output Connector:	3.5 mm mono phone jack
Earphone:	Earbud-type with foam cushion, 3.5 mm plug, 32 $\Omega$
Notes:	The R35 Receiver can be field tuned to any of 10 wideband channels using the PLT 005 Tuning Tool.
Warranty:	Five Years, Parts and Labor. 90 days on cords, earphones, headphones, batteries and other accessories



R35 Top



R35 Front

\* FCC Rules limit the use of the 72-76 MHz band to hearing assistance for the handicapped only.

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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 10 wideband and 7 non-standard 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 +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 a "on" indicator and power button.

#### Rear Panel:

The PPA T35 shall be powered by 24VAC power supply via a 3-pin Molex® connector. It shall have a 75 ohm F-connector antenna. It shall have a "rubber duckie" 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 approval and be powered by UL and CSA power supply. It shall have a 5 year parts and labor warranty. 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 R35 Receiver

The R35 receiver shall be encased in a gray, polycarbonate impact-resistant plastic with a hinged door for battery installation. The receiver shall be a body-pack type and include a detachable belt-clip for hands-free operation. The receiver shall have a 3.5 mm mono phone jack and accommodate low-impedance mono earphones, headphones, and neckloops telecoil couplers. The receiver shall have a combination volume control and power on/off rotator dial, and a green LED power "on" indicator. The LED power "on" indicator shall illuminate red to indicate low battery power. There shall be a screwdriver adjustable tuning pot accessible through the battery door. There shall be a slide selection switch located through the battery door for choosing Alkaline or NiMH battery operation. There shall be drop-in charger contacts on the bottom of the receiver unit. The receiver shall be pre-tuned to one of 10 available channels from 72-76 MHz and field adjustable by internal tuning coil. The receiver shall operate up to approx. 80 hours when using 1.5 V AA Alkaline batteries, and shall operate up to approx. 50 hours when using 1.5 V NiMH rechargeable AA batteries.

The receiver shall receive FM signals in the 72-76 MHz audio assistance band with 75  $\mu$ S de-emphasis. The receiver shall provide a maximum output of 35 mW at 16 Ohms with an earbud-type earphone. The system's electrical frequency response shall be 100 Hz to 15 kHz,  $\pm$  3 dB and the signal to noise ratio shall be 65 dB at 10  $\mu$ V. The receiver shall have a sensitivity of 2 $\mu$ V at 12 dB Sinad.

The receiver shall be covered by a five years parts and labor warranty, excluding earphones, headphones, batteries, and chargers. The receiver model shall be the Williams Sound Corp. model PPA R35.

