

# Personal PA<sup>®</sup> FM Listening System, Model PPA 575

## Description:

The T35 transmitter features 77 narrowband and 10 wideband channels for maximum reduction of outside radio interference. With easy to use push-button controls, powerful microprocessor, the T35 champions the next generation of hearing assistance technology. Quickly choose between Music, Voice or Hearing Assistance in the Application Presets Menu and take the guess work out of complex audio installation. The PPA 575 has a range of up to 1000 ft to accommodate all your large-area coverage needs. The PPA 575 system comes complete with four (4) R19 narrowband FM receivers with EAR 013 earphones and batteries.

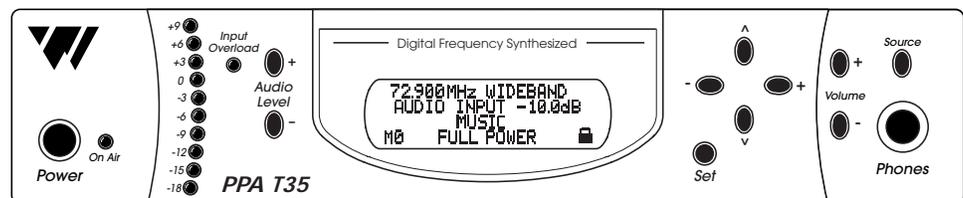
## Applications:

• Churches • Schools • Auditoriums • Conference Rooms • Theaters

### 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>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: ± 5 kHz 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>	74 dB transmitted

### T35 Front Panel

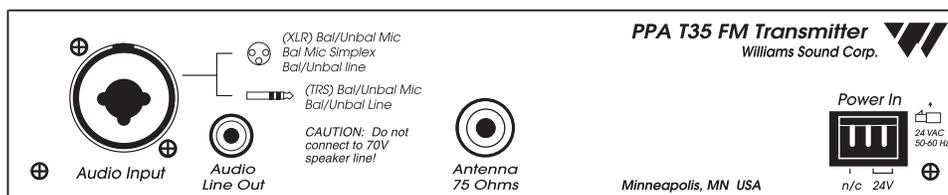


<b>Audio Level Control:</b>	Push-button audio level controls, adjustable from 0 to -50 dB
<b>Audio Level Indicators:</b>	10 LED array that reads +9 to -18 at 3 dB intervals
<b>Power On Indicator:</b>	Green LED indicates power on
<b>Phones Output:</b>	Mono signal, 1/4" TRS stereo jack, 67 mW, maximum 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

NOTE: SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE!

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## T35 Rear Panel



### INPUT LEVELS (Bal or Unbal):

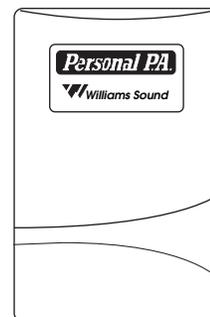
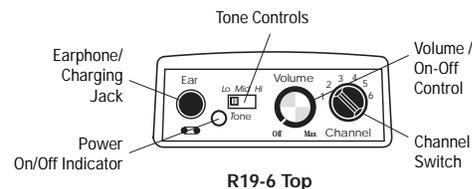
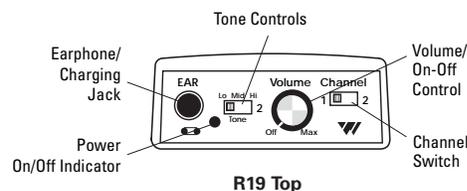
	Nominal (1st Amber LED)	Maximum (Input Overload LED)	Absolute Maximum Ratings*
Microphone Simplex-Mic:	-60 dBV (1mVRMS)	-20 dBV (100 mVRMS)	+20 dBV (10.0VRMS)
Line:	-8 dBV (400mVRMS)	+16 dBV (6.3 VRMS)	+20 dBV (10.0VRMS)
Simplex Mode:	12 volts simplex power (DIN 45596) on the 3-pin XLR connector		
RF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

\*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 R19 Receiver:

Model PPA R19:	2-Channel, pre-tuned, selectable CH 33 (72.9 MHz), CH 53 (75.7 MHz) standard 10 channels available (72.1-75.9 MHz)
Model PPA R19-6:	6-Channel, pre-tuned, selectable CH 13 (72.1 MHz), CH 23 (72.5 MHz), CH 33 (72.9 MHz), CH 53 (75.7 MHz), CH 38 (74.7 MHz), CH 43 (75.3 MHz)
Dimensions:	3-5/8" L x 2-3/8" W x 7/8" H (92.1 mm x 60.3 mm x 22.2 mm)
Weight:	3.2 oz (90 g) with battery
Color:	Neptune Blue
Battery Type:	(2) BAT 001 AA Alkaline or (2) BAT 026 NiMH
Battery Drain:	20 mA, nominal
Battery Life:	90-100 hrs with 2 AA Alkaline, 45-50 hrs/charge with BAT 026
Operating Freq:	Crystal controlled. See factory for frequency changing instructions.
Intermediate Freqs:	10.7 MHz, 455 kHz
FCC ID:	CNMR19
Earphone:	Earbud-type with foam cushion, 3.5 mm plug, 32 Ω
Output Connector:	3.5 mm mini phone jack
FM Deviation:	Narrow-band, 5 kHz
De-Emphasis:	300 μS
Sensitivity:	0.7 μV at 12 dB Sinad
Squelch Level:	4 μV for minimum 40 dB S/N ratio
Frequency Response:	100 - 5 kHz, ± 3 dB (Tone: Lo)
Receiver Antenna:	Integral with earphone cord
Signal-to-Noise Ratio:	50 dB
Audio Output:	35 mW, max. at 16 Ω (Tone: Lo; 3 VDC Bat.)
Acoustic Output:	125 dB Max SSPL90 with EAR 013
<b>CONTROLS</b>	
Tone:	Switched Low-Cut. Lo: 20 Hz / Mid: 120 Hz / Hi: 700 Hz
Volume & On/Off:	Combination, integral
Channel Selector:	PPA R19: 2-position, slide switch PPA R19-6: 6-position, rotary switch
Warranty:	5 years (90 days on accessories)



R19 / R19-6  
Front View

# Personal PA<sup>®</sup> FM Listening System, Model PPA 575

## 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 3 dB 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 24 VAC power supply via a 3-pin Molex<sup>®</sup> 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 five-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 Corp. model number PPA T35.

### PPA R19 or R19-6 Receiver

The receiver shall be encased in a blue, polypropylene impact-resistant plastic with a single hinged door for battery installation. The receiver shall be a body-pack type and have the option for a belt-clip case 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 receiver shall be crystal controlled to reduce frequency drifting. The R19 receiver shall have 10 available channels: Two channels shall be selectable by a 2-position slide switch and pre-tuned from 72-76 MHz. The R19-6 receiver shall have six channels pre-tuned from 72-76 MHz and adjustable by a channel rotary dial. The receiver shall have an adjustable 3-position tone control switch to select Low (20 Hz), Mid (120 Hz), or Hi (700 Hz) operation. The receiver shall operate up to approx. 100 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 300  $\mu$ 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 5 kHz,  $\pm$  3 dB and the signal-to-noise ratio shall be 50 dB at 10  $\mu$ V. The receiver shall have a sensitivity of 0.7  $\mu$ V at 12 dB Sinad.

The receiver shall be covered by a five-year parts and labor warranty, excluding earphones, headphones, batteries and chargers. The receiver model shall be the Williams Sound Corp. model PPA R19 or model PPA R19-6 receiver model shall be the Williams Sound Corp. model PPA R30.

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## Contact:

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