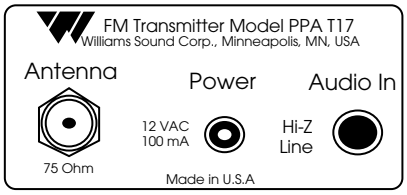
Personal PA® Value Pack System

Description:
The Personal PA® Value Pack System: The FM listening system priced to meet your budgetary needs! The FM system broadcasts to listeners directly from the sound source, helping them overcome background noise, reverberation, and distance from the sound source. Each system includes a T17 transmitter and four R7 receivers.

PPA T17 Transmitter

Dimensions:	3.25" W x 6.875" L x 1.75" H (82.5 mm x 174.6 mm x 44.5 mm)
Weight:	13 oz., 368.5 g
Color:	Black epoxy paint with white legends
Power (U.S./Canada):	105-130 VAC, 50-60 Hz, 0.5 W with TFP 008 power supply
Operating Freq's*:	CH A (72.1 MHz), CH B (72.3 MHz), CH C (72.5 MHz), CH D (72.7 MHz), CH E (72.9 MHz) CH F (75.5 MHz), CH G (75.7MHz), CH H (75.9MHz), CH I (74.7 MHz), CH J (75.3 MHz) CH E (72.9 MHz) is standard
Frequency Selector:	Internal switches, 10 channels
RF Field Strength:	8000 µV/m at 30 m Max., 20 mW typical
Nominal Range:	300–500 feet (90–150 m)
Modulation:	75 kHz (wide–band) max.
Stability:	± .005% over 0-50˚C
Pre-Emphasis:	75 µS
Frequency Response:	100 Hz - 15 kHz, ± 3 dB with PPA R7 Receiver
Signal to Noise Ratio:	55–60 dB with R7 Receiver
Distortion:	1% Max. THD
Audio Processor:	Fast-attack, fast decay compressor
Operating Requirements:	0-50°C ambient temperature, non-condensing, non-corrosive atmosphere
Approvals:	FCC, DOC
FCC ID:	CNMT17
Warranty:	5 Years, parts and labor
***Note:**	FCC Rules limit the use of the 72–76 MHz band to auditory assistance for the handicapped. Specific transmitter model names contain a frequency code. For example, Model T17E is preset to channel E, 72.9 MHz.

PPA T17 Front Panel



Mic Input:	3.5 mm mini phone jack for use with Williams Sound condenser microphones. Supplies +DC power for condenser/electret microphones.
Mic Input Level:	1–10 mV, nominal
Level Control:	Rotary potentiometer, Screwdriver-adjust control used to set the microphone input level or the audio input level.
Audio Indicator Light:	Yellow LED, Flashes when audio signal is present.

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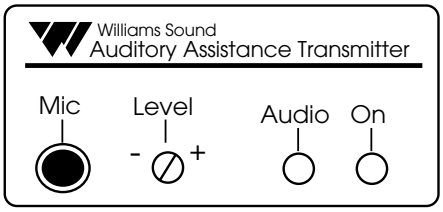
ON Indicator Light:	Green LED, Glows when power is applied to the transmitter. There is no on/off switch. The T17 is designed to be left on continuously.

PPA T17 Rear Panel



Line-Level Input:	RCA Jack, Hi Z, unbalanced, 100 KΩ input impedance
Line Input Level:	100 mV min. to 1.0 V max., .5 Vrms nominal
Antenna Output Connector:	This connector is defeated, as specified by FCC Rules. To use the ANT 005 remote antenna, contact your dealer or Williams Sound.
Antenna Outputs:	Thread Mount for "rubber duckie" flexible whip antenna, optional 75 Ω Coaxial Antenna (ANT 005) uses RG-59 cable, 400 ft. (140 m) max. cable length
Antenna Mounting Stud: (Top Panel)	For use with the "rubber duckie" type antenna supplied.
Power Input Jack:	Connects to the plug on the wall transformer power supply 12 VAC, 100 mA

PPA Receivers: Model R7, Model R7-4

Model R7:	Single channel, Pre-Tuned, Adjustable (72.9 MHz standard) 10 Channels Available (72.1-75.9 MHz)
Model R7–4:	4-Channel, Pre-Tuned, Selectable CH A (72.1 MHz), CH C (72.5 MHz), CH E (72.9 MHz), CH G (75.7 MHz) (OR) CH B (72.3 MHz), CH D (72.7 MHz), CH F (75.5 MHz), CH H (75.9 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:	Gray
Battery Type:	9 Volt, Eveready 216 Carbon, Eveready 522 Alkaline, or BAT 003 Ni-Cad Rechargeable
Battery Drain:	14 mA, nominal
Battery Life:	32 hours with Eveready 522, 6 hours/charge with BAT 003
FCC ID:	CNM R7Y, CNM R74Y
Operating Frequencies:	Pre-Tuned, Adjustable, 72 MHz–76 MHz
Intermediate Freq.:	75 kHz
FM Deviation:	75 kHz
De-Emphasis:	75 µS
AFC Range:	± 300 kHz
Sensitivity:	2 µV at 12 dB Sinad with squelch defeated
Squelch:	Squelches at 10 µV for minimum 50 dB S/N ratio
Input Overload:	20 mV
Frequency Response:	100–10 kHz, ± 3 dB
Signal-to-Noise Ratio:	50 dB at 10 µV
Receive Antenna:	Integral with earphone/headphone cord
Audio Output:	250 mW, max. at 16 Ohms

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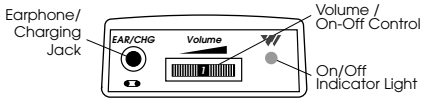
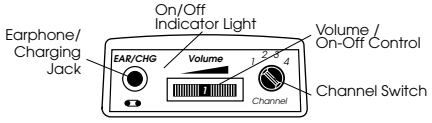
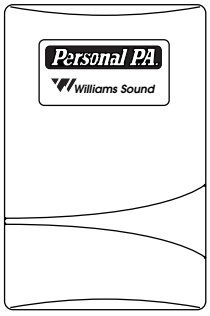
Output Connector:	3.5 mm mini phone jack, also serves as a charging jack for rechargeable battery
Earphone:	Earbud-type with foam cushion, 3.5 mm plug, 32 Ω (Other styles available)
R7-4 Channel Selector:	4–position, rotary switch
***Note:**	Specific receiver model numbers contain a frequency code. For example, Model R7E is preset to channel E (72.9 MHz).



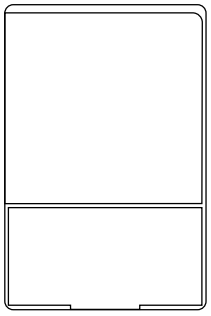
R7 Top



R7-4 Top



R7/R7-4 Front


R7/R7-4 Rear

Bid Specs

T17 Transmitter

The FM transmitter shall be contained in a black, rack-mountable, metal enclosure. A rack panel shall be available to mount up to four transmitters within a single EIA rack space.

The transmitter shall provide single-channel operations at the following frequencies, selectable by internal switches: 72.1, 72.3, 72.5, 72.7, 72.9, 75.5, 75.7, 75.9, 74.7, or 75.3 Mhz. Frequency modulation shall be no more than 75 kHz. Frequency stability shall be ± .005% over 0-50°C. Pre-emphasis shall be 75 µS. Frequency response shall be 100 Hz – 15 kHz ±3 dB, with a maximum distortion of 1% THD. The signal to noise ratio shall be 55–60 dB as measured with a PPA R7 Receiver. The transmitter shall provide a nominal range of 300–500 feet (90–150 m), with a maximum RF field strength of 8000 µV per meter at 30 meters, 20 mW typical.

The transmitter shall have a microphone input and line–level input. The microphone input shall be a 3.5mm mini phone jack supplying positive DC power for electret mics. The mic input level shall be 1–10 mV, nominal. The line-level input shall be a HiZ, unbalanced RCA jack with an input level of 0.1–1 Vrms, nominal. The transmitter shall have a pot–style, screwdriveradjustable input attenuator. The transmitter shall have two antenna outputs. The first shall be a thread mount for a "rubber duckie" flexible whip antenna. The second shall be a thread mount for an optional 75 1/2 coaxial antenna using RG-59 cable. The maximum cable length of the optional coaxial antenna shall be no more than 400 ft. (140 m). The transmitter shall be powered by an external 105-130 VAC, 50-60 Hz, .5 W power supply, connected via a concentric DC plug. The transmitter should not have a power switch. The transmitter shall have a LED lamp to indicate "power on." The

transmitter shall also have a LED lamp to indicate the presence of an audio signal. The transmitter shall carry a five year parts and labor warranty. The transmitter shall be the Williams Sound Corp. Model PPA T17.

R7 or R7-4 Receiver

The receiver shall be housed in an impact resistant plastic case with a hinged battery door that does not separate from the receiver. The receivers shall be a body-pack type and include 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 neckloop telecoil couplers. The 3.5 mm phone jack shall also serve as a charging jack for rechargeable batteries.

Receiver frequencies shall be pre-tuned and adjustable by means of an internal tuning coil. A four-channel receiver model shall be available for use with the system.

The receivers shall receive FM signals in the 72–79 MHz Audio Assistance band with 75 µS de-emphasis. The receivers shall provide a maximum output of 250 mW at 16 Ohms with an earbud-type earphone. The system electrical frequency response shall be 100 Hz to 10 kHz, ±3 dB and the signal to noise ratio shall be 50 dB at 10 µV.

The receiver shall be covered by a five year parts and labor warranty, excluding earphones, headphones, batteries, and chargers. The receiver model shall be either the Williams Sound Corp. Model PPA R7 or Model PPA R7-4.

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