

# PFM 330 RCH

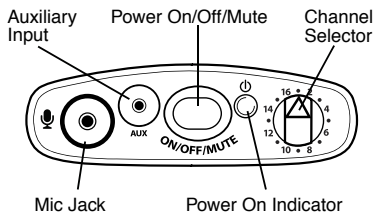
Motiva® Personal FM System



Maximize a student's ability to listen with the Motiva® PFM 330 RCH from Williams Sound. Personal FM systems eliminate background noise and other distractions, and ensure that the speaker's message is heard by everyone in the room. It's perfect for classrooms, job training, consultation and more. Portable, no wire, no hassle. Each PFM 330 RCH system has a range of up to 150 feet, and will operate up to 21 hours at one time. Versatile 3.5 mm jack allows for a variety of earphone and headphone options, or equipped with a neckloop and it is compatible with most telecoil-equipped hearing aids. The T36 transmitter has an additional auxiliary input feature allowing the user to add another audio source i.e. MP3 or CD player, into the system. This gives the user the ability to mix that auxiliary input with the microphone input. Each PFM 330 RCH includes a CHG 3502 drop-in style charger for charging up to (4) AA BAT 026 batteries (included

# Motiva® Personal FM System

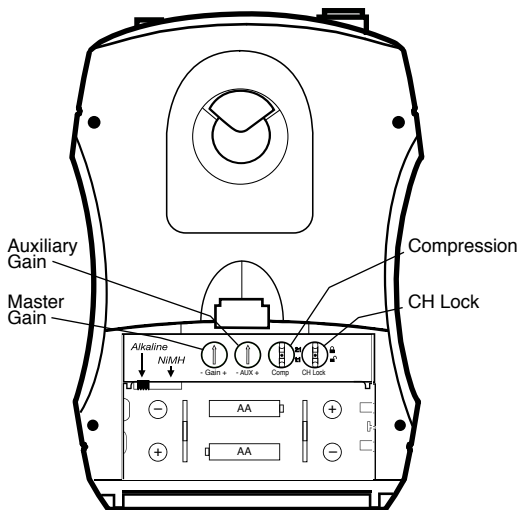
## PFM T36 FM Transmitter:



**T36 Top**



**T36 Front**



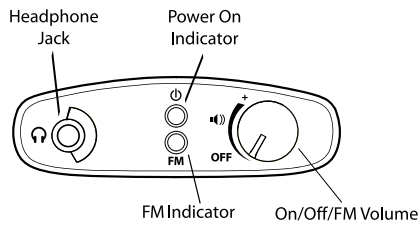
**T36 Batt Comp/Controls**

<b>Dimensions:</b>	4.1" L x 2.8" W x 1.1" H (104 mm x 71 mm x 28 mm)
<b>Weight:</b>	2.6 oz (74 g), no batteries
<b>Housing Material:</b>	Shatter-resistant PC/ABS plastic
<b>Battery Type:</b>	Two (2) AA 1.5 V non-rechargeable Alkaline batteries (BAT 001), 70 mA nominal current drain, 30 hours approx. life or Two (2) AA 1.5 V NiMH rechargeable batteries (BAT 026), 70 mA nominal current drain, 20 hours per charge approx., recharges in 14-16 hours, uses CHG 3502 or CHG 3512 Charger
<b>Operating Freq's:</b>	Selectable, 16 channels, 72.1 – 75.9 MHz* (channels 1-8 correspond with R35-8 receiver channels) PPA R1600
<b>Stability:</b>	± .005%, frequency synthesized, crystal reference, PLL
<b>Modulation:</b>	Wide-band FM, 75 kHz pk, 75 µs pre-emphasis
<b>RF Output:</b>	80 mV/m at 3 m (max. allowed by FCC rules)
<b>Freq Response:</b>	200 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 phone plug
<b>External Controls:</b>	Momentary push button: push and hold 3 seconds for power On/Off, push and release for microphone mute On/Off; Rotary sixteen channel switch (with internal channel lock switch)
<b>Mic Input:</b>	3.5 mm mono phone jack with electret mic bias, internal adjustable master gain with 25 dB range
<b>Aux Input:</b>	2.5 mm stereo phone jack, internal adjustable gain with 60 dB range
<b>Audio Compression:</b>	1:1 or 2:1 ratio selected with internal slide switch
<b>Compatible Receivers:</b>	PFM R33, PFM R36, PPA R37, PPA R35-8, PPA R1600
<b>Approvals/Directives:</b>	FCC, Industry Canada, RoHS, WEEE
<b>Warranty:</b>	5 years, parts and labor (90 days on accessories)

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

# Motiva® Personal FM System

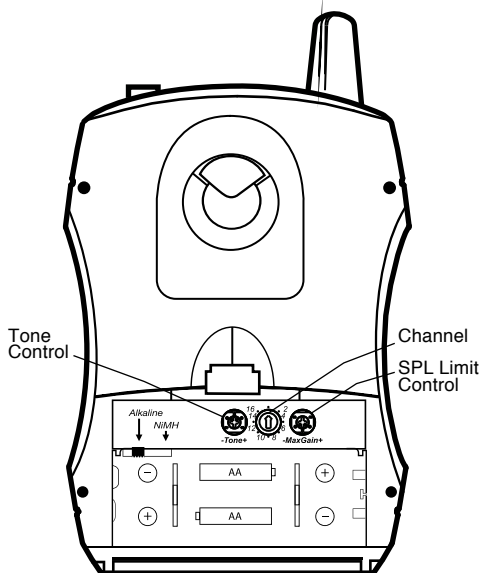
## PFM R33 FM Receiver:



**R33 Top**



**R33 Front**



**R33 Batt Comp/Controls**

<b>Dimensions:</b>	4.6" L x 2.8" W x 1.1" H (116 mm x 71 mm x 28 mm)
<b>Weight:</b>	3.4 oz (96 g), no batteries
<b>Color:</b>	Titanium and Black
<b>Housing Material:</b>	Shatter-resistant PC/ABS plastic
<b>Battery Type:</b>	Two (2) AA 1.5 V non-rechargeable Alkaline batteries (BAT 001), 70 mA nominal current drain, approximately 21 hours life, or Two (2) AA 1.5 V NiMH rechargeable batteries (BAT 026), 70 mA nominal current drain, approximately 17 hours per charge, recharges in 14-16 hours, uses CHG 3502 or CHG 3512 Charger.
<b>Operating Frequencies:</b>	Selectable, 16 channels, 72.1 - 75.9 MHz*
<b>FM Deviation:</b>	± 75 kHz max synthesized, crystal reference, PLL
<b>Sensitivity:</b>	2.5 µV at 12 dB Sinad with Squelch defeated.
<b>Freq Response:</b>	200 Hz to 12 kHz, -3 dB
<b>Signal-to-Noise Ratio:</b>	62 dB at 100 µV
<b>Receive Antenna:</b>	Integral with earphone/headphone cord
<b>External Controls:</b>	FM Volume: Rotary control with on/off switch
<b>Internal Controls</b>	Tone: Rotary control
	Channel: 16 position rotary switch
	Output (SPL) Limit: Rotary control
	Squelch: rotary control
<b>Indicators:</b>	On/off/low battery and FM LED's
<b>Audio Output:</b>	Stereo jack produces 30 mW, max at 16 Ohm, can be reduced by internal SPL limit control up to 17 dB
<b>Approvals/Directives:</b>	FCC, Industry Canada, RoHS, WEEE
<b>Warranty:</b>	5 years, parts and labor (90 days on accessories)

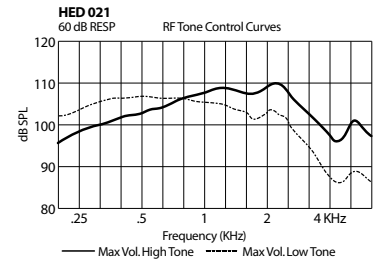
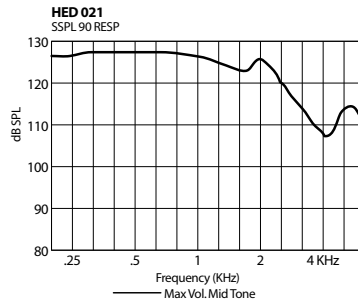
**NOTE: SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE!**

## Acoustic Specifications: Typical Values (ANSI S3.22-1987)

R33 System Data: (With T36 Transmitter and Mic 090)

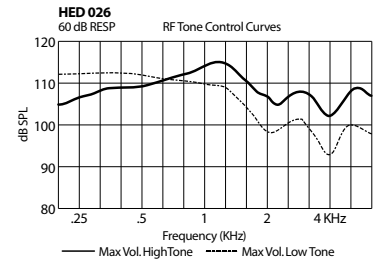
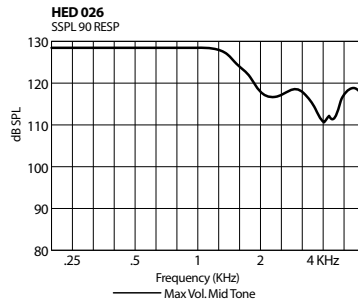
### Lightweight headphone, HED 021: (with 6cc coupler)

Test	Tone High	Tone Mid	Tone Low
SSPL90	127.0dB	128.0dB	129.4dB
HF Ave (SSPL90)	124.2dB	124.2dB	124.2dB
HF Ave full on gain (60 dB)	48.6dB	46.5dB	43.8dB
Ref test gain	47.2dB	46.5dB	43.7dB
% THD: 500 Hz	2.2%	2.0%	1.2%
800 Hz	1.1dB	0.5dB	0.3dB
1600 Hz	0.7dB	0.3dB	0.2dB



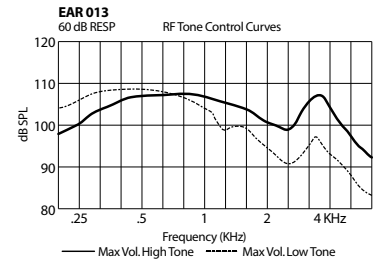
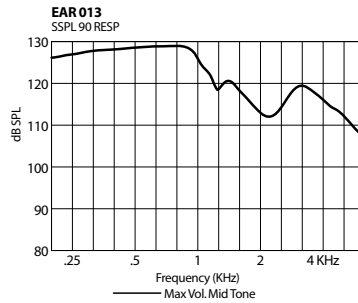
### Wide range headphone, HED 026: (with 6cc coupler)

Test	Tone High	Tone Mid	Tone Low
SSPL90	130.1dB	130.3dB	130.4dB
HF Ave (SSPL90)	124.5dB	124.6dB	124.7dB
HF Ave full on gain (60 dB)	50.3dB	48.5dB	45.5dB
Ref test gain	47.5dB	47.6dB	45.5dB
% THD: 500 Hz	3.4%	2.5%	1.6%
800 Hz	2.2dB	1.3dB	0.6dB
1600 Hz	0.7dB	0.6dB	0.7dB



### Mini earphone single, EAR 013: (with 2cc coupler)

Test	Tone High	Tone Mid	Tone Low
SSPL90	128.1dB	128.8dB	128.9dB
HF Ave (SSPL90)	119.1dB	119.2dB	119.1dB
HF Ave full on gain (60 dB)	42.5dB	40.0dB	37.7dB
Ref test gain	42.1dB	40.0dB	37.6dB
% THD: 500 Hz	1.9%	1.2%	1.1%
800 Hz	1.4dB	0.6dB	0.5dB
1600 Hz	1.3dB	0.4dB	0.4dB



## Bid Specs

### PFM T36

The PFM T36 is a wide band body-pack transmitter and shall operate on 16 selectable frequencies between 72MHz and 76MHz. It shall operate for up to 30 hrs with two AA Alkaline batteries and shall be housed in a titanium colored PC/ABS plastic enclosure. The T36 shall have a 3.5 mm microphone jack and a 2.5 mm auxiliary audio input jack. The T36 shall have access to channel select, compression on/off, channel lock, master gain and aux gain inside the battery compartment. There shall be a power switch which also serves as a microphone mute control on the top bezel of the transmitter.

The T36 shall have wide band modulation at 75KHz peak with a frequency response of 200Hz to 16KHz. The transmitting antenna shall be integrated into the 40 inch microphone cable.

The PFM T36 shall be covered under a five year parts and labor warranty. This transmitter shall be the Williams Sound PFM T36.

### PFM R33

The Williams Sound PFM R33 shall be a wideband sixteen channel synthesized FM receiver operating on 72MHz to 76MHz. It shall be housed in a titanium colored PC/ABS plastic enclosure 4.6" x 1.1" x 2.8" and be compatible with the CHG 3502 and CHG3512 chargers.

The R33 shall be powered by two AA batteries and shall run for 21 hours on two alkaline disposable batteries and seventeen hours on the Williams Sound BAT 026 rechargeable batteries.

The R33 shall have the antenna integrated into the headphone cord. The top bezel shall have a 3.5mm stereo jack that can drive both stereo and mono headphones, a rotary on/off volume control and have a power LED and an FM indication LED.

Inside the battery compartment there shall be a rotary tone control, a sixteen position channel selector, an Alkaline or NiMH switch to select for charging operation and an output control which can reduce the maximum output by up to 17dB.

The R33 shall be FCC, Industry Canada and RoHS compliant and shall have a five-year warranty; charger 90 days. The PFM 330 RCH shall include a 2-bay charger CHG 3502 and (4) rechargeable batteries (BAT 026).

This receiver shall be the Williams Sound PFM R33.

### 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)  
Web: [www.williamssound.com](http://www.williamssound.com)



**WILLIAMS SOUND®**  
HELPING PEOPLE HEAR

800.843.3544 / [info@williamssound.com](mailto:info@williamssound.com) / [www.williamssound.com](http://www.williamssound.com)