

# Hearing Helper® Personal FM System, Model PFM 350

## Description:

Maximize a student's ability to listen with the Personal FM System 350 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 350 system has a range of up to 150 feet, and will operate up to 60 hours at one time. Versatile 3.5 mm jack allow for a variety of earphone and headphone options, or equip it with a neckloop and it is compatible with most telecoil-equipped hearing aids.

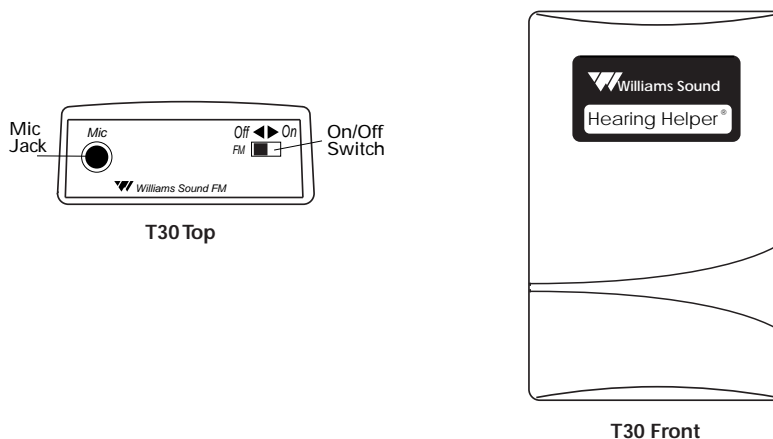
The PFM 350 includes an R31 receiver, which features a sensitive environmental microphone: this gives the listener more flexibility on what they want to hear. By turning on the environmental mic, they can listen to a nearby classmate speak more clearly.

## Applications:

- Classrooms • Job Consultation • Job Training • Tours • Group Meetings

### PFM T30 FM Transmitter

<b>Dimensions:</b>	3-5/8" L x 2-3/8" W x 7/8" H (92.1 mm x 60.3 mm x 22.2 mm)
<b>Weight:</b>	4.4 oz (125 g) with battery
<b>Color:</b>	Royal blue, shatter-resistant polypropylene
<b>Battery Type:</b>	Two (2) AA 1.5 V non-rechargeable Alkaline batteries (BAT 001), 70 mA nominal current drain, 12 hours approx. life (OR) Two (2) AA 1.5 V NiMH rechargeable batteries (BAT 026), 70 mA nominal current drain, 10 hours per charge approx., recharges in 14–16 hours, uses CHG 200 Charger
<b>Operating Freq's:</b>	Selectable, 10 channels, 72.1 – 75.9 MHz, internal DIP switch
<b>Stability:</b>	+ .005%, frequency synthesized, crystal reference, PLL
<b>Modulation:</b>	Wide-band FM, 75 kHz, 75 µS pre-emphasis
<b>RF Output:</b>	8000 µV/m at 30 m, max., 40 mW typical
<b>FCC ID:</b>	CNM T30
<b>Freq Response:</b>	100 to 10 kHz, + 3 dB at 1% max. THD
<b>Signal-to-Noise Ratio:</b>	55 - 60 dB, with R31 or R32 Receiver
<b>Auto Gain Control:</b>	40 dB range, 30 mV threshold
<b>Transmit Antenna:</b>	Integral with 39" microphone cord
<b>Microphone:</b>	Omnidirectional condenser, Lavalier-type, 39" cord, 3.5 mm mono phone plug (MIC 081)
<b>Controls:</b>	On/Off switch, slide-type
<b>Mic Connector:</b>	3.5 mm mono phone jack
<b>Warranty:</b>	5 years, parts and labor (90 days on accessories)

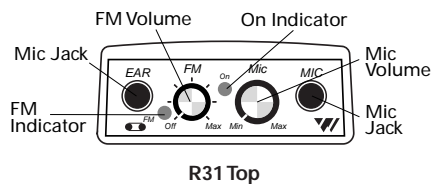


NOTE: SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE!

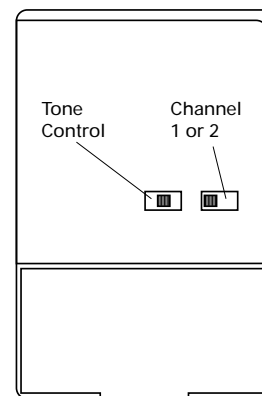
# Hearing Helper® Personal FM System, Model PFM 350

## PFM R31 FM Receiver:

<b>Dimensions:</b>	3-5/8" L x 2-3/8" W x 7/8" H (92.1 mm x 60.3 mm x 22.2 mm)
<b>Weight:</b>	4.6 oz (130 g) with batteries
<b>Color:</b>	Royal blue, shatter-resistant polypropylene
<b>Battery Type:</b>	Two (2) AA 1.5 V non-rechargeable Alkaline batteries (BAT 001), 14 mA nom. current drain, 80 hours approx. life (OR) Two (2) AA 1.5 V NiMH rechargeable batteries (BAT 026), 14 mA nominal current drain, 50 hours per charge approx., recharges in 14–16 hours, uses CHG 200 Charger
<b>FCC ID:</b>	CNM R31
<b>Operating Freq's:</b>	Pre-tuned, field-tuneable, 72 MHz - 76 MHz. Pre-set channels are E (72.9 MHz) and G (75.7 MHz).
<b>FM Deviation:</b>	Wide-band, 75 kHz, 75 µS de-emphasis
<b>AFC Range:</b>	± 120 kHz
<b>Sensitivity:</b>	4 µV at 12 dB Sinad with squelch defeated, squelches at 10 µV for min. 50 dB S/N ratio
<b>Freq Response:</b>	100 to 10 kHz, + 3 dB
<b>Signal-to-Noise Ratio:</b>	50 dB at 10 uV
<b>Receive Antenna:</b>	Integral with earphone cord
<b>Audio Output:</b>	35 mW, max. at 16 Ω
<b>Output Connector:</b>	3.5 mm mono phone jack
<b>Squelch:</b>	Set to turn off audio under weak or no signal condition
<b>Carrier Detect Ind:</b>	Red LED, turns on in the presence of a carrier
<b>CONTROLS:</b>	
<b>Volume:</b>	Rotary, On/Off/Volume
<b>Tone:</b>	3-way slide switch; Lo: flat response (20 Hz), Mid: -3 dB at 235 Hz, Hi: -3 dB at 730 Hz
<b>Channel:</b>	2-way slide switch; Ch 1 = 72.9 MHz, Ch 2 = 75.7 MHz
<b>Indicators:</b>	On/Off and FM
<b>Mic Connector:</b>	3.5 mm mono phone jack, supplies positive DC for Williams Sound electret mics
<b>Microphone:</b>	Plug mount electret, omnidirectional, with windscreen, 3.5 mm mono phone plug (MIC 014)
<b>Mic Volume:</b>	Rotary control
<b>Note:</b>	Specifications are electrical performance
<b>Warranty:</b>	5 years, parts and labor (90 days on accessories)



R31 Front

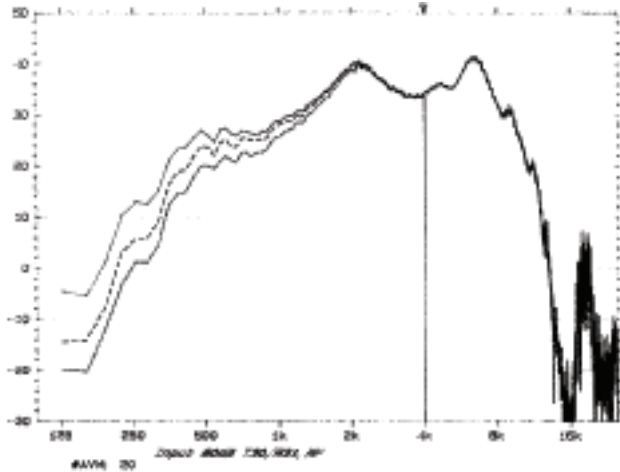


R31 Rear

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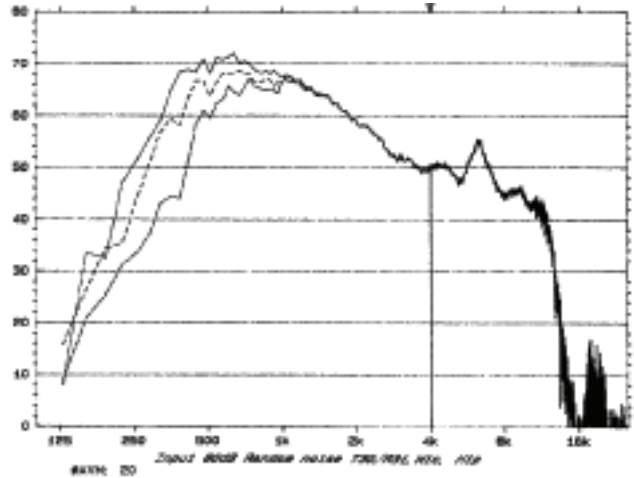
## Acoustic Specifications:

### ANSI 2.44 Test



#### FM Response (PFM R31)

Input:	80 dB random noise		
Device:	KEMAR mannequin with BTK 3550 tester		
Y:	80.0 dB	80 db	Main Y: 34.1 dB
X:	100 Hz + 8 OCT LOG	Main X:	4 kHz



#### Environmental Mic Response (PFM R31)

Input:	80 dB random noise		
Device:	KEMAR mannequin with BTK 3550 tester		
Y:	80.0 dB	80 db	Main Y: 50.2 dB
X:	100 Hz + 8 OCT LOG	Main X:	4 kHz

### ANSI S3.22-1987 Test

#### FM Response (PFM R31)

##### Minimum Low Cut (Tone Set to Low)

Max. SSPL90:	135.8 dB at 500 Hz
HF Avg. SSPL90:	127.1 dB
HF Avg. Full On Gain:	37.7 dB at 60 dB in
Reference Test Gain:	38.1 dB
Response Limit:	80.1 dB
	F1=200 Hz, F2=8 kHz
Total Harmonic Dist:	3.6 % at 500 Hz
	3.9 % at 800 Hz
	2.2 % at 1600 Hz

##### Medium Low Cut (Tone Set to Mid)

Max. SSPL90:	135.5 dB at 600 Hz
HF Avg. SSPL90:	127.1 dB
HF Avg. Full On Gain:	36.8 dB at 60 dB in
Reference Test Gain:	37.3 dB
Response Limit:	79.4 dB
	F1=200 Hz, F2=8 kHz
Total Harmonic Dist:	3.4 % at 500 Hz
	3.4 % at 800 Hz
	2.2 % at 1600 Hz

##### Maximum Low Cut (Tone Set to Hi)

Max. SSPL90:	133.5 dB at 1000 Hz
HF Avg. SSPL90:	127.0 dB
HF Avg. Full On Gain:	35.4 dB at 60 dB in
Reference Test Gain:	35.8 dB
Response Limit:	78.01 dB
	F1=200 Hz, F2=8 kHz
Total Harmonic Dist:	1.1 % at 500 Hz
	2.7 % at 800 Hz
	2.1 % at 1600 Hz

#### Environmental Mic Response (PFM R31)

##### No Tone Modification

Max. SSPL90:	134.8 dB at 500 Hz
HF Avg. SSPL90:	126.4 dB
HF Avg. Full On Gain:	40.9 dB at 60 dB in
Reference Test Gain:	40.8 dB
Response Limit:	81.1 dB
	F1=200 Hz, F2=8 kHz
Total Harmonic Dist:	1.1 % at 500 Hz
	1.1 % at 800 Hz
	0.3 % at 1600 Hz

NOTE: SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE!

# Hearing Helper<sup>®</sup> Personal FM System, Model PFM 350

## Bid Specs:

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Not Currently Available

## Contact:

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