

# PFM PRO/ PFM PRO RCH

## Personal FM Systems

The PFM PRO and rechargeable PFM PRO RCH deliver superior audio directly to the ear, enhancing sound at home, work, or school – anywhere background noise or distance from the source makes listening difficult. Each system features 17 selectable channels on the 72-76 MHz band and has an operating range of up to 150 feet. A versatile 3.5mm jack allows for a variety of earphones and headphone options, and is compatible with neckloops and telecoil-equipped hearing aids (not included with system).



PFM PRO



PFM PRO RCH

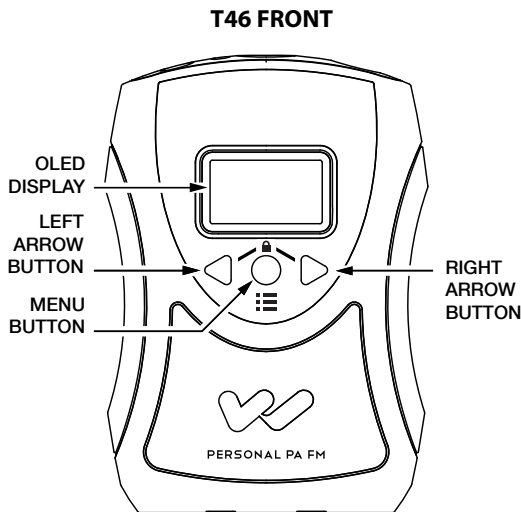
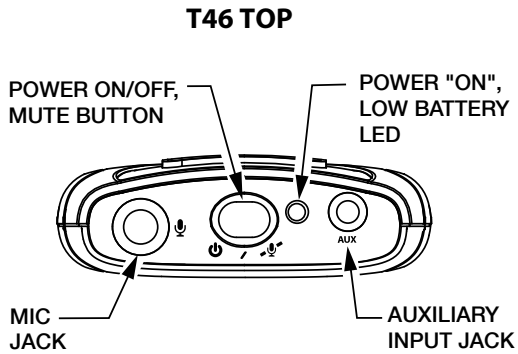
The **PFM PRO** system includes:

- (1) FM Body-pack Transmitter (PPA T46)
- (1) FM Body-pack Receiver (PPA R37)
- (1) Single Mini Earphone (EAR 041)
- (1) Folding Headphone (HED 021)
- (1) Audio Input Cable (WCA 087)
- (1) Lavalier Microphone (MIC 090)
- (2) AA Alkaline Batteries (BAT 001-2)
- (1) System Carry Case (CCS 043)

The **PFM PRO RCH** system includes the items in the PFM PRO, plus:

- (2) Rechargeable NiMH AA Batteries (BAT 026-2)  
(Replaces BAT 001-2)
- (1) Dual Drop-in Charger (CHG 3502)

## PPA T46 FM Transmitter:



<b>Dimensions:</b>	4.1" L x 2.8" W x 1.1" D (104 mm x 71 mm x 28 mm)
<b>Weight:</b>	2.6 oz (74 g), no batteries
<b>Color:</b>	Black/Silver
<b>Enclosure Material:</b>	Shatter-resistant PC/ABS plastic with textured scratch-resistant aluminum faceplate
<b>Battery Type options:</b>	Two (2) AA 1.5 V non-rechargeable Alkaline batteries (BAT 001-2), 75 mA nominal current drain, up to 30 hours battery life Two (2) AA 1.5 V NiMH rechargeable batteries (BAT 026-2), 75 mA nominal current drain, up to 20 hours battery life per charge, recharges in 14–16 hours, uses CHG 3502 or CHG 3512 Charger
<b>Operating Frequencies:</b>	Selectable, 17 channels, 72.1 – 75.9 MHz*. Switchable 8 or 17 Channel Mode. (8-channel mode setting corresponds with PPA R35-8 receiver channels)
<b>Stability:</b>	± .005%, frequency synthesized, crystal reference, PLL
<b>Modulation:</b>	Wide-band FM, 75 kHz peak, 75 µS pre-emphasis
<b>RF Output:</b>	80 mV/m at 3 m (max. allowed by FCC rules)
<b>Frequency Response:</b>	180 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 plug
<b>External Display:</b>	OLED for status and menu information. Status: Ch/Freq, Mic Audio Level, Auxiliary Input Audio Level, Battery Status, Mic Mute, Channel Lock, Dual-Preset mode. Menu: Ch/Freq display mode select, Volume, Aux Input, Compression, 17 or 8-channel mode, screen time out, screen brightness, restore default settings
<b>External Controls:</b>	Momentary push button: push and hold 3 seconds for power On/Off, push and release for microphone mute On/Off. "Up", "Down" and "Menu" buttons for accessing and changing transmitter settings. Battery type switch (Alkaline or NiMH) located behind the battery compartment door
<b>External Indicators:</b>	Power LED - Green, flashes when battery is low
<b>Mic Input:</b>	3.5 mm mono jack with electret mic bias, adjustable gain with 25 dB range
<b>Aux Input:</b>	2.5 mm stereo jack, adjustable gain with 60 dB range
<b>Audio Compression:</b>	1:1 (off) or 2:1 (on) selectable in menu
<b>Compatible Receivers:</b>	PFM R31, PFM R32, PFM R33, PFM R36, PPA R35, PPA R37, PPA R35-8, PPA R1600,
<b>Approvals/Directives:</b>	FCC, Industry Canada, RoHS, WEEE
<b>Warranty:</b>	Lifetime PLUS Limited Warranty, 90 Days on most accessories.

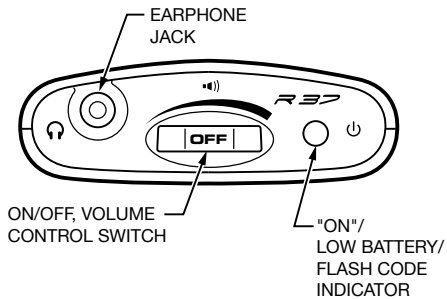
**NOTE: SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.**

**Note: FCC regulations, section 15.21, requires the user to comply with the rules of transmitter operation. Any changes or modifications made by the user not expressly approved for compliance may result in the loss of all privileges and authority to operate the equipment.**

**Note: Specifications subject to change without notice.**

**\*Disclaimer: FCC Rules limit use of this equipment to auditory assistance.**

## PPA R37 FM Receiver:



<b>Dimensions:</b>	4.1" x 2.85" x 1.38" (104 x 72 x 35mm)
<b>Weight:</b>	4.6oz (130g) with batteries. 2.6oz (73g) without batteries
<b>Color:</b>	Black
<b>Battery Type:</b>	(2) AA Alkaline or 2 x AA NiMH
<b>Battery Life:</b>	Two (2) AA non-rechargeable alkaline batteries (BAT 001), approx. 50 hrs (2) AA rechargeable NiMH batteries (BAT 026), 1500 mAh, approx. 32 hrs
<b>Current Consumption:</b>	52mA nominal
<b>Temperature Range:</b>	- 0 to 50C
<b>Channels</b>	17, accessed via seek button in battery compartment
<b>Operating Freq.:</b>	72.1, 72.2, 72.3, 72.4, 72.5, 72.6, 72.7, 72.8, 72.9, 74.7, 75.3, 75.4, 75.5, 75.6, 75.7, 75.8, 75.9 MHz*
<b>Intermediate Freq.:</b>	75 kHz
<b>FM Deviation:</b>	75 kHz
<b>De-Emphasis:</b>	75 $\mu$ S
<b>LED Indicator:</b>	Power: Green; Low Battery: Flashes Green
<b>AFC Range:</b>	$\pm$ 120 kHz
<b>Sensitivity:</b>	2 $\mu$ V at 12 dB Sinad with squelch defeated
<b>Input Overload:</b>	100 mV
<b>Frequency Response:</b>	200 - 15 kHz
<b>Modulation:</b>	FM, +/- 75 kHz peak deviation
<b>Signal-to-Noise Ratio:</b>	65 dB min @ 100 $\mu$ V
<b>Receive Antenna:</b>	Integral with earphone/headphone cord
<b>Audio Output:</b>	35 mW max, peak into 16 ohms
<b>Output Connector:</b>	3.5 mm stereo/mono phone jack
<b>Earphone:</b>	Earbud-type with foam cushion, 3.5 mm plug, 32 $\Omega$
<b>Auto Shut-off</b>	Enters sleep mode after approx 6 mins of no RF signal
<b>Approvals:</b>	FCC, Industry Canada, RoHS, WEEE
<b>Warranty:</b>	Lifetime PLUS Limited Warranty, 90 Days on most accessories.

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

This device complies with "RSS-Gen Issue 2 June 2007" for Industry Canada and FCC part 15.105[b] for the United States.

Operation is subject to the following two conditions: [1] this device may not cause interference, and [2] this device must accept any interference, including interference that may cause undesired operation of the device.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) This device may not cause interference, and (2) this device must accept any interference, including any interference that may cause undesired

## Architectural/Engineering Specifications:

### PPA T46

The PPA T46 is a wide-band body-pack transmitter and shall operate on 17 selectable frequencies between 72MHz and 76MHz. It shall operate for up to 30 hrs with two AA Alkaline batteries and be housed in a black plastic enclosure with an aluminum faceplate. It shall have battery recharge ability utilizing Williams Sound drop-in chargers.

The T46 shall have a 3.5 mm microphone jack and a 2.5 mm auxiliary audio input jack. The microphone cord will serve as the transmitting antenna. The T46 shall have three buttons on the front to access channel select, master and aux gain, compression on/off, channel lock and screen adjustments. There shall be an OLED screen on the front of the T46 displaying current operating status and menu information.

The T46 shall have the ability to operate in dual channel mode whereby the user can switch between two different transmitting channel presets, each with its own set-up parameters (channel, master volume, aux volume).

There shall be a power switch which also serves as a microphone mute control on the top bezel of the transmitter.

The T46 shall have wide band FM modulation at 75 KHz peak with a frequency response of 180 Hz to 13 KHz.

The PPA T46 shall be covered under a limited lifetime parts and labor warranty.

This transmitter shall be the Williams Sound model PPA T46.

### PPA R37

The PPA R37 receiver shall be encased in black, PC/ABS impact-resistant plastic with a hinged battery door. The receiver shall be a body-pack style and include a detachable belt-clip for hands-free operation. The receiver shall have a 3.5mm stereo/mono jack to accommodate stereo or mono low impedance earphones, headphones and neckloops. The receiver shall have a combination volume control with power on/off rotator dial. It shall have a green LED indicating battery and system status codes. The R37 shall have access to 17 preset wideband channels between 72-76MHz. Channel selection shall be made by pushing the seek button inside the battery compartment. The receiver shall have channel-lock capability.

The receiver shall have a slide switch inside the battery compartment to select disposable Alkaline or NiMH rechargeable battery operation. It shall have charger contacts on the bottom of the receiver for use with Williams Sound drop-in chargers CHG 3512 and CHG 3502. The R37 shall operate up to 50 hours with two disposable AA Alkaline batteries and up to 32 hours with two AA NiMH rechargeable batteries (BAT 026).

The receiver shall provide a maximum out of 35mW at 16 $\Omega$  with an earbud type earphone. The systems audio frequency response shall be 200Hz to 15kHz  $\pm$  3dB and the signal to noise ratio shall be 65dB min. The receiver sensitivity shall be 2 $\mu$ V or better at 12dB Sinad with squelch defeated. The R37 shall accept up to  $\pm$ 75kHz FM deviation and have a 75  $\mu$  s de-emphasis time constant.

The R37 shall have FCC, Industry Canada approvals and be compliant with RoHS and WEEE regulations. The receiver shall be covered by a Lifetime PLUS Limited Warranty, 90 Days on most accessories.

This receiver model shall be the Williams Sound model PPA R37.

#### 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-intl@williamssound.com](mailto:info-intl@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)