Hearing Helper™ Transmitter, Model PFM T32
Instructions For Use and Care

Thank you for purchasing the PFM T32 transmitter from Williams Sound. The T32 is designed to operate with a wideband FM, 72–76 MHz receiver. For more information on available receivers, contact Williams Sound at 800-843-3544. *How the system works:* The PFM T32 transmitter uses a microphone (not included) to pick up the desired sound source. The speaker talks into the microphone and the T32 transmitter broadcasts the message over an FM radio signal. Listeners wear FM receivers equipped with headphones to pickup the broadcast and hear the speaker's message.

Pacemaker Safety

CAUTION!

1. Before using this product with a pacemaker or other medical device, consult your physician or the manufacturer of your pacemaker or other medical device.
2. If you have a pacemaker or other medical device, make sure that you are using this product in accordance with safety guidelines established by your physician or the pacemaker manufacturer.

Battery Safety & Disposal

CAUTION!

Do not attempt to recharge disposable batteries, which may explode, release dangerous chemicals, cause burns, or other serious harm to the user or product.

Recycling Instructions

Help Williams Sound protect the environment! Please take the time to dispose of your equipment properly.

WILLIAMS SOUND®
Helping People Hear

Product Recycling:
Please do NOT dispose of your Williams Sound equipment in the household trash. Please take the equipment to a electronics recycling center; OR, return the product to the factory for proper disposal.

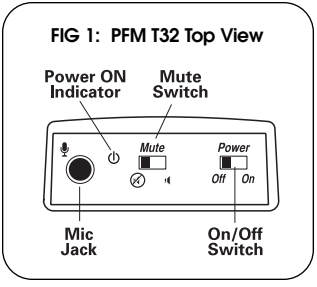
Battery Recycling:
Please do NOT dispose of used batteries in the household trash. Please take the batteries to a retail or community collection point for recycling.

1/16/07

Operating Instructions

1. Install two (2) AA batteries. If you're using rechargeable batteries, they must be charged before using.
2. Plug the microphone cord into the "Mic" jack on top of the transmitter.
3. Place the transmitter in the belt clip case provided.
4. Slide the Power Switch on top of the transmitter to "On." The Power ON LED indicator should illuminate Red.
5. The microphone should be placed as close to the speaker's mouth as is practical. For lapel mics, attach the microphone to a collar, lapel, or tie.

FIG 1: PFM T32 Top View



6. When you are ready to speak, turn the Mic Mute Switch (speaker icon) to the "On" position. When you are done speaking, mute the mic by turning the Mute Switch to the "Off" position (speaker icon with line through it).

The transmitter can be placed in a pants pocket, or clipped onto a belt or waistband.

Important: To conserve battery life, remember to turn the transmitter OFF when it is not in use.

Note On The Transmitter Antenna:
The microphone cord is the transmitting antenna. Do not bunch up the cord or wrap it around the

transmitter. For maximum range, the cord should hang as straight as possible.

Battery Instructions

This transmitter can use disposable AA batteries (alkaline or NiMH) or a Williams Sound rechargeable battery (BAT 026). We recommend using BAT 026 AA NiMH or BAT 001 AA Alkaline batteries. BAT 026 batteries will last about 20 hours per charge when used with Williams Sound transmitters. BAT 001 batteries will last approx. 30 hours when used with Williams Sound transmitters. Batteries from other suppliers may provide different operating life.

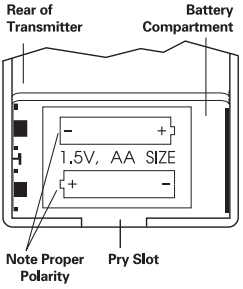
Low Battery Indicator
The power ON LED indicator will flash to indicate low battery. A soft pulsing sound may be heard on the receiver(s) being used.

Expected Battery Life

Alkaline batteries (BAT 001): 30 hrs.

Rechargeable NiMH Batteries (BAT 026): 20 hrs. per charge. Min. 14 hour recharge time.

FIG 2: T32 Battery Compartment



Installing and Replacing Batteries

1. Open the battery compartment by lifting the tab on the bottom of the transmitter with a coin or finger.
2. To remove depleted batteries, pull up on the fabric strip.
3. To install new batteries, press them into place over the fabric strip. Be sure to observe proper polarity (+/–).
4. Close the lid.
5. When the sound becomes weak or distorted, replace or recharge batteries. If recharging, use the Williams Sound CHG 200 Battery Charger.

Changing Frequencies

By default, the T32's frequency is to set 75.7 MHz (Channel G). If you experience FM interference, or if you need to match a receiver's frequency, it may be necessary to adjust the frequency on the T32. Instructions:

1. Open the battery compartment using a coin in the slot in the bottom of the transmitter. Remove the batteries.
2. Lift the battery compartment door up and pull to your left to expose the circuit board.
3. Refer to **FIG 4** to locate the Channel Switch.
4. Use a small screwdriver to rotate the Channel Switch to correspond with the desired operating frequency. Choose between 16 standard channels. Refer to the Channel Selection Chart in **FIG 3** for available channels.
5. Reinstall the batteries, then close the back of the transmitter.
6. Plug the microphone in and turn the transmitter on to provide a tuning signal for the receivers.

FIG 3: Channel Selection Chart

Frequency (MHz)	Switch Position	Wideband Channel	R35-8 Switch Selection
72.1	0	A	1
72.2	1	K	
72.3	2	B	2
72.4	3	N	
72.5	4	C	
72.6	5	O	3
72.7	6	D	
72.8	7	P	4
72.9	8	E	
74.7	9	I	5
75.3	A	J	
75.4	B	R	6
75.5	N/A	F	
75.6	C	S	
75.7	D	G	7
75.8	E	T	
75.9	F	H	8

Make sure all receivers being used match the frequency of the transmitter. Refer to the receiver's instruction manual for frequency change instructions.

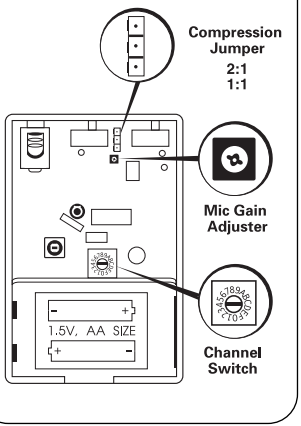
ADVANCED FEATURES
Gain Control Adjustment

If necessary, the microphone gain control on the T32 can be increased or decreased to meet the demands of specific listening applications.

Instructions:

1. Open the battery compartment using a coin in the slot in the bottom of the transmitter. Remove the batteries.
2. Lift the battery compartment door up and pull to your left to expose the circuit board.
3. Refer to **FIG 4** to locate the microphone gain control.
4. Using a small screwdriver, turn the gain control fully counter-clockwise to *reduce* the gain. Turn the gain control fully clockwise to *increase* the gain
5. Close the back of the case and battery door.

FIG 4: T32 Back View (open)



COMPRESSION ADJUSTMENT

By default, the T32 transmitter compression jumper is set to "Off" for normal operation, or 1:1 compression. For hearing assistance applications, the compression jumper can be set to "On" for 2:1 compression.

Instructions:

1. Open the battery compartment using a coin in the slot in the bottom of the transmitter. Remove the batteries.
2. Lift the battery compartment door up and pull to your left to expose the circuit board.

3. Refer to **FIG 4** to locate the Compression Selector.
4. Gently remove the jumper from the circuit board by pulling it up and away from the unit. You will see three exposed "pins."

To turn compression ***"On"*** (2:1 Compression): Press jumper on to the **top two** pin locations as shown on left.

To turn compression ***"Off"*** (1:1 Compression): Press jumper on to the **bottom two** pin locations as shown on left.

5. Close the back of the case and battery door.

Limited Warranty

Williams Sound products are engineered, designed and manufactured under carefully controlled conditions to provide you with many years of reliable service. Williams Sound warrants the PFM T32 transmitter against defects in materials and workmanship for FIVE (5) years. During the first five years from the purchase date, we will promptly repair or replace the PFM T32 transmitter.

Earphones, headphones, batteries, cables, carry cases, and all other accessory products carry a 90-day warranty.

WILLIAMS SOUND HAS NO CONTROL OVER THE CONDITIONS UNDER WHICH THIS PRODUCT IS USED. WILLIAMS SOUND, THEREFORE, DISCLAIMS ALL WARRANTIES NOT SET FORTH ABOVE, BOTH EXPRESS AND IMPLIED, WITH RESPECT TO THE PFM T32 TRANSMITTER, INCLUDING BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. WILLIAMS SOUND SHALL NOT BE LIABLE TO ANY PERSON OR ENTITY FOR ANY MEDICAL EXPENSES OR ANY DIRECT,

INCIDENTAL OR CONSEQUENTIAL DAMAGES CAUSED BY ANY USE, DEFECT, FAILURE OR MALFUNCTION OF THE PRODUCT, WHETHER A CLAIM FOR SUCH DAMAGES IS BASED UPON WARRANTY, CONTRACT, TORT OR OTHERWISE. THE SOLE REMEDY FOR ANY DEFECT, FAILURE OR MALFUNCTION OF THE PRODUCT IS REPLACEMENT OF THE PRODUCT. NO PERSON HAS ANY AUTHORITY TO BIND WILLIAMS SOUND TO ANY REPRESENTATION OR WARRANTY WITH RESPECT TO THE PFM T32 TRANSMITTER. UNAUTHORIZED REPAIRS OR MODIFICATIONS WILL VOID THE WARRANTY.

The exclusions and limitations set out above are not intended to, and should not be construed so as to contravene mandatory provisions of applicable law. If any part or term of this Disclaimer of Warranty is held to be illegal, unenforceable or in conflict with applicable law by a court of competent jurisdiction, the validity of the remaining portions of this Disclaimer of Warranty shall not be affected, and all rights and obligations shall be construed and enforced as if this Limited Warranty did not contain the particular part or term held to be invalid.

If you experience difficulty with your system, call Toll-Free for Customer Assistance:

1-800-843-3544

If it is necessary to return the system for service, your Customer Service Representative will give you a Return Authorization Number (RA) and shipping instructions.

Pack the system carefully and send it to:

Williams Sound Corp.
Attn: Repair Dept.
10321 West 70th Street
Eden Prairie, MN 55344

SYSTEM SPECIFICATIONS

HEARING HELPER™ PFM T32 TRANSMITTER

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:	4.4 oz (125 g) with battery
Color:	Royal blue, shatter-resistant polypropylene
Battery Type:	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 200 or CHG 1600 Charger
Operating Freq's:	Selectable, 16 channels, 72.1 – 75.9 MHz*, internal rotary switch
Stability:	± .005%, frequency synthesized, crystal reference, PLL
Modulation:	Wide-band FM, 75 kHz pk, 75 µS pre-emphasis
RF Output:	8000 µV/m at 30 m, max., 40 mW typical
Freq Response:	200 to 10 kHz, + 3 dB at 1% max. THD
Signal-to-Noise Ratio:	55 - 60 dB, with R31 or R32 Receiver
Microphone Gain Control:	45 dB maximum, 18 dB minimum
Transmit Antenna:	Integral with 39" microphone cord
Microphone:	Electret type, 39" cord, 3.5 mm mono phone plug
Controls:	On/Off switch, slide-type; Microphone Mute Switch, slide-type; Compression Selector 1:1 or 2:1 with internal selectable jumper
Mic Connector:	3.5 mm mono phone jack
Compatible Receivers:	PPA R35, PPA R35-8, PFM R31, PFM R32
Approvals:	FCC, Industry Canada, RoHS, WEEE
Warranty:	5 years, parts and labor (90 days on accessories)
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.

*DISCLAIMER: FCC RULES LIMIT USE OF THIS EQUIPMENT TO AUDITORY ASSISTANCE FOR THE HANDICAPPED.

NOTE: SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

WILLIAMS SOUND®
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