

# Transmitter Model T36, 72-76 MHz

## Instructions For Use and Care

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Thank you for purchasing the T36 transmitter from Williams Sound. The T36 is designed to operate with a wideband FM, 72–76 MHz receiver. For more information on available receivers, visit [www.williamsound.com](http://www.williamsound.com) or contact Williams Sound at 800-843-3544 or 952-943-2252

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### 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.

#### Product Recycling:

Please do NOT dispose of your Williams Sound equipment in the household trash. Please take the equipment to an 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.

07/29/08

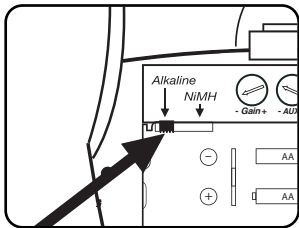
## OPERATING INSTRUCTIONS

**IMPORTANT:** If Alkaline (non-rechargeable) batteries are being installed, slide the battery selection switch in the battery compartment to the “Alkaline” position. See FIG. A below. If installing NiMH (or rechargeable) batteries, slide the battery selection switch to the “NiMH” position.

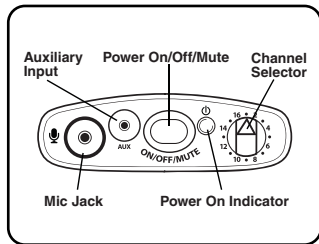
1. Install AA batteries: Open the battery compartment by pressing and lifting the tab on the back of the transmitter with your finger. To remove depleted batteries, pull up on the fabric strip.

Press the batteries into place over the fabric strip. Be sure to observe proper polarity (+/-). Damage due to improper battery installation may void the warranty on the product. Close the battery door. The “Power On” LED on top of the unit will flash when the batteries are getting low; you may continue to use until the unit quits operating, then replace or recharge batteries.

**FIG. A: Battery Selection Switch**



**FIG. B: T36 User Controls**



2. Plug the microphone cord (sold separately) into the “Mic Jack” on top of the transmitter (FIG. B).
3. Optionally, plug in a desired audio source such as a CD or MP3 player using the “Auxiliary Input” jack (WCA 087 stereo auxiliary input cable included). If mic and auxiliary sources are used together, the audio will be mixed. If only auxiliary source is desired, the mic can be muted. **Do not remove the mic from the “Mic Jack” as the cable is also the transmitting antenna!**
4. Turn the unit on: press and hold the “ON/OFF/MUTE” button for three seconds. The “Power On” indicator should illuminate green.
5. Select the desired operating frequency. Use the “Channel Selector” knob to select any of the 16 available channels on 72-76 MHz. Refer to the channel selection chart, FIG C.

**Make sure the receiver being used is operating on the same frequency as the T36 transmitter!**

**FIG. C: Channel Selection Chart**

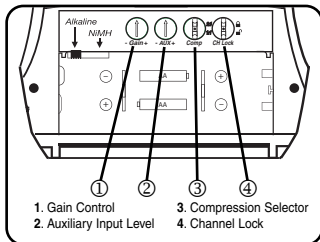
T36 CH	Freq. (MHz)	Letter	R35-8 CH	T36 CH	Freq. (MHz)	Letter	R35-8 CH
1	72.1	A	1	9	72.5	C	-
2	72.3	B	2	10	72.2	K	-
3	72.6	O	3	11	72.4	N	-
4	72.8	P	4	12	72.7	D	-
5	74.7	I	5	13	72.9	E	-
6	75.4	R	6	14	75.3	J	-
7	75.7	G	7	15	75.6	S	-
8	75.9	H	8	16	75.8	T	-

**NOTE:** Up to eight T36's can operate simultaneously on channels 1-8 (FIG. C) when used with an R35-8 receiver.

- Position the headset microphone boom as close to the speaker's mouth as possible without actually touching. Lapel clip microphones should be attached to a collar or lapel, as close to the speaker's mouth as possible. The transmitter can be placed in a pocket, or clipped onto a belt or waistband.
- When you pause from speaking, mute the microphone by pressing the "ON/OFF/MUTE" button once momentarily. The "ON/OFF/MUTE" button will flash red. To unmute the mic, press the "ON/OFF/MUTE" button once momentarily again.

**IMPORTANT:** When the T36 transmitter is not being used, remember to turn the unit OFF by pressing and holding the "ON/OFF/MUTE" button for **three seconds**. The Power On indicator should not be lit.

**FIG. D: Configuration Controls**



- Gain Control
- Auxiliary Input Level
- Compression Selector
- Channel Lock

### GAIN CONTROL

The gain control can be used to adjust the volume level on both the microphone and auxiliary input.

To adjust the volume level, open the battery door and locate the Gain Control (FIG. D). Use a plastic tuning wand and rotate to increase "+" or decrease "-" the gain.

### AUXILIARY INPUT LEVEL

The auxiliary input level can be used to adjust the auxiliary input level only.

To adjust, open the battery door and locate the Auxiliary Input Level (FIG. D). Use a plastic tuning wand and rotate to increase "+" or decrease "-" the input level.

Note: When using an auxiliary audio source, if the "Aux Input Level" is set too high, there can be increased audio distortion and decreased battery life.

## COMPRESSION SELECTOR

By default, the T36 compression is set to “Off” for normal operation, or “1:1” compression. For hearing assistance applications, the compression selector can be set to “On” for “2:1” compression.



To change this setting, open the battery door and locate the Compression Selector (FIG. D).

To turn on compression (2:1), use a plastic tuning wand and slide the “Comp” switch to the position marked “2:1.” To turn off, slide the “Comp” switch to the position marked “1:1.”

## CHANNEL LOCK

By default, the T36 channels are *unlocked* to allow the user to change frequencies as needed. If desired, channels can be locked to prevent users from changing the channels.

Note: The Channel Lock only locks the electronic frequency; it does not physically lock the channel selector knob.

To lock or unlock channels, open the battery door and locate the Channel Lock (FIG. D). To *lock* the current channel, slide the “CH Lock” switch to the position marked “”. To *unlock* the channels, use a tuning wand and slide the “CH Lock” switch to the position marked “”.

## BATTERY INFORMATION

The T36 transmitter can use two (2) alkaline AA batteries (BAT 001) or two (2) AA rechargeable batteries (BAT 026). Note: The BAT 026 provides longer life than other rechargeable batteries. For best product performance, do not substitute other rechargeable batteries and chargers.

### LOW BATTERY INDICATOR

The “Power On” indicator (FIG. B) will flash to indicate low battery.

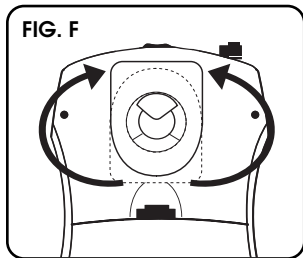
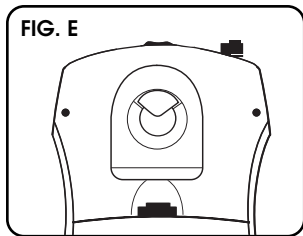
### EXPECTED BATTERY LIFE

**Alkaline batteries**  
(BAT 001): 30 hours

**Rechargeable NiMH Batteries**  
(BAT 026): 20 hours  
Min. 14 hour recharge time.

If the T36 transmitter is equipped with rechargeable batteries, up to 12 units can be charged at one time in the optional CHG 3512 or CHG 3512 PRO multi-charger, or up to two units in the CHG 3502 dual bay charger. For ordering information, please contact Williams Sound at 800-843-3544.

## BELT CLIP INSTALLATION



**To Install:** Position the belt clip on the rear of the T36 transmitter as shown in FIG. E. Turn the belt clip 180° left or right as shown in FIG. F. The belt clip is now installed and ready for use.

**To Remove:** Turn the belt clip 180° so the open end of the clip points to the top of the unit as shown in FIG. E. Gently pull the belt clip away from the unit to remove.

## 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 T36 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 T36 transmitter.

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

**NOTE: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.**

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 T36 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 T36 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 (U.S.A.) or  
+1 952 943 2252 (Outside the U.S.A.)**

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

### FM TRANSMITTER, MODEL T36

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Dimensions:	4.1" L x 2.8" W x 1.1" H (104 mm x 71 mm x 28 mm)
Weight:	2.6 oz (74 g), no batteries
Housing Material:	Shatter-resistant PC/ABS plastic
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 3502 or CHG 3512 Charger
Operating Freq's:	Selectable, 16 channels, 72.1 – 75.9 MHz* (channels 1-8 correspond with R35-8 receiver channels)
Stability:	± .005%, frequency synthesized, crystal reference, PLL
Modulation:	Wide-band FM, 75 kHz pk, 75 $\mu$ S pre-emphasis
RF Output:	80 mV/m at 3 m (max. allowed by FCC rules)
Freq Response:	200 Hz to 13 kHz, $\pm$ 3 dB at 1% max. THD
Signal-to-Noise Ratio:	65 dB (typical) transmitted
Transmit Antenna:	Integral with microphone cord
Microphone:	Electret type, 3.5 mm mono phone plug
External Controls:	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)
Mic Input:	3.5 mm mono phone jack with electret mic bias, internal adjustable gain with 25 dB range
Aux Input:	2.5 mm stereo phone jack, internal adjustable gain with 60 dB range
Audio Compression:	1:1 or 2:1 ratio selected with internal slide switch
Compatible Receivers:	PFM R31, PFM R32, PFM R33, PFM R36, PPA R35, PPA R35-8, PPA R1600
Approvals/Directives:	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**

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



**WILLIAMS SOUND®**  
*Helping People Hear*

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