

# WIR TX75 C/D Infrared Transmitter 2.3,2.8 / 3.3,3.8 MHz

USER MANUAL



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## **Important Safety Instructions**

Please read and keep these instructions.

### **CAT-5e CABLE SAFETY**

### **CAUTION!**

Do NOT plug the WIR TX75 C/D PRO (master) CAT-5e / RJ45 cable into anything other than the WIR TX75 S slave(s). The TX75 C/D PRO CAT-5e / RJ-45 connection is proprietary and is NOT compatible with ethernet or any other RJ-45 systems. Failure to comply with this caution can destroy this or other equipment and will void the warranty.

## **Receiver Safety Warnings**

### **HEARING SAFETY**

### **CAUTION!**

Many Williams Sound receivers are designed to amplify sounds to a high volume level, which could potentially cause hearing damage if used improperly. To protect your hearing and the hearing of others:

- 1. Make sure the volume is turned down before putting on the earphone or headphone—only then adjust the volume to a comfortable level.
- 2. Set the volume level at the minimum setting that you need to hear.
- 3. If you experience feedback (a squealing or howling sound), reduce the volume setting and move the microphone away from the earphone or headphone.
- 4. Do not allow children or other unauthorized persons access to this product.

### **BATTERY SAFETY AND DISPOSAL**

### **CAUTION!**

Williams Sound receivers are supplied with non-rechargeable alkaline batteries. Do not attempt to recharge non-rechargeable batteries; they may explode, release dangerous chemicals, cause burns, or cause other serious harm to the user or product.

### PACEMAKER SAFETY

### **CAUTION!**

If you have a pacemaker or other medical device, make sure that you are using the Williams Sound receiver in accordance with safety guidelines established by your physician or the pacemaker/medical device manufacturer.

## **Transmitter Safety Warnings**

WARNING! To reduce the risk of fire or electric shock, do not expose the system to rain or moisture. Do not use this apparatus near water. The system should not be exposed to dripping or splashing, and objects filled with liquids such as beverages should not be placed on the transmitter or receivers. Clean only with a dry cloth.



#### Servicing or attempting to service this device will void the warranty

Refer servicing to qualified personnel. Servicing is required when the system has been damaged in any way: if liquid has been spilled or objects have fallen into the unit, if the unit has been exposed to moisture, if the unit does not operate normally, or if the unit has been dropped.

Do not block any ventilation openings. Install in accordance with manufacturer's instructions.

Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus that produces heat.

Use only attachments/accessories specified by the manufacturer.

Unplug the transmitter during lightning storms or when unused for long periods of time.

Be advised that different operating voltages require the use of different types of line cord and attachment plugs. Check the voltage in your area and use the correct type.

Use only the power supply provided by Williams Sound. Other power supplies may have similar specifications, but may not be equivalent in emissions ratings, in-rush current, etc. Use of an unapproved power supply may leave the device partially or completely inoperable, and will void the warranty.

This apparatus has been designed with class-1 construction and must be connected to a main socket outlet with a protective ground connection (the third grounding prong).

Protect the power cord from being walked on or pinched, particularly at plugs, receptacles, and near the power jack on the transmitter.

This apparatus must be grounded.

The MAINS plug or an appliance coupler is used as the disconnect device, so the disconnect device should remain readily operable.

#### For Customers in The United States

WARNING: Use a three-wire grounding-type line cord as is supplied with the product. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet. This equipment has been tested and found to comply with the limits for Class B digital device, pursuant to part 15 of the FCC rules.

#### For Customers in Canada

This Class B digital device meets all requirements of the Canadian Interference-causing Equipment Regulations.

Cet appareil numérique de la classe B respecte toutes les exigencies du Règlement sur le matériel brouilleur du Canada.

### **Recycling Instructions**

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



#### Product Recycling for Customers in the European Union:

Please do NOT dispose of your Williams Sound equipment in the household trash. Take the equipment to a electronics recycling center, or return the product to the factory for proper disposal.

### **System Overview**

The WIR TX75 C/D PRO is a two-channel PRO infrared transmitter combining infrared modulator and emitter technology into a single mountable enclosure—which reduces operating costs, eliminates the need for rack space and eases set-up.

The WIR TX75 C PRO Infrared Transmitter includes phoenix connectors for the line inputs and provides two channels: 2.3 MHz and 2.8 MHz.

The WIR TX75 **D** PRO Infrared Transmitter includes phoenix connectors for the line inputs and provides two channels: 3.3 MHz and 3.8 MHz.

The WIR TX75 C/D PRO is ideal for high-quality audio programs such as music, theater and audio description. The WIR TX75 C/D PRO will accept any line level, balanced or unbalanced audio inputs. Infrared receivers detect the transmission and convert the light signals back into audio signals. The WIR TX75 C/D PRO operating frequencies (2.3,2.8 / 3.3,3.8 MHz) minimize high-efficiency lighting interference.

Up to two slave emitters can be added for additional coverage. Power, baseband, and digital data are fed to the slave emitters via a single CAT-5e cable for each emitter. No additional cables are required.

No FCC license or radio approval is required with this equipment. It can be used anywhere in the world.

- NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area may cause interference in which case the user will be required to correct the interference at his own expense.
- NOTE: A PLASMA MONITOR OR TELEVISION CAN DEGRADE THE AUDIO QUALITY OF THE WIR TX75 C/D PRO TRANSMITTER. FOR BEST PERFORMANCE, THE TRANSMITTER SHOULD BE POSITIONED AS FAR AWAY AS POSSIBLE FROM ANY PLASMA MONITOR OR TELEVISION.

## **Installation Procedures**

#### **Determine Coverage Area**

When using the WIR TX75 C/D PRO transmitter in single-channel mode with the RX22-4 receiver, the system coverage area will exceed 12,000 sq. ft. (1,115 sq. m.). WIR TX75 C/D PRO units automatically adjust to give the best coverage area possible in both 1-channel and 2-channel modes.

Figure 1 illustrates typical coverage pattern for the WIR TX75 C/D PRO. This can be affected by direct/indirect sunlight, reflections on walls and room construction. Reflections of the infrared light from walls, ceilings, and floors may change these patterns.

#### Important: Remember to point the transmitter towards the listening audience.

**Remember: Most objects block infrared light. The transmitter cannot be concealed behind walls, glass, curtains, etc.** These patterns are the direct radiation pattern. The infrared radiation does not drop to zero outside the illustrated patterns; it decreases. It still may be useable at a greater distance, depending on the receiver sensitivity and the reflective characteristics of the room. Reflections of the infrared light from walls, ceilings, and floors may change these patterns.

The WIR TX75 C/D PRO can be operated with or without the faceplate, if desired. The faceplate can be removed and painted to match room decor. Lightly sand faceplate with 400 grit sandpaper apply primer and two coats of final color. **Do not paint the infrared lens behind the faceplate of the WIR TX75 C/D PRO.** 

#### Figure 1: Receiver coverage area with WIR TX75 C/D PRO transmitter OR WIR TX75 S slave emitter in single channel mode.



RX22-4: 12,000ft<sup>2</sup> (1,115m)<sup>2</sup>

### **Optional WIR TX75 S Emitter for Additional Coverage**

For larger facilities, additional emitters can be used to increase the total coverage area. The WIR TX75 C/D PRO is capable of driving two WIR TX75 S slave emitters. Power, baseband and digital data bus are fed via CAT-5e cable to each TX75 S slave.

Figure 1: Receiver coverage area with WIR TX75 C/D PRO transmitter OR WIR TX75 S slave emitter in single channel mode.

Figure 2: Overlapping illumination patterns to cover larger listening areas.



#### Figure 3: Coverage area with second emitter added to same emission point (50% increase)



**RX22-4: 12,000ft<sup>2</sup> (1,115m<sup>2</sup>)** TX75 Master + Slave w/RX22-4: 24,000ft<sup>2</sup> (2,230m<sup>2</sup>)

#### Figure 5: WIR TX75 C/D PRO master and two WIR TX75 S slaves each at an angle of 35° from the master.



# **Control Panel**

#### Figure 6: WIR TX75 C/D PRO master rear view



### **Connecting Power**

# WARNING: MAINS VOLTAGE MUST NOT FALL BELOW 100 VAC, 0R SYSTEM PERFORMANCE WILL BE GREATLY REDUCED. UNIT MAY ENTER RESET MODE UNTIL POWER IS RESTORED.

- 1. Plug the power supply output cord into "Power In" on the WIR TX75 C/D PRO.
- 2. Attach a line cord to the power supply.
- 3. Plug the power supply into the AC outlet. TFP 046: 100-240 VAC IN, 50 / 60 Hz.

This system is designed for class 2, low-voltage wiring. Always follow local electrical codes when using low-voltage wiring.

#### **Power over Ethernet**

The WIR TX75 C/D PRO has the ability to use a POE power supply to power itself and one slave. When using POE, one of the slave connections is used for the POE connection, and the other can be used to run one slave. See the section "Connecting Master and Slave Units".

#### **Green Power**

The WIR TX75 C/D PRO is equipped with a sleep/power save feature. If no audio is present on either channel for three minutes, the transmitter will automatically go into sleep/power save mode. This mode decreases power consumption by 80 percent. Units will automatically start up when audio is activated. This sleep/power save feature can be disabled. Contact Williams Sound for instructions.

On power up, the WIR TX75 C/D PRO performs a self-test to detect damage due to shipping, handling, tampering or incorrect operation. If any failure is present, green indicator lights will blink. See WIR TX75 C/D PRO Indicators table on page 12 for instructions on how to read indicator lights.

## **Connecting the Audio Source**

#### **Automatic Channel Detection/ Shutdown**

The WIR TX75 C offers two carrier frequencies: Ch 1 (2.3 MHz) and Ch 2 (2.8 MHz).

The WIR TX75 D offers two carrier frequencies: Ch 1 (3.3 MHz) and Ch 2 (3.8 MHz).

Either unit automatically detects the presence of audio on the microphone and phoenix audio inputs, and transmits on either/both channels when an audio signal is present on that channel. If audio is present on both the microphone and phoenix jack for a given channel, the audio signals will be mixed.

When no audio signal is present on a channel for three minutes, the WIR TX75 C/D will shut down that channel. Operating the WIR TX75 C/D in single-channel mode provides a 40 percent increase in range over two-channel mode.

#### Line Level Source (Phoenix connectors)

The WIR TX75 C/D will accept line level balanced or unbalanced audio inputs. Select the frequency(ies) you wish to transmit on and connect your audio source(s) to the appropriate phoenix connectors/jack(s). No adjustment needs to be made for balanced or unbalanced inputs; this is internally detected & managed. See figures 7 and 8 for balanced and unbalanced cable configurations.

#### Microphone Source (3.5 mm Mono Plug)

Plug an electret microphone into the 3.5mm "Mic In" jack (MIC 027, MIC 100, or MIC 090). To assign the microphone to Ch 1 use the Mic Channel Switch to select "2.3" on the WIR TX75 C (or "3.3" MHz on the WIR TX75 D). To assign the microphone to Ch 2 use the Mic Channel Switch to select "2.8" on the WIR TX75 C (or "3.8" MHz on the WIR TX75 D).

#### Figure 7: Balanced line out (XLR) to WIR TX75 C/D PRO line input (Phoenix Contact® connector)



Figure 8: Unbalanced line out (XLR) to WIR TX75 C/D PRO line input (Phoenix Contact® connector)



1= SHIELD, 2= RED (SIGNAL IN PHASE), 3= BLACK (SIGNAL)

#### Summing an unbalanced stereo line-level source to a single mono input (Euro Block "Phoenix" connector)

If the desire is to use a stereo source for an input, this is how you would wire it. The stereo signal will be combined to mono, and heard in mono, on one channel of the TX75.

The "+" and "-" phoenix terminals on the TX75 are each tied internally to single differential amplifiers.

**Proper Wiring ("Yes" circle below).** The resistors, along with the jumper between "-" and ground, are necessary to allow the left and right signals to be summed before being preamplified by the *single differential (single-ended) amplifier inside the TX75*.

**Improper Wiring ("No" circle below):** If the left, right positive leads from the source were connected to the "+" and "-" pins on the phoenix block, and their grounds (sheilds) were connected to the ground terminal, the result would be the *difference* of the left and right channels, which is *very little*, resulting in a very low input signal. The main part of the audio (what is common to both the left and right channels) would be missing, as this is thrown away during *differential amplification*. So most of the original audio would not be heard!

#### Figure 9: Summing an unbalanced stereo source to a single mono input



### **Adjusting the Audio Level**

#### **Line Level Source**

After an audio signal has been connected to the transmitter, adjust the audio source gain until the WIR TX75 C/D PRO audio-level indicator for that channel blinks periodically.

#### **Microphone Source**

Speak into the microphone from a normal distance and at a natural voice level. Use the microphone gain adjustment on the WIR TX75 C/D PRO to set the gain to the point where the audio level indicator on the selected channel blinks periodically. If the audio level indicator is always on or on most of the time, the level is too high. If the audio level indicator is never on, the level is too low.

## **Connecting Master and Slave Units**

Connect all WIR TX75 C/D PRO master and WIR TX75 S slave(s) units together using CAT-5e cables, the "to slave" jacks on the master, and the "Master In" jack on the slave(s). For systems with no slave units, the CAT-5e cables and "to slave" jacks are not used. For systems with one slave unit, either "out 1" or "out 2" may be used. When powering the master unit with POE, connect the POE source to either jack, and connect the remaining jack to the slave unit.

The WIR TX75 C/D PRO automatically detect when slave units are plugged in, establishes a data link to verify operation, monitors status, and enables baseband output to the slave emitter(s).

When a cable is plugged into a "to slave" jack, the master unit will automatically detect mis-wired, intermittent or bad CAT-5e cables; a yellow status indicator light will blink on that channel's "to slave" jack to indicate any problem. See WIR TX75 C/D PRO Indicators table on page 12 for instructions on how to read indicator lights.

Once a master and slave unit are connected, the yellow and green indicators located on the "to slave" and "Master In" jacks mimic each other. This allows the user to know the status of the entire system by simply looking at the indicators on the back of the master unit. A switch is provided to turn off all indicator lights AFTER initial set-up, to allow for less conspicuous operation.

## Note: The WIR TX75 C/D PRO will automatically detect and adjust for differences in CAT-5e cable length to the slaves. Matching cable lengths to the slaves is not necessary. Cable length up to 100 feet may be used to connect the slaves or POE.

#### Figure 10: Connecting a WIR TX75 C/D PRO master transmitter to two WIR TX75 S slave emitters



### Troubleshooting

For easier troubleshooting, the WIR TX75 C/D PRO units are equipped with a series of self-tests and indications. Please see WIR TX75 C/D PRO indicator lights table on page 12 to aid in troubleshooting.

#### The WIR TX75 C/D PRO "Power Indicator" is not lit:

- Make sure the power supply is plugged into the transmitter, or make sure the POE power supply is plugged in to a slave jack, and any remote power switch is on.
- Set the "Indicators" switch on the back panel to "On".
- Make sure the electrical outlet is on.
- Make sure the 48 VDC power supply, or the POE power supply, is working.

#### The WIR TX75 C/D PRO's Ch1 or Ch2 "Audio-level Indicator" does not light:

- Make sure the WIR TX75 C/D PRO is plugged in.
- Set the "Indicators" switch on the back panel to "On".
- Make sure the audio input is connected properly. Refer to figures 6,7,8, or 9 depending on the connection being used.
- Make sure an active and adequate level audio signal is being sent to the WIR TX75 C/D PRO transmitter.

#### No Sound through Receivers:

- Check to make sure the receiver is operating on the same frequency as the transmitter.
- If some of the receivers work but others don't, check for bad batteries or earphones.
- If none of the receivers work, check to see if the power and audio input cables are connected to the transmitter. Verify that the "Power Indicator" is on steady, and ch1 or ch2 "audio-level indicator" blinks periodically.
- Check to see if the transmitter is connected properly to the audio source. The audio-level indicators should flash on channels that have audio.
- Make certain the transmitter is not covered by objects which would block infrared light.

#### Sound Through the Receivers is Weak and Noisy:

• Try adjusting the audio input level (see page 10). If the signal sounds okay, you may need to reposition the transmitter beam or add additional WIR TX75 S slave emitters to the WIR TX75 C/D PRO system.

#### **Buzzing or Humming Noise in Sound System:**

- · Check for ground loops or noise on the input signal.
- Check to make sure the "balanced / unbalanced" switch is in the correct position. If these instructions do not address your problem or the issue persists, please call your authorized Williams Sound dealer or representative.

### WIR TX75 PRO Indicator lights

INDICATOR	ON UNIT	STATE	DESCRIPTION
Power Indicator – Green (round or rectangle)	Master or Slave	On steady	Unit is powered and actively transmitting
		Fade-on, Fade-off (continuous)	Unit is powered and in sleep/power-save mode (no audio signal detected, unit is not transmitting)
		Fast blink (continuous)	Self test has detected an internal failure on this unit
		Blinking periodically	Audio is present on this channel and is set to the optimum level
Audio Level Indicators – Yellow round (ch1 or ch2)	Master	On steady (or most of the time)	Audio is present on this channel but the level is too high
		Off	Audio is not present OR audio level is too low on this channel
Slave Status Indicator – Yellow	I Master or Slave	On steady	Carrier signal is being sent to this slave
		Off	No carrier signal is being sent to this slave
(rectangle)		Fast blink (continuous)	Self test has detected a CAT-5e cable failure between the master and this slave unit
All indicators	Master or Slave	On for 2 seconds, Off for 1 second, resumes normal states	Initial power-on sequence OR unit has reset
		On for 2 seconds, Off for 1 second (continuous)	Unit is continuously resetting - may be due to a low voltage supply condition (In Master: bad power supply. In Slave: bad CAT-5e cable or CAT-5e cable is too long)

NOTE: The indicator lights can all be turned off AFTER initial set-up to allow for less conspicuous operation.

#### **Mounting Options**

BKT 024 - Universal wall / ceiling mount (included)

MLB 003 - Linking Bar - 2 1/2" bar with 1/4" - 20 threaded male connectors on both ends (optional), for stacking master and slave together.

The WIR TX75 C/D and WIR TX75 S can be mounted on any camera tripod stands with a 1/4" - 20 threaded connector.

The WIR TX75 C/D and WIR TX75 S can be operated with or without the faceplate, if desired. The faceplate can be removed and painted to match room decor. Lightly sand faceplate with 400 grit sandpaper apply primer and two coats of final color. **Do not paint the infrared lens behind the faceplate of the WIR TX75 C/D PRO or WIR TX75 S.** 

#### Accessories

MIC 027 Hand-held unidirectional microphone

MIC 090 Lavaliere microphone

MIC 100 Rear-wear headset microphone

PLE 078 SIL - Silver Faceplate (included)

WCA 051 - Female XLR to Phoenix 3' Stereo RCA cable

WCA 096 - 12" CAT-5e cable for connection to slave emitter (optional)

WCA 091 - 25' CAT-5e cable for connection to slave emitter (optional)

# **Optional Receivers**

#### WIR RX15-2 Receiver:



WIR RX22-4 Receiver: (4-channel receiver: Channel 1=2.3 MHz, channel 2=2.8 MHz, channel 3=3.3 MHz, and channel 4=3.8 MHz).



# **Infrared Transmitter Specifications**

### Model WIR TX75 C/D PR0 (Master)

Dimensions, Weight: 10.0" W (25.4 cm) x 3.1" D (7.9 cm) x 1.5" H (3.8 cm) w/o faceplate or 2.5" H (6.4 cm) w/faceplate, 0.6 lbs (0.3 kg)

Color:	Black with silver colored silk screen and silver colored faceplate Optional: white colored faceplate
Power Supply:	Desktop style international power supply with IEC line cord, 100-240 VAC input, 50-60 Hz, 24 W; 48 VDC output
DC Power Input:	2.5 mm ID barrel connector, 48 VDC, 0.4 A center positive, or Either "to slave" RJ45 jack using POE over Cat5e/6
Power Indicator:	Green LED
Sleep/Power Save Mode:	Shuts off carrier when no audio is present for 3 minutes
Modulation:	FM Wideband, $\pm 50$ kHz deviation max, 50 $\mu$ S pre-emphasis
Carrier Frequencies:	WIR TX75 C: 2.3 MHz (Ch 1) and 2.8 MHz (Ch 2). WIR TX75 D: 3.3 MHz (Ch 1) and 3.8 MHz (Ch 2). Default at power on = carriers off. Carriers are automatically enabled upon presence of audio.
Emitter IR Power:	0.7 W
Master Only Coverage Area (minimum, 1-Ch mode):	12,000 sq. ft (1,115 sq. m) in single-channel mode with the RX 22-4 receiver 6,000 sq. ft (557 sq. m) in single-channel mode with the RX 15-2 receiver 4,000 sq. ft (372 sq. m) in single-channel mode with the RX 18 receiver
Audio Inputs / Controls:	Line inputs: Phoenix Contact® jack for Ch1 and Ch2 accept line level, balanced or unbalanced audio
Microphone input:	3.5 mm, stereo jack with signal and bias connected to tip, electret microphone compatible (4 VDC bias supply with 2.7 k ohm series resistor)
Microphone gain adjust:	Rotary potentiometer
Microphone channel switch:	Selects microphone input to Ch 1 or Ch 2
Audio indicators:	Yellow LED blinks at nominal audio level. One per channel
Indicators On/Off:	2-position switch turns on/off indicator lights
"to slave" Output/Input:	(2) 8p8c RJ45 connectors output 48 VDC 0.4 A power, baseband RF and a bi-directional RS-485 bus for control and status communications Can also be used as a POE connection to power the master unit (and one slave) when POE is connected to one of these jacks
Slave Status Indicators (on "to slave" jacks):	Green: Power/Unit Status Yellow: Transmit/Cable Status
Signal-to-Noise Ratio:	70 dB, (line input)
Frequency Response:	95 Hz to 17.6 kHz, -3 dB re 1 kHz (line inputs) 125 Hz to 17.0 KHz, -3 dB re 1 kHz (microphone input)
Total Harmonic Distortion:	<1% (1 kHz, nominal deviation, line or microphone input)
Operating Requirements:	0-50°C (32°-122°F)
Mounting Kit:	Wall or Ceiling mount: BKT 024 Omnidirectional mount Optional: slave linking bar (MLB 003)
Warranty:	5 Years
Approvals:	CE, C-tick, FCC, Industry Canada, WEEE, RoHS, CB Scheme
Compatible Receivers:	WB 8222-4 WB 8218 WB 8215-2

Compatible Receivers: WIR RX22-4, WIR RX18, WIR RX15-2

#### NOTE: Specifications subject to change without notice.

Visit our website for the latest specifications and publications: www.williamssound.com

# **Infrared Emitter Specifications**

### Model WIR TX75 S (Slave)

Dimensions, Weight:	10.0" W (25.4 cm) x 3.1" D (7.9 cm) x 1.5" H (3.8 cm) w/o faceplate or 2.5" H (6.4 cm) w/faceplate, 0.6 lbs (0.3kg)
Color:	Black with silver colored silk screen and silver colored faceplate Optional: white colored faceplate
Sleep/Power Save Mode:	Shuts off carrier when no audio is present for 3 minutes
Modulation:	FM Wideband, $\pm$ 50kHz deviation max, 50 $\mu$ S pre-emphasis
Carrier Frequencies:	WIR TX75 C: 2.3 MHz (Ch 1) and 2.8 MHz (Ch 2). WIR TX75 D: 3.3 MHz (Ch 1) and 3.8 MHz (Ch 2). Default at power on = carriers off. Carriers are automatically enabled upon presence of audio.
Emitter IR Power:	0.7 W
Slave Coverage Area (minimum, 1-ch mode):	Note: Slave emitter cannot be used without a master transmitter, but if the slave emitter is aimed so that its coverage area does not overlap that of the master, on its own it will provide: 12,000 sq. ft (1,115 sq. m) in single-channel mode with the RX 22-4 receiver 6,000 sq. ft (557 sq. m) in single-channel mode with the RX 15-2 receiver 4,000 sq. ft (372 sq. m) in single-channel mode with the RX 18 receiver
Master + Slave Coverage Area (minimum, 1-ch mode)	If slave transmitters are aimed to maximize coverage area (so that their coverage areas minimally overlap that of the master): 24,000 sq. ft (2,230 sq. m) in single channel mode with the RX22-4, a master and (1) slave transmitter 36,000 sq. ft (3,345 sq. m) in single channel mode with the RX22-4, a master and (2) slave transmitters
Indicators On/Off:	2-position switch turns on/off indicator lights
Signal-to-Noise Ratio:	70 dB, (line input)
Frequency Response:	95Hz to 17.6kHz, -3dB re 1kHz (line input) 125Hz to 17.0kHz, -3dB re 1kHz (microphone input)
Total Harmonic Distortion:	<1% (1 kHz, nominal deviation, line or microphone input)
From Master Input	8p8c RJ45 connector input provides 48VDC 0.4A power, baseband RF, and a bi-directional RS-485 bus for control and status communications.
Slave Extension Cable:	CAT-5e (or better) cable, maximum 100' length, with RJ-45 8P8C male connector on each end, TIA568B
Slave Status Indicators (on "to slave" jacks):	Green: Power/Unit Status Yellow: Transmit/Cable Status
Operating Requirements:	0-50° C (32°-122°F)
Mounting Kit:	Wall or Ceiling mount: BKT 024 Omnidirectional mount Optional: slave linking bar (MLB 003)
Warranty:	5 Years
Approvals:	CE, C-tick, FCC, Industry Canada, WEEE, RoHS, CB Scheme
Compatible Receivers:	WIR RX22-4, WIR RX18, WIR RX15-2

#### NOTE: Specifications subject to change without notice.

Visit our website for the latest specifications and publications: www.williamssound.com

## **Limited Warranty**

Williams Sound products are engineered, designed, and manufactured under carefully controlled conditions to provide many years of reliable service. Williams Sound warrants the WIR TX75 PRO infrared listening system 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 WIR TX75 C/D PRO infrared listening system.

Microphones, earphones, headphones, batteries, chargers, 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 WIR TX75 PRO INFRARED LISTENING SYSTEM, 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 MALFUNCTIONING 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. NO PERSON HAS ANY AUTHORITY TO BIND WILLIAMS SOUND TO ANY REPRESENTATION OR WARRANTY WITH RESPECT TO THE WIR TX75 PRO INFRARED LISTENING SYSTEM. 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 Attn: Repair Dept. 10300 Valley View Road Eden Prairie, MN 55344 USA

Your warranty becomes effective the date you purchase your system. If your sales receipt is not available, the date code on the product will determine your warranty status.



10300 Valley View Rd • Eden Prairie, MN 55344 800-328-6190 / 952-943-2252 • FAX: 952-943-2174 www.williamssound.com