Overall System

Transmission Format: Xwire proprietary digital audio transmission
Frequency Response: 20 Hz - 15 kHz
Audio Dynamic Range: Greater than 120 dB
Distortion: 0.2% THD
RF Carrier Frequency: Ch1 (906 MHz), Ch2 (912 MHz), Ch3 (918 MHz), Ch4 (924 MHz)
Number of Selectable Frequencies: Four
RF Output Power: 0.5mw
Transmission Range: 280 feet line-of-sight, 80 to 130 feet adverse conditions
FCC Approval: Part 15 approved, no user-license required

XT904 & XH904 Transmitter

A/D Conversion: 16-bit Linear, 64 times over sampling
Input Impedance: 1 MΩ
Connectors: 1/4" Unbalanced Or Miniature XLR/ XH904 (none)
Internal Shielding: Two 'Aluminized' chambers yield 90dB rejection
Controls: Power On/Off, Channel Select
Dimensions: 2.5" W x 4.25" D x 1" H/ XH905: 7.33"L x 4.95" Max Diameter (w/o capsule)
Battery Life: Linear power supply, 11 Hours (4x AA alkaline)
Weight: 8.4 oz. (with 4 AA batteries installed)

XR904 Receiver

D/A Conversion: 16-bit Linear
Output: +/- 3.5V (Unbalanced: 1.6 kΩ, Balanced: 150Ω)
Connectors: Tranformerless Balanced XLR , 1/4" Unbalanced
Internal Shielding: 25 'Aluminized' chambers yield 90dB rejection
Back-lit LCD: Battery Life, Data Received, Channel Number, Audio dB Meter
Controls: Power On/Off, Channel Select
Dimensions: 8.112" W x 5.5" D x 1.65" H - (1/2 RU)
Power Requirements: 9V AC or DC

Xwire
Digital Wireless Systems

Xwire Corporation
4630 Beloit Drive • Suite 10 • Sacramento CA 95838 U.S.A.
Voice (916) 929-9473 • Fax (916)924-8065 • Internet: www.xwire.com

Symptom	Cause	Solution
sound.	System not turned on. Improper connection or improper channel selection.	Check that the system is powered on. Check that the transmitter and receiver are set to the same operating channel. Check that the receiver is receiving data. Check that the source is operating correctly. Check that the receiver displays audio level. Check connections.
termittent sound or crackling" performance.	Improper source performance. Improper connection. Multiple transmitters are set to the same operating channel. Transmitter has gone out of range. Transmitting through metal wall. Unknown source of RF in local vicinity.	Check source. Check connections. Turn your transmitter off. Check to see if receiver still displays data being received. If so, locate and either turn off or switch channels on extra transmitter. Adjust receiver positioning closer to transmitter. Consider remote antenna option. Check that other local communication systems are not interfering with your performance. They will most likely be within 100 ft.

Additional Information

Multi-system Operation

Up to four systems can operate simultaneously. In situations where it is necessary to have more than one person wireless, each transmitter and receiver combination must be set to the same channel. Set the first system to transmit and receive on channel "one", the second system to transmit and receive on channel "two"... and so on.

Battery Life Information

Alkaline batteries should last about 11 hours, NiCad rechargeable batteries will only last about 6 hours. Standard batteries may only last 3 to 6 hours. THE BATTERY HOUR DISPLAY WILL ONLY BE ACCURATE FOR ALKALINE BATTERIES. The battery life is calculated inside the transmitter and sent to the receiver and then displayed on the LCD in 1 hour increments. Upon power up the battery info will take 1-5 minutes to stabilize, the battery gauge is accurate within + or - 20 min. Within the one hour mark, LO BATT will be displayed informing you that the batteries currently installed in the transmitter are nearly depleted. You may use batteries until they are completely drained without affecting the performance of the unit in any way.

Warranty Information

Xwire will repair or replace any defective system within the first two years free of charge. After the initial term, we will continue to repair or replace defective systems for an additional period of three years, for a flat fee of $35.00. (You are NOT required to pay this fee in advance, it is due only if repairs become necessary). Xwire will cover 2nd-day return shipping costs in the continental United States. This warranty is transferrable, but does not cover abused systems. Please retain a copy of your dated sales receipt for proof of warranty status should repairs become necessary.

Refer All Servicing to Xwire

We believe that the X904 is one of the most reliable wireless systems that can be made using current technology, and should provide years of trouble-free use. However, should problems occur, DO NOT attempt to service the unit yourself. Service on this product should only be performed by Xwire. THERE ARE NO USER SERVICEABLE PARTS INSIDE.

Obtaining Repair Service

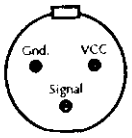
Before contacting Xwire, check over all your connections, and make sure you've read the manual. Your Xwire dealer may be able to offer further assistance. If the problem persists, call Xwire at 1-916-92XWIRE and request the customer service department. Talk the problem over with one of our technicians; if necessary, you will be given a return authorization (RA) number and instructions on how to return the unit. All units must be shipped prepaid and COD shipments will not be accepted.

For prompt service, indicate the RA number on the shipping label. Tape a note to the top of the unit describing the problem, include your name and phone number where Xwire can contact you if necessary, as well as instructions where you want the system returned. Xwire will pay for 2nd-day shipping back to you on any repair covered under the terms of this warranty.

Service address for customers in the USA:

Xwire Corporation
4630 Beloit Drive, Suite 10
Sacramento, CA 95838
916-929-9473, FAX 916-924-8065

*If you have purchased a bodypack microphone transmitter, and would like to use it with other microphones in your collection, the following wiring diagram will show you how to connect a standard TA3F connector onto your microphone's cable.

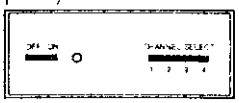


Procedure

up the transmitter, slide the
ch to the on position, an
ght. To power on the receiv-
vide power to the unit using
dapter included with the system, then
ower button on the front panel, the
or DATA ON LED should light up
power is on.

election

different frequency channels which
oose to
d receive
are labeled
h transmitter



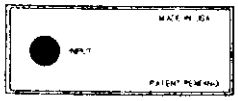
er. In order to operate on any one of
nels, you must have both the trans-
receiver on the same channel num-
ct a channel on the receiver, power
iver, the current channel selected
wn on the switch (ch 1-4). To change
l, slide the channel selection button
he front panel. The channel number
ce one, indicating a new channel has
ted. After selecting a channel on the
e transmitter frequency channel must
atched to the receiver's. To select a
channel, power up the transmitter,
channel selected will be shown by
e switch next to corresponding chan-
r(1-4). To advance the channel, slide
l select switch to the desired channel.
transmitter and receiver have the
nel number selected, the receiver
n receive data. To verify RF signal
the receiver's DATA ON LED will

Wireless

eceiver on or near the desired ampli-
stem, FOR BEST RESULTS, PLACE
HIGH ABOVE ANY OBSTRUC-
the system works best when transmit-
eiver antennas are in line of sight.

Using the proper output connector on the receiver, the XLR for low impedance, or the 1/4" jack for high impedance, connect the output of the receiver to the input of your amplification system. Power up the unit and select the desired frequency for receiving data.

Next, connect the output of your instrument into the 1/4" input jack on the transmitter, using the 2' instrument cable provided.

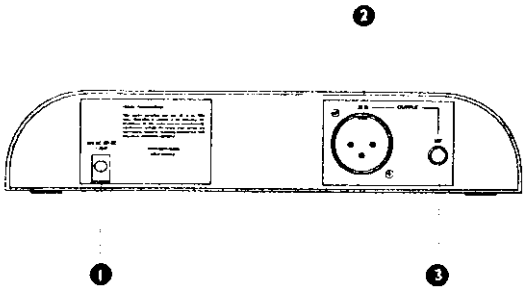


Power up the transmitter and select the proper frequency channel for data transmission. TRANSMITTER AND RECEIVER MUST BE ON THE SAME CHANNEL TO OPERATE CORRECTLY. Attach belt-pack transmitter to your waist band or instrument strap. For best operation keep antenna away from your body and unobstructed.

Communication between transmitter and receiver can be checked by viewing the LED display on the receiver. The LED display will show proper reception, transmitter battery life, and audio signal strength. Once data is being received, input an audio signal into the transmitter using your microphone or instrument. The audio meter on the receiver should display audio signal strength. Once you have verified the unit is receiving data, and audio level is being displayed, the unit is ready for operation.

Battery Replacement

The transmitter uses 4 AA alkaline batteries. DO NOT MIX OLD AND NEW BATTERIES. This will cause unpredictable battery life performance and display readings. To remove and install batteries, hold down on the battery release button, and slide the cover open. This will expose the battery compartment. For quick removal of batteries, it is okay to 'slap' transmitter to palm of hand. A sticker showing the proper battery placement is on the bottom of the battery compartment. After installing the batteries, slide the cover over the batteries until the release button locks (you should here a click when it locks). After the batteries have been installed power the unit on, an LED will light to indicate power is on.

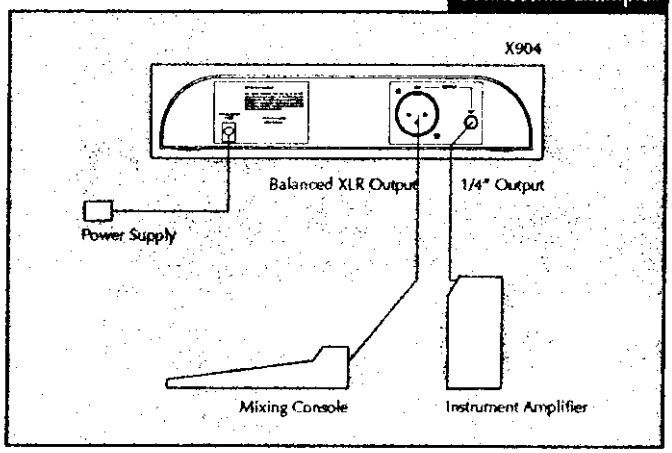


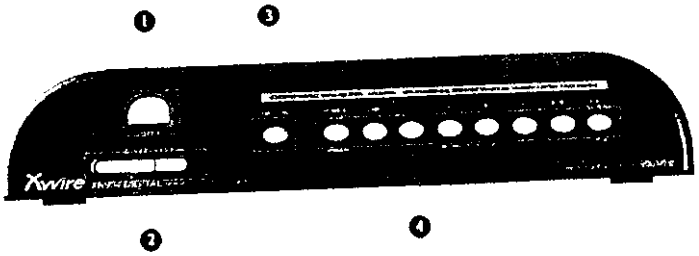
❶ Power Supply Connector
- Connect to the power supply.
- Power requirements are 9 volt A/C or D/C.

❷ Balanced XLR Output Connector
- If the source is a microphone or instrument, connect to balanced microphone input of mixer. If the source is line-level, connect to balanced line-in of mixer. Audio signal that originated at the transmitter will be output.

❸ Unbalanced 1/4" Output Connector
- Connect to the input of an instrument amplifier. Audio signal that originated at the transmitter will be output.

Connection Examples





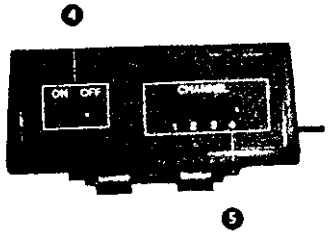
er Switch (POWER)
- Press once to turn the power to the receiver on, and once more to turn the power off.

a On Indicator
- This LED will light when transmitter that is set to the same operating channel is powered on.

❷ Channel Select Button (CHANNEL 1234)
- Slide this button to select one of four operating channels.
- The receiver will be set to receive data on one of four operating frequencies.

❸a Transmitter Battery Performance Indicator
- Indicates the number of hours that the transmitter will operate with the currently installed batteries (in one hour increments, eleven hours typical).

❸b Audio Level Indicator
- Indicates audio level across an eight segment LED display.



ransmitter Power Switch (ON - OFF)
- Slide left to turn the power to the transmitter on, and then to the right to turn the transmitter off.

❺ Transmitter Channel Select Button (CHANNEL 1234)
- Slide this button to select one of four operating channels.
- The transmitter will be set to transmit data on one of four operating frequencies.

Congratulations on your purchase of the Xwire X904 Digital Wireless System. The Xwire X904 is a state-of-the-art 900 MHz (UHF) digital audio transmission system and is capable of outstanding audio and RF performance in combination with high-grade amplification, mixing and recording systems.

Xwire proudly presents this advanced new standard in audio transmission to musical and audio professionals as proof of Xwire's non-compromising pursuit of the ultimate in RF and audio performance.

Your digital wireless system is designed for superb audio quality and wireless performance as well as continued reliability.

To familiarize you with your new digital wireless system, we suggest that you read through this entire operation manual.

FEATURES

- 16-bit A/D - D/A Conversion - For CD quality sound.
- No Compander ICs - For the transient response and 'feel' of a wired connection.
- Frequency Clear™ UHF Digital - System transmits a proprietary digital signal on a 900 MHz UHF carrier for freedom from multipathing and interference, including HDTV.
- Quadiversity™ Receiver - One UHF receiver, four internal antenna, all microprocessor controlled for freedom from dropouts.
- Scanner-proof Security - Proprietary digital transmission is scanner-proof for eavesdrop free peace of mind.
- Operating Range of 80 - 130 feet under adverse conditions, 280 feet line of sight.
- Nine Segment LED Display - Shows important performance parameters including audio level, operating channel, and battery life in the transmitter.
- Limited Five Year Transferrable Warranty - For quality assurance. Made in U.S.A.

As you unpack the X904, please check to be sure that along with the XR904 receiver, the following items are included:

- XT904Belt pack or XH904 Handheld digital transmitter.
- set of four alkaline AA batteries.
- a 9V AC or DC power supply.
- microphone or audio cable (depending on model purchased).

INFORMATION

Warning:

Changes or modifications not expressly approved in writing by Xwire Corporation may void the users authority to operate this equipment.

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.