

Tech Tip

X1 Series Quick Start Guide

The X1 Series is a custom wireless platform, engineered to provide installers and integrators a flexible and robust wireless solution that delivers uncompromising performance and signal integrity. The X1 helps meet the needs of installers who are looking to reduce retrofit wiring costs or address any issues related to speaker wiring in the installation.

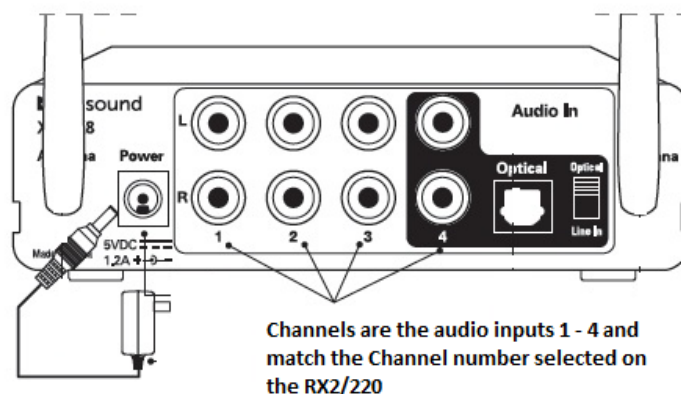
Product Highlights

- Proprietary digital signal provides a reliable connection with very low latency between the original source signal and the output receiver, eliminating any echo effect.
- Small form factor for easy placement and mounting options.
- Metal construction for durability and interference rejection.
- Adjustable Optimized Diversity Antennas and Professional design allows for a range of 100ft in standard residences with walls and floors as obstacles. Unobstructed or line of sight range is much greater.
- Detachable antennas for ease of replacement or extension for greater range.
- The X1 Series consists of three components:
 - X1-TX8 – 4 Stereo Channel Transmitter
 - X1-RX220 – Amplified Receiver (20W per channel)
 - X1-RX2 – Line Level Receiver

Equipment Setup

- X1-TX8
 - Connect audio outputs from your mixer, controller or zone 2 of a receiver (using the appropriate cables) to the RCA inputs on the TX8.
 - If you are only connecting 1 stereo source to the TX8, connect to input 1.
 - If you are using a digital optical connection, use input 4.
- X1-RX220
 - Connect speaker level output to your speakers.
- X1-RX2
 - Connect the RCA output from the RX2 using the appropriate connector cables to your amplifier or powered speakers (line level or optical).
- Connect power to all X1 products.
- Set the **ID** number. ID sets the frequency band used and will need to match on all units.
 - On the TX8, set the ID number (from 1-9) by pressing the ID button.
 - On the RX2 or RX220, set the ID number to match the ID on the TX8 by pressing the ID button. If multiple RX2/RX220 receivers are being used, match the ID numbers.

- Set the **Channel** number on the RX2 receivers. Channel numbers match the source inputs on the rear panel of the TX8 (1-4). Source input 1 is Channel 1 on the receiver, source input 2 is Channel 2, etc.



- Adjust volume on your mixer, controller or zone 2 output as needed.
- Verify the LEDs on the front of the TX8. The Power LED should be a solid green and the Link LED should show a green LED when other X1 receivers are detected on the same ID.
- Verify the LEDs on the front of the RX2 or RX220. The Power LED should be a solid green and the Link LED will show a green LED when it detects an audio signal and connects to a TX8.

Setup notes:

- ❖ Link LED: Solid indicates both connection to a TX8 AND audio signal is present. A blinking Link LED indicates there is no TX8 detected on this ID. Check ID on TX8 and RX2/RX220 to match ID number.
- ❖ Auto-off function: The Link LED on the RX2/RX220 will shut off if no audio signal is present from the TX8 after 10 minutes and will indicate a link once a signal is present again.

ID Settings

The X1 products operate over three frequency bands, 2.4GHz, 5.2GHz and 5.8GHz and feature Frequency Hopping Mode or Fixed Frequency Mode. These available options allow you to find the ID setting that works best for your particular installation.

- Fixed Frequency Mode operates on a set frequency band.
- Frequency Hopping Mode will automatically search for the best and least congested frequency within the ID setting selected.
- ID 1-3 uses 2.4GHz bands that operate better through walls and are often used for Wi-Fi networks.
- ID 4-6 uses the 5.18GHz to 5.240GHz band that offers a balance between least possible interference and better performance over higher ID bands.

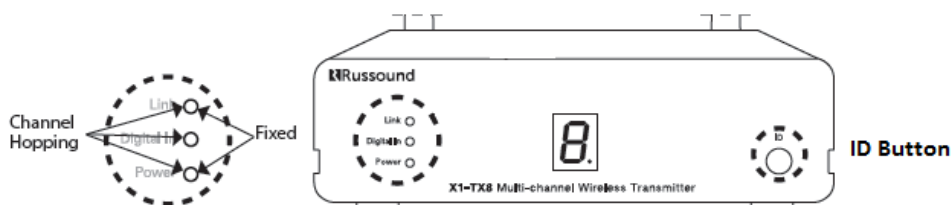
- ID 5-9 uses the 5.2GHz to 5.8GHz bands that offer less interference and are better for line-of-sight operation but do not go through walls the same distance as the lower IDs.

Frequency Hopping Mode or Fixed Frequency Mode

The Frequency Hopping technology will combat crowded spaces by searching for the cleanest and least congested frequency band. Determining the modes and band used is a question of application and distance requirements and may require some trial onsite. Depending on the amount of interference in your installation, you may choose to select between Frequency Hopping or Fixed Frequency mode.

The X1 units come preset to Fixed Frequency Mode but can be easily selected between these modes from the TX8 by pressing and holding the ID button while power cycling the unit.

1. Disconnect the power from the TX8.
2. Press and hold the ID button on the front.
3. Reconnect power, look for 2 LED's or 3 LED's illuminated on the front of the unit to indicate which mode the TX8 is in.
 - 2 LED's represent Fixed Frequency Mode
 - 3 LED's represent Frequency Hopping Mode.
4. To change the mode, repeat the steps above.



ID Frequency Bands:

Fixed Frequency Mode

ID 1 = 2.41GHz

ID 2 = 2.438GHz

ID 3 = 2.464GHz

ID 4 = 5.18GHz

ID 5 = 5.210GHz

ID 6 = 5.240GHz

ID 7 = 5.736GHz

ID 8 = 5.762GHz

ID 9 = 5.814GHz

Frequency Hopping Mode

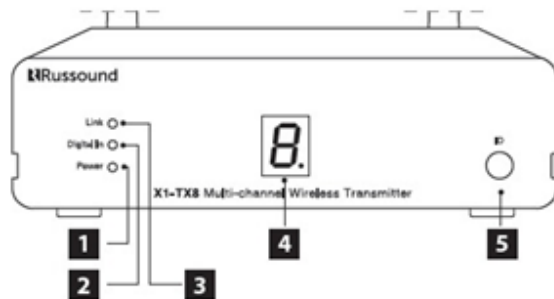
ID's 1, 2 and 3 = 2.4GHz

ID's 4, 5 and 6 = 5.2GHz

ID's 7, 8 and 9 = 5.8GHz

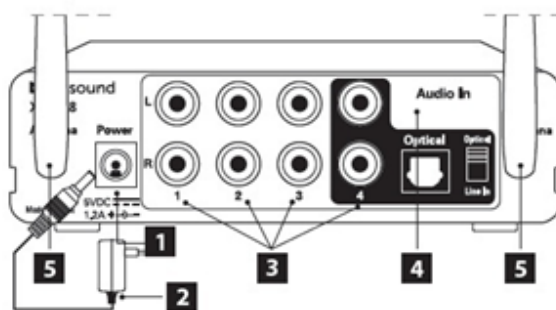
X1-TX8 FRONT, BACK PANEL

Front panel



- 1 Power**
- 2 Digital In**
Confirms digital audio in
- 3 Link**
Confirms connection to receiver X1-RX2 or X1-RX220
- 4 ID Number**
- 5 ID**
Sets ID to match receiver X1-RX2 or X1-RX220

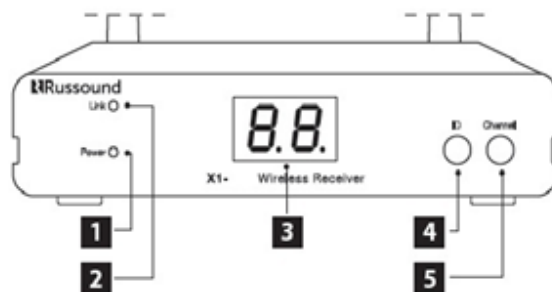
Back panel



- 1 Power Plug Inlet**
- 2 Power Supply**
5VDC 1.2A
- 3 Channels**
Channels are the audio inputs 1-4 and match the Channel number selected on the RX2/RX220
- 4 Audio In**
Audio inputs:
1-3 Line level
4 Line in or optical
- 5 Antenna**
SMA 50ohm type connector

X1-RX2/220 FRONT PANEL

Front panel



- 1 Power**
- 2 Link**
Confirms connection to transmitter X1-TX8
- 3 ID Number**
Sets ID to match TX8.
- 4 ID**
Sets ID to match transmitter X1-TX8
- 5 Channel#**
Sets Channel (inputs on the back of X1-TX8)