

User and Installation Guide

DIGITAL Wireless

Audio Transmitter / Receiver

Model TX1, RX1

Amphony[®]

Unpacking: Check that this package contains:

One audio transmitter, one audio receiver, two AC adapters, two audio cables.

Step 1

Connecting the transmitter

With the transmitter, you can send music from your iPod / iPhone or from any audio source that either provides a line-level audio signal or amplified speaker level signal.

Depending on what type of audio signal you wish to transmit, follow one of the below guidelines:

a) Transmit music from an iPod / iPhone

Place your iPod or iPhone into the iPod cradle located at the top of the transmitter. Ensure the iPod / iPhone display faces towards the front of the transmitter.

b) Transmit music from a line-level audio source

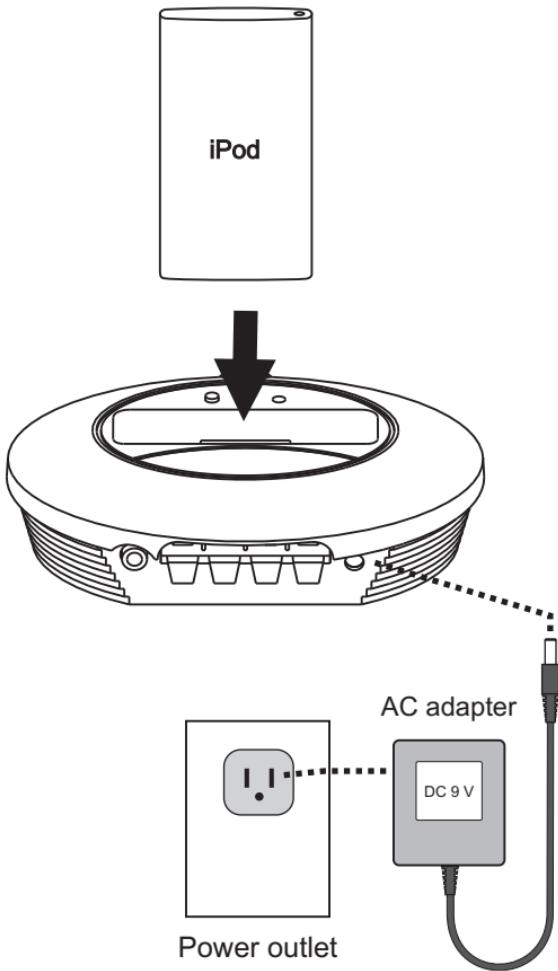
Attach the small silver jack of the supplied Y adapter audio cable to the line level audio input of the transmitter. Then connect the two RCA plugs to your audio source.

c) Transmit music from an amplified source

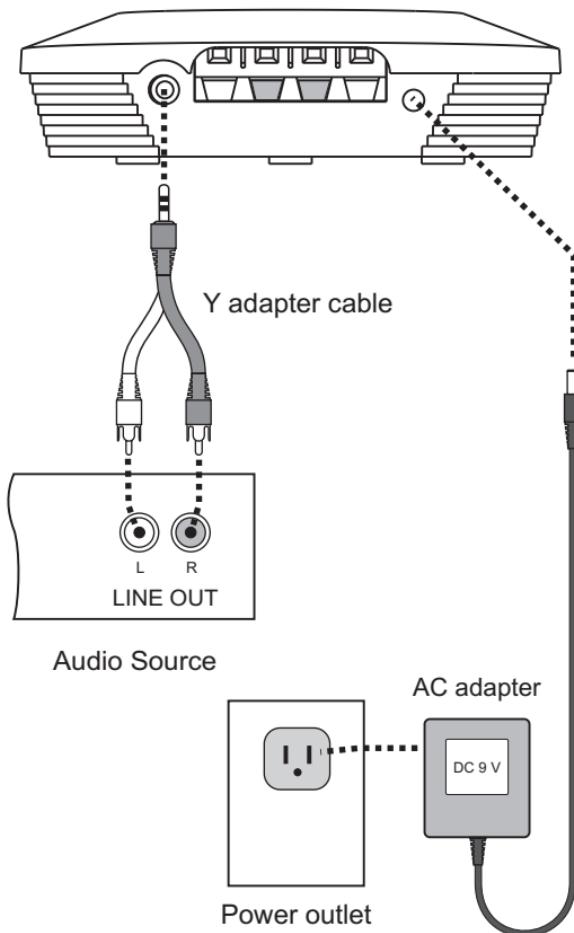
In order to transmit music from an amplified audio source, attach the two supplied speaker cables to the speaker outputs of your source and then to the speaker jack of the transmitter. Please ensure the correct polarity of the cable.

The transmitter can also be connected to other audio outputs by using an appropriate adapter.

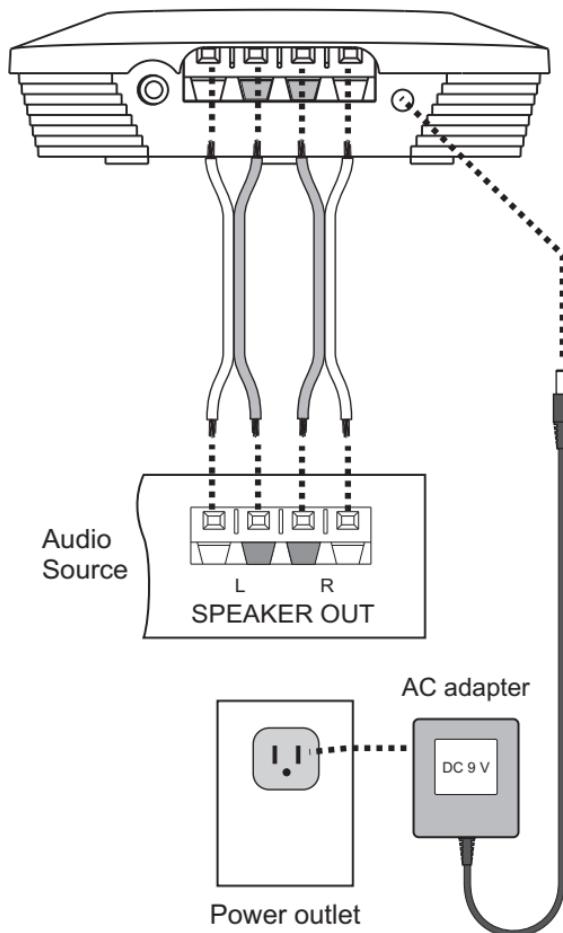
Finally, connect the supplied small AC adapter's barrel-shaped plug into the DC 9V jack, and then plug the transformer into a standard AC outlet. We recommend the use of a surge protector to protect the transmitter from power surges.



Example: Transmitting music from an iPod



Example: Connecting the transmitter to a line-level audio source



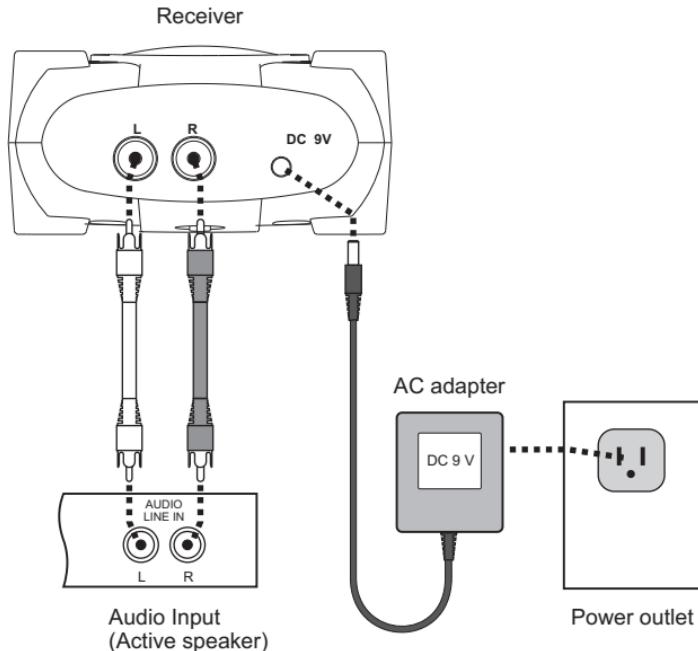
Example: Connecting the transmitter to an amplified audio source

Step 2 Connecting the receiver

The receiver connects to a line-in interface of an active speaker or external amplifier via the supplied RCA cable.

If no line-in interface is available, the receiver can also be connected to other audio inputs by using an appropriate adapter. It should be noted that the maximum audio level of the receiver output is 1 Vrms ($V_{pp} \pm 1.4 \text{ V}$ maximum). Ensure that the connected audio device will accept this audio level.

Connect the DC power input with the supplied AC adapter. The use of a surge protector is recommended to protect the receiver from power surges which may damage the receiver or may cause audio dropouts.





Pairing the transmitter and receiver

In order for the transmitter and receiver to communicate, they need to be paired. To pair the transmitter and receiver, push the transmitter pairing button. The transmit light will start flashing.

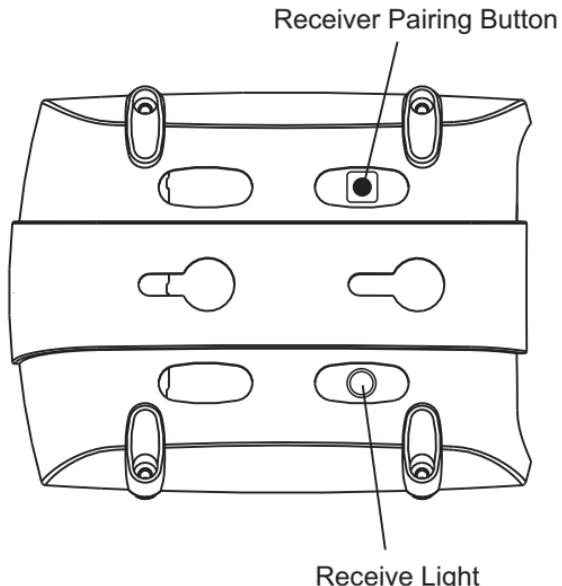
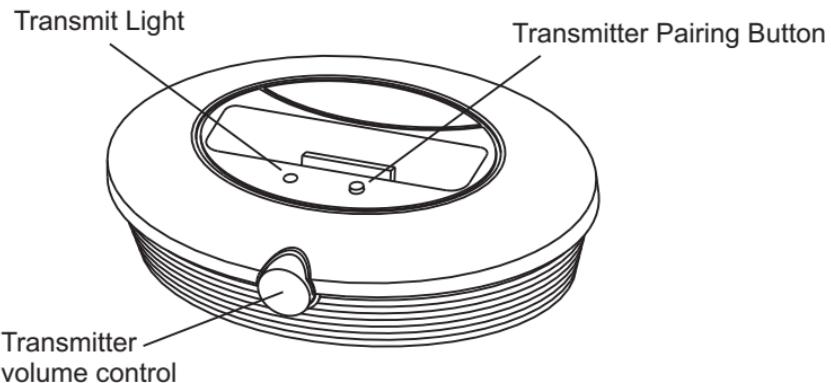
Next, push the pairing button of the receiver which is located on the bottom of the receiver.

You must push the receiver pairing button within one minute after you have pushed the transmitter pairing button.

You can add up to 3 more receivers to receive the signal from the transmitter (maximum of 4 receivers in total). Pair each additional receiver as shown above.

Description of the transmit and receive light

Transmitter	
Flashing Slowly	- No receivers detected
Flashing Quickly	- Pairing mode
Constantly On	- Transmitting signal
Receiver	
Flashing Slowly	- No transmitters detected
Constantly On	- Receiving valid audio signal



Step 4**Setting the transmitter volume control**

The transmitter performs advanced analog-to-digital transmission of the audio signal. In order to achieve maximum dynamic range and avoid clipping of the audio, the transmitter volume control must be adjusted to your audio source.

In order to properly set the transmitter volume control, turn the volume of the device connected to the receiver to a low setting. Then feed a signal with the highest possible volume into the transmitter. Set the transmitter volume control to the highest level while there is still no clipping / distortion of the audio signal. Then set the volume of the device connected to the receiver to your desired level.

If the transmitter level is set too low, the dynamics of the transmission are not fully used. If the level is set too high, audio clipping (distortion) will occur inside the transmitter during the analog-to-digital conversion.

If the transmitter or receiver are not used for an extended period of time, remove the AC adapters from the power outlet.

ATTENTION!

Do not connect the receiver audio output directly to passive speakers or other low impedance drains as this may damage the receiver! The receiver audio output cannot drive passive speakers or headphones directly. For those devices, an external amplifier is required.

Troubleshooting

Problem	Possible Cause	Solution
The transmit light does not go on after DC power is applied to the transmitter	Faulty AC adapter or faulty power outlet	Check the power outlet and the AC adapter; if possible, check for correct voltage of the AC adapter.
The transmit light goes out after a few seconds and does not light again	No audio present at audio input	Check the audio connection to the transmitter and ensure that there is audio present.
	Transmitter hung up	Disconnect and then reconnect DC power.
No audio at receiver	Faulty AC adapter or faulty power outlet	See under "Faulty AC adapter or faulty power outlet" above.
	Transmitter volume control set too low	Adjust the transmitter volume control.
	Strong interference	See under "Strong Interference" on next page.
Audio is distorted	Transmitter volume control set too high	Adjust the transmitter volume control until clipping stops.
	Strong interference	See under "Strong Interference" on next page.
Speaker audio level is too low	Transmitter volume control set too low	Adjust the transmitter volume control to achieve the desired audio level.
	Speaker volume control set too low	Adjust the speaker volume control to achieve the desired audio level.
	Audio signal too weak	Increase the output level of the audio source (connect transmitter to an adjustable output by using an adapter if necessary).

Technical Specifications

Transmitter:

Audio transmission method: Digital, uncompressed

Transmitter frequency: 2.4 GHz

Transmitted data rate: 5 Mbps

Transmitter operating range:

max. 200 ft. line of sight, max. 50 ft. through walls and ceilings

Audio sampling method: 128 times oversampling

Receiver:

Output level: 1 Vrms

Frequency response: 2 Hz ... 20 kHz

Signal-to-noise ratio: 91 dB (Transmitter / Receiver, A-weighted)

Total harmonic distortion: typ. 0.01 % (-80 dB)

Overall audio latency: 18 ms

Channel separation: typ. 90 dB

IMPORTANT SAFETY INFORMATION

READ THESE SAFETY INSTRUCTIONS CAREFULLY AND HEED ALL WARNINGS IN THIS MANUAL.

ATTENTION!



POWER SOURCE

To avoid product malfunction, and to protect against electric shock, fire or personal injury, please observe the following:

- This product has been designed to work with 120-volt AC current using the supplied AC adapters. Connection to a line voltage other than that or use of non-compatible AC adapters may create a safety and fire hazard and may damage the product.
- Do not run power cords under rugs or carpets or place heavy objects on them.
- Damaged or deformed power cords are hazardous and should be replaced immediately by a qualified service technician.

LOCATION

- Do not use this product outdoors or in cars.
- Air vents are provided at the bottom of the receiver to prevent excessive temperatures inside the unit. Do not place the receiver in closed spaces, cover it, or otherwise block the vents.
- Do not place this product in direct sunlight, or near heat sources.
- Keep this product away from strong magnetic objects.

VOLUME CONTROL

- Do not turn up the volume while listening to a portion with very low level input or no audio signal to avoid damage to your speakers during a peak level audio portion.
- Turn the speaker volume control to minimum prior to connecting or disconnecting the transmitter or receiver and prior to switching audio sources as this may cause loud clicks which can damage your speakers.

CARE

- Do not insert or drop anything into the receiver through the air vents as this could cause serious damage, possibly resulting in fire.
- Do not place any object containing water or other liquids on this product.
- Do not remove the cabinet. Touching parts inside the cabinet could result in electric shock and damage to the product.

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Revisions may be issued to advise of such changes and/or additions.

All product names, trade names, or corporate names mentioned in this document are acknowledged to be the proprietary property of the registered owners.

FCC ID: PMJTX1 (Transmitter), **PMJRX1** (Receiver)

This device complies with part 15 of the FCC Rules. Operation is subjected 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.

Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

IMPORTANT NOTE:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator & your body.

NON-USE PERIODS

- When the product is not being used for a long period of time, unplug the product.

CLEANING

- Unplug the product before cleaning.
- When the system gets dirty, wipe it with a clean, soft cloth. If necessary, wipe it with a soft cloth, slightly dampened with soapy water. Wipe dry immediately with a dry cloth.
- Never use benzene, aerosol cleaners, thinner, alcohol or any volatile cleaning agent.
- Do not use abrasive cleaners, as they may damage the finish.

SERVICE

- Do not open the cabinet of any components. Opening the cabinets may present a shock hazard, and any modification to this product will void your warranty.
- Do not attempt to service the unit yourself. If liquid or any metal objects such as paper clips, wire or staples accidentally fall inside, disconnect the product from the power source immediately, and consult an authorized service center.
- Please refer any service to an authorized Amphony service center.

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Limited warranty

WHAT YOUR WARRANTY COVERS

This warranty extends only to the original user of the equipment ("you", "your") and is limited to the purchase price of each part. Amphony and its affiliated companies ("we", "our", "us") warrant this Wireless Transmitter / Amplifier Set against defects in materials or workmanship as follows.

LABOR: For a period of ninety (90) days from the original date of purchase, if we determine that the equipment is defective subject to the limitations of this warranty, we will replace it at no charge for labor. We warrant any such work done against defects in materials or workmanship for the remaining portion of the original warranty period.

PARTS: For a period of one (1) year from the original date of purchase, we will supply, at no charge, new or rebuilt replacement parts in exchange for parts we determine are defective subject to the limitations of this warranty. We warrant any such replacement parts against defects in materials or workmanship for the remaining portion of the original warranty period.

Note: "Parts" means items included in this package. It does *not* include other parts purchased separately.

WHAT YOUR WARRANTY DOES NOT COVER

This warranty *does not cover* consumer instruction, physical setup or adjustment of any consumer electronic equipment, or signal transmission problems.

This warranty *does not cover* cosmetic damage, damage due to the affixing of any attachment not provided with the product, loss of parts, connecting the product to any but the specified receptacles, lightning, electrical surges, fire, flood, or other acts of God, accident, misuse, abuse, repair or alteration by other than authorized service personnel, negligence, commercial or institutional use, or improper or neglected maintenance.

This warranty *does not cover* equipment sold AS IS or WITH ALL FAULTS, equipment removal or reinstallation, shipping damage if the equipment was not packed and shipped in the manner we prescribe, nor equipment purchased, serviced, or operated outside the contiguous United States of America.

LEGAL LIMITATIONS

REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS YOUR EXCLUSIVE REMEDY. WE SHALL NOT BE HELD LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESSED OR IMPLIED WARRANTY ON THIS EQUIPMENT, NOR FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF, OR INABILITY TO USE, THIS EQUIPMENT. UNDER NO CIRCUMSTANCES SHALL OUR LIABILITY, IF ANY, EXCEED THE PURCHASE PRICE PAID FOR THIS EQUIPMENT, EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW. EXCEPT AS PROVIDED HEREIN, WE MAKE NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. WE RESERVE THE RIGHT TO REFUSE TO HONOR THIS WARRANTY IF WE DETERMINE ANY OF THE ABOVE EXCEPTIONS TO HAVE CAUSED THIS EQUIPMENT NOT TO HAVE PERFORMED PROPERLY. THIS WARRANTY SHALL BE VOID IF ANY FACTORY-APPLIED IDENTIFICATION MARK, INCLUDING BUT NOT LIMITED TO SERIAL NUMBERS AND WARRANTY LABELS, HAS BEEN ALTERED OR REMOVED. THIS WARRANTY SHALL ALSO BE VOID IF THE TRANSMITTER OR AMPLIFIER HAVE BEEN OPENED BY AN UNAUTHORIZED PERSON.

This warranty gives you specific legal rights which may vary from state to state. Some states do not allow the exclusion or limitation of incidental or consequential damages, or allow limitations on the duration of an implied warranty, so those limitations may not apply to you.

Note: No responsibility is assumed for the presence of interference outside of Amphony's control, such as other transmitters or cordless phones, which may hamper proper signal reception.