



Model xTV-8T / xTV-8R

Wireless Entertainment Transmitter & Receiver

Operation Manual

www.cardiotheater.com



Cardio Theater xTV 863-865MHz Pre-Installation Procedure

The purpose of the pre-installation procedure is to determine that there are no spurious emissions or other wireless products that may interfere with Cardio Theater 863-865 wireless system. A Radio Frequency Spectrum Analyzer will be required for this procedure.

- Set the Spectrum Analyzer to frequency range 863MHz to 865 MHz.
- Place the Spectrum Analyzer in the cardiovascular workout area.
- Check the spectrum for any wireless products that may be transmitting within the 863-865MHz bandwidth.
- **IMPORTANT**- certain wireless microphones systems available throughout Europe transmit between 863-865 MHz. If the location is currently using this type of wireless microphone system, it is likely that the microphone will interfere with the Cardio Theater system. The solution is to change the wireless microphone system to a 173.8 -175.0 VHF microphone system also available throughout Europe.
- If other frequencies transmitting in the 863 – 865 bandwidth are discovered that are generated by an external non-controllable source, it is necessary to note the frequencies and set the Cardio Theater transmitters away from these frequencies. This may reduce the number of transmitter channels. If the external non-controllable frequencies are being generated by a very powerful signal, they may cause static interference with the Cardio Theater wireless system.
- Proper positioning of the Cardio Theater transmitter can also greatly affect the operating range and audio quality of the transmitter. The antenna should always be oriented in a vertical position and placed a minimum of 8 feet from the floor without any major obstructions between the transmitter and receiver.
- Cardio Theater xTV Transmitters now feature Automatic Level Control (ALC) circuitry for consistently even audio levels. Input volume levels from the audio output source must be first set to a median position to insure adequate audio level to the transmitter. The transmitter may not be able to fully compensate if incoming audio level is initially set too low.

TABLE OF CONTENTS

| | |
|--------------------------------------|--------|
| Step 1: Setting Transmitter Number | Page 1 |
| Step 2: Connecting Transmitter to TV | Page 2 |
| Step 3: Installing Receiver | Page 3 |
| Step 4: Programming Receiver | Page 4 |
| Specifications | Page 5 |
| Warranty | Page 6 |

STEP 1: SETTING TRANSMITTER NUMBER

Simply set the left and right dials on the rear of the transmitter to the corresponding numbers below.

Example: For Transmitter #1 set left dial to "0" and right dial to "1"

| Transmitter | Left Dial | Right Dial | Frequency (Mhz) |
|-------------|-----------|------------|-----------------|
| #1 | 0 | 1 | 863.050 |
| #2 | 0 | 2 | 863.200 |
| #3 | 0 | 3 | 863.400 |
| #4 | 0 | 4 | 863.550 |
| #5 | 0 | 5 | 863.750 |
| #6 | 0 | 6 | 863.900 |
| #7 | 0 | 7 | 864.100 |
| #8 | 0 | 8 | 864.250 |
| #9 | 0 | 9 | 864.450 |
| #10 | 1 | 0 | 864.600 |
| #11 | 1 | 1 | 864.800 |
| #12 | 1 | 2 | 864.950 |

STEP 2: CONNECTING TRANSMITTER TO TELEVISION

Important: Television with “Audio Output” jack required.

1. Connect provided patch cable into Left & Right **Audio Output Jack** on rear of TV.
2. Plug other end of patch cable into the Left & Right **Audio Input** jack on rear of transmitter.
3. Plug provided AC adapter into AC outlet.
4. Turn TV Speakers **OFF** via TV menu function if applicable.
5. Turn TV volume up at least 50% if TV has variable output.
6. Adjust audio level control so red “Peak” light blinks on and off.
Caution: Turning audio level to high will cause sound distortion
7. Plug headphones into xTV receiver. Match sound level of each TV by adjusting volume of each individual TV.
8. Place corresponding number sign under each TV

CONNECTING THE xTV-8T TRANSMITTER TO MUSIC COMPONENT:

1. Connect provided patch cable into Left & Right **Audio Output Jack** on rear of music component and follow steps 2 through 8 above.

STEP 3: INSTALLING RECEIVER

Mounting Receiver

The Cardio Theater xTV Receiver is designed to mount to any make or model of cardio equipment.

1. Insert two nylon wire ties (provided) through the holes in the mounting bracket on the rear of the Cardio Theater xTV Receiver.
2. Wrap wire ties tightly around the bar so the receiver does not rotate.

NOTE: Do not place receiver where it would interfere with the cardio unit controls or display panel. .

Powering the Receiver

Power the xTV Receiver one of two ways:

1. **C-Safe Cable:** Most cardio manufacturers offer C-Safe compatibility. Connect the Ultra Seal C-Safe cable to the C-Safe port located on cardio unit. (Refer to the CV manufacturer to locate C-Safe port on cardio unit).

Note: Many CV manufacturers offer C-Safe retrofit kits for older models. Contact your CV manufacturer for availability.

2. **AC Adapter:** In the event that C-Safe is not available on the cardio unit, use the Ultra Seal AC adapter. A standard outlet is required near the cardio unit.

Ultra Seal Connector:

The exclusive Cardio Theater Ultra Seal power connector, found on both Cardio Theater C-Safe cables and Cardio Theater 9 AC Adapters, prevents sweat or cleaning products, from entering the unit.

1. Insert the connector on the rear of the xTV-R and press firmly around the connector hood to make a complete seal.
2. To disconnect, press connector clip and release.

STEP 4: PROGRAMMING RECIEVER

This function enables the receiver to automatically scan the exact amount of transmitters and number them accordingly or you may manually program each channel.

Auto Program Mode:

1. To activate auto program mode, press Volume Up and Down buttons simultaneously for 3 seconds. The number 1 with a decimal point on left will pop up in display window.
2. Press the EQ button to begin programming. Scanning will take a few moments to lock in transmitters.

When auto programming is complete, press channel Up and Down buttons to confirm all transmitters have been programmed.

Manual Program Mode:

1. To activate manual program mode, press Channel Up and Down buttons simultaneously for 3 seconds. The number 1 with a decimal point on left will pop up in display window
3. Select a channel and press the EQ button to activate the desired channel. A decimal point will appear on the right side of number to confirm channel activation.

When manual programming is complete, press Mute button to lock channels and return to main functions.

XTV-8T Specifications

| | |
|--------------------------|---------------------------------|
| Input Sensitivity | 100 to 1 volt |
| Input Impedance | 10K ohms |
| Level Gain Control | -70 dBm to + 10dBm |
| Transmission Frequency | 863MHz to 865MHz |
| Signal to Noise | -70 dBm ref .7 volts |
| RF Output | 1 mW |
| Distortion | <2 %. |
| Audio Frequency Response | 20Hz to 15KHz |
| Weight | 1 lbs. |
| Power Requirements | 12 VDC 200 mA |
| Dimensions | W: 5.50" H: 1.48" D: 5.00 |

WARRANTY

Cardio Theater warrants the xTV wireless entertainment system to be free from defects in material and workmanship for the following period of time from date of shipment, provided that the products have not been subject to mechanical, electrical, or other abuse or modifications.

| | |
|---|------------------------------|
| Cardio Theater xTV-T Wireless Transmitter | 3 Years Parts & Labor |
| Cardio Theater xTV-R Wireless Receiver | 1 Year Parts & Labor |
| Quick Change Headphone Jack | 90 Days On Original Purchase |

Should the xTV wireless entertainment transmitter or receiver be deemed defective by Cardio Theater, a return authorization number will be issued. **Cardio Theater will not accept returns without a return authorization number.**

Cardio Theater reserves the right, at their option, to repair or replace the equipment after verification of defect.

Equipment that fails after the warranty period expires will be repaired at the current price of part and labor after authorization from the customer. Repairs are warranted for 90 days.

This warranty is in lieu of all other warranties expressed or implied.

The user is cautioned that changes or modifications not expressly approved by the manufacturer of the equipment could void the user's authority to operate the equipment.