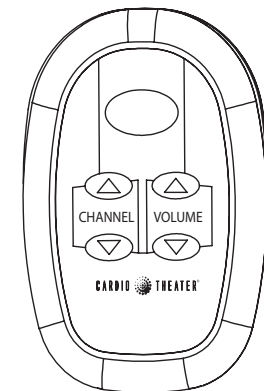
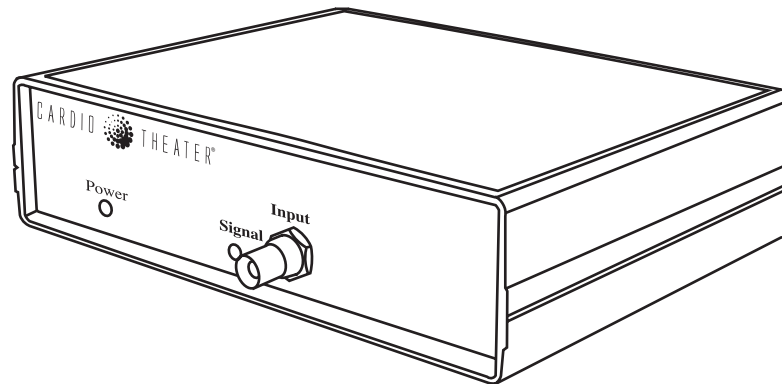
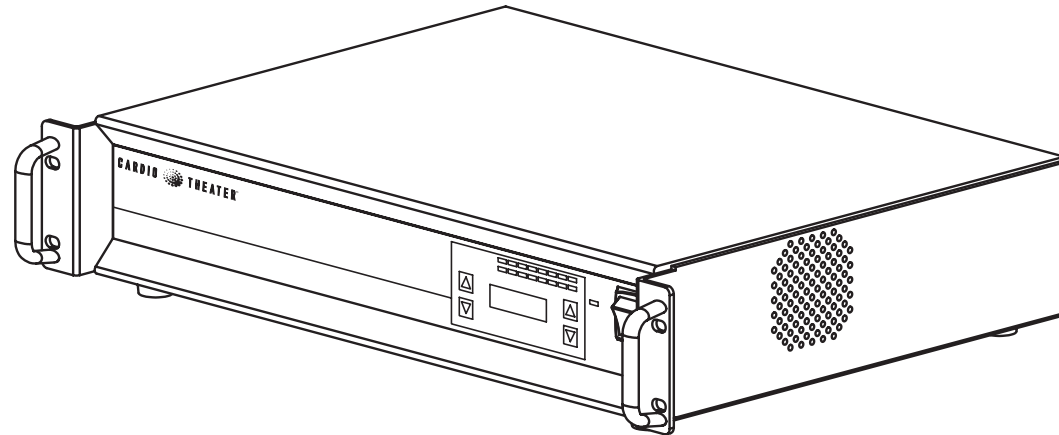


Cardio Theater Wired System

Installation and Maintenance Guide



CARDIO  THEATER®

Important Safety Instructions

Always follow basic safety precautions when using this equipment to reduce the chance of injury, fire, or damage.

- Read all instructions in this guide before installing and using the equipment. Follow any labels on the equipment.
- Use the power adapter provided with the equipment. Plug the power adapter into an appropriate, grounded power outlet as marked on the equipment.
- Position power cables so that they are not walked on or pinched by items placed upon or against them.
- Make sure that the equipment has adequate ventilation. Do not place anything on top of or over the equipment. Do not use on a cushioned surface that could block the ventilation openings.
- Keep the equipment away from water and moisture.
- Locate the equipment away from sources of heat, such as radiators, heat registers, and stoves. Avoid temperature extremes.
- Avoid dropping anything on or spilling anything inside the equipment because doing so can damage the electronics.
- Do not attempt to service the unit yourself except to follow the maintenance instructions found in this guide.

Regulatory Information

Radio Frequency Interference (RFI)

Federal Communications Commission, Part 15

The unit has been tested and found to comply with

- the IEC EMC Directive (international electromagnetic compatibility certification)
- the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. The unit generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the owner's manual instructions, may cause harmful interference to radio communications.

WARNING Per FCC rules, changes or modifications not expressly approved by Precor could void the user's authority to operate the equipment.

European Applications

This product conforms to the requirements of the European Council Directive 89/336/EEC, Electromagnetic Compatibility.

This product also conforms to the requirements of the European Council Directive 73/23/EEC, Low Voltage Directive.

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Before You Begin

With the Cardio Theater Wired System, fitness facilities can add entertainment to exercise rooms while providing high-quality sound to its members. The Cardio Theater Wired System gives people the choice of listening to music, radio, or programs shown on TVs while they exercise. The person simply plugs a stereo headphone into a controller, selects the desired entertainment, and exercises while listening to high-fidelity sound. The digitized sound of the Cardio Theater Wired System eliminates possible background hissing and popping sounds.

A typical Cardio Theater Wired System includes a Model 800 or 1600 Distribution Unit, a number of controllers, a number of wired lower units, and connectors, cables, and more as ordered.

Depending on the size of the installation, you may need to install one or more QuadPac Wired Amplifiers, which will allow the facility to connect additional controllers or to include exercise equipment farther away than supported by the distribution unit.

The Model 800 Distribution Unit has 8 channels; the Model 1600 Distribution Unit has 16 channels. Depending on the distribution unit being installed, the fitness facility can offer up to 8 or 16 different types of entertainment at one time, to people listening with controllers. A public address feature lets the facility interrupt the current sound entertainment with important information for people exercising.

A fitness facility chooses to install the Cardio Theater Wired System when a wireless system cannot be installed due to foreseen conflicts with other wireless equipment, or the location makes it inadvisable.

This guide explains how to install a distribution unit, controllers, and wired lower units. It also includes installation instructions for a QuadPac Wired Amplifier if needed. For proper installation, please read this guide thoroughly and follow the instructions.

Note: In earlier Cardio Theater Wired System manuals, the names for parts of the system were different. Table 1 lists the old name and gives the name currently used.

Table 1: Name changes

<i>Old Name</i>	<i>New Name</i>
Main amplifier	Distribution unit
Upper monitor box	Controller
Floor monitor Lower monitor	Wired floor unit

About the Controller

The controller supports up to 16 channels of high-fidelity sound depending on the distribution unit installed. Use of the controller is intuitive; people can typically use the controller with little or no training. Figure 1 provides an overview of how to use the controller.

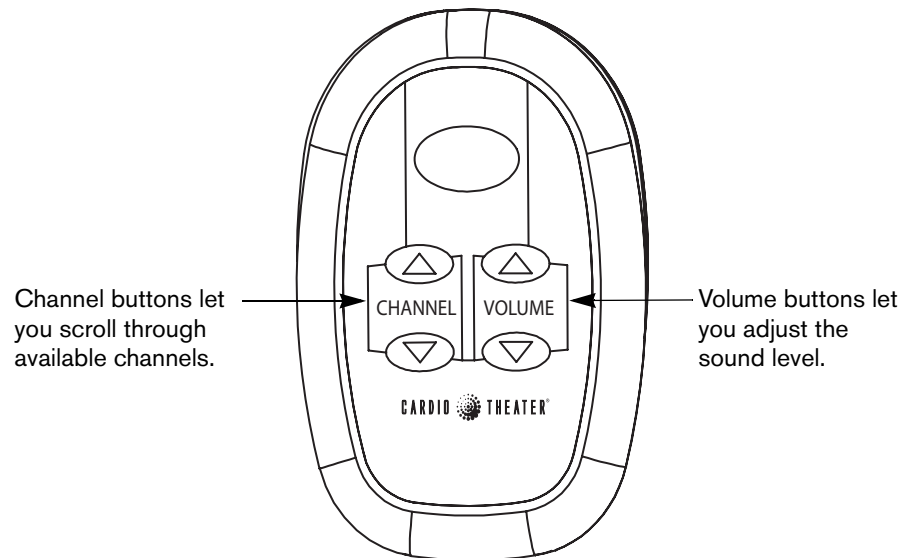


Figure 1: How to use the buttons on the controller

During installation, the technician attaches controllers to selected exercise equipment in the facility. Next, the technician installs a wired floor unit on the floor near each piece of equipment, and then attaches the nearby controller with a coiled cable; each controller requires a wired floor unit.

Controllers are powered by the distribution unit through the coaxial cables that link wired floor units to the distribution unit. Therefore, additional power cables are not required for the controllers.

Obtaining Service

Do not attempt to service any of the equipment provided in the Cardio Theater Wired System except as described in this guide. For information about product operation or service, refer to the Cardio Theater web site at www.cardiotheater.com or contact an authorized dealer. For information about product operation or service, contact an authorized Cardio Theater Technical Support Representative:

- 1-800-776-6695 or service@cardiotheater.com
- +44 118 973 9633 or emeaservice@cardiotheater.com

Returning Equipment to Cardio Theater

To return equipment to Cardio Theater for any reason, you must contact Cardio Theater Technical Support and obtain a return authorization (RMA) number. When requesting the RMA number, explain why you are returning the equipment, for example you ordered too many controllers and the extra controller can be returned to stock, or the equipment needs repairs.

Important: *Equipment must be shipped with an RMA number in order for Cardio Theater to process it. Any equipment received without an RMA number will be returned to the sender.*

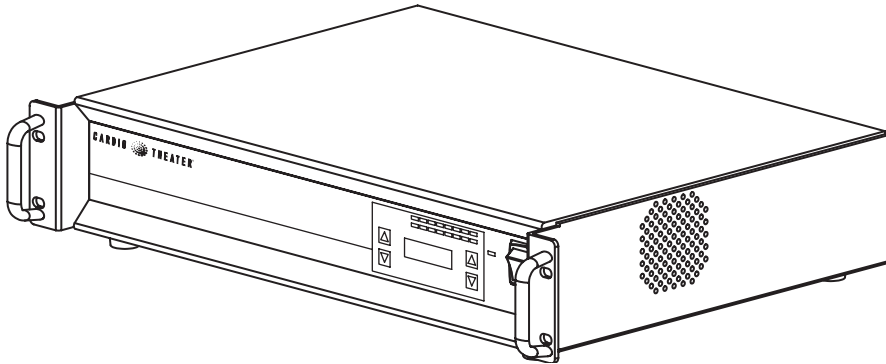
Preparations

Remember to read and follow the instructions in this guide. If you do not install the Cardio Theater Wired System according to these instructions, you could void the Limited Warranty.

Unpacking the Equipment

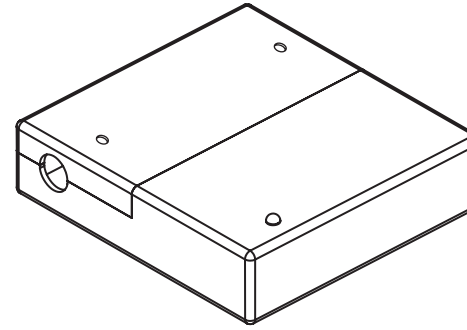
The Cardio Theater Wired System is shipped with the following items:

- Distribution unit, Model 800 or 1600 (CXC800 or CXC1600)

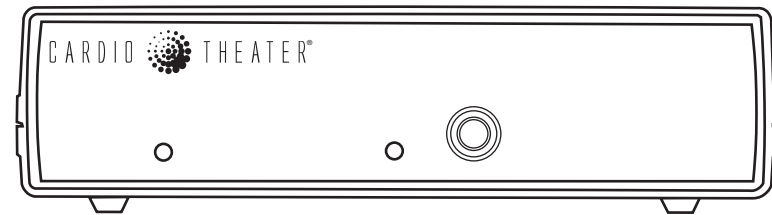


- Power cable for distribution unit
- RCA audio cables for distribution unit, quantity as ordered
- Multiple controllers (CX2004U), quantity as ordered
- Coiled cables, 1 per controller
- Neoprene pad, 1 per controller
- Wire ties, 4 per controller

- Multiple wired floor units (CX2002F), 1 for each controller



- Coaxial cables for wired floor units, quantity and lengths as ordered
- T-Connector, 1 per wired floor unit
- Terminators, 2 for Model 800 or 4 for Model 1600 Distribution Unit
- If needed, QuadPac Wired Amplifier, 1 to 4 as ordered



- For each QuadPac Wired Amplifier, an AC power adapter for each output connector that will be used
- Numbered signs to post near TVs and audio components
- These installation instructions

If any items are missing, contact the dealer from whom you purchased the Cardio Theater Wired System or call Cardio Theater Technical Support.

Required Tools

Obtain the following before installation:

- Phillips-head (crosshead) screwdriver
- Headphones
- Tool to cut the wire ties
- Pliers to tighten the wire ties

Installation Requirements

Review the following installation requirements before assembly. This section provides important information you need to know to properly install a Cardio Theater Wired System.

General Information

- The Model 800 Distribution Unit has eight stereo channels (eight audio inputs) and two output connectors. The Model 1600 Distribution Unit has 16 stereo channels and four output connectors. You can connect a different audio component to each channel. For example, with a Model 800 Distribution Unit, you could connect five TVs and three radio stations to its eight audio inputs.

Each output connector on the distribution unit supports up to 20 controllers. This means that the Model 800 Distribution Unit supports up to 40 controllers and the Model 1600 Distribution Unit supports up to 80 controllers. For an overview of a Wired System installation, refer to Figure 2.

- Cardio Theater recommends that you group audio components together to minimize cabling.
- If the audio components are stacked in a cabinet, make sure the equipment has adequate ventilation to avoid overheating.

- Place the distribution unit in a location where the front and back of the unit are easily accessible. The distribution unit requires 1 inch (3 cm) of clearance on each side for ventilation.
- Televisions should be arranged so that every person exercising has a clear view of the screens. Stagger the rows of exercise equipment, placing shorter equipment, such as recumbent cycles, in the front and taller equipment, such as elliptical crosstrainers, in the back.
- Number the TVs and audio components to match the corresponding channel selections that people will use on the controllers. Most likely you will want to place the numbered signs in front of the TVs and audio components in a logical order to make it easier for people.

Installing Controllers

- You can attach controllers to the handlebars of almost any exercise equipment. However, for safety, the controller must be installed on a stationary location, so you cannot install it on handlebars that move.
- Attach the controllers securely with the wire ties and neoprene pads. When a controller is properly attached to a piece of equipment, it should not move. Proper installation is important to prevent moisture from entering the controller through the power connector and damaging the electronics.
- Each controller requires a wired floor unit; a coiled cable connects the two together. After installation, make sure that the coiled cable does not interfere with using the exercise equipment.
- As possible, divide the controllers evenly between output connectors on the distribution unit. For example, if you have 20 controllers and a Model 800 Distribution Unit, connect 10 controllers to its two output connectors rather than all 20 controllers on one output connector.

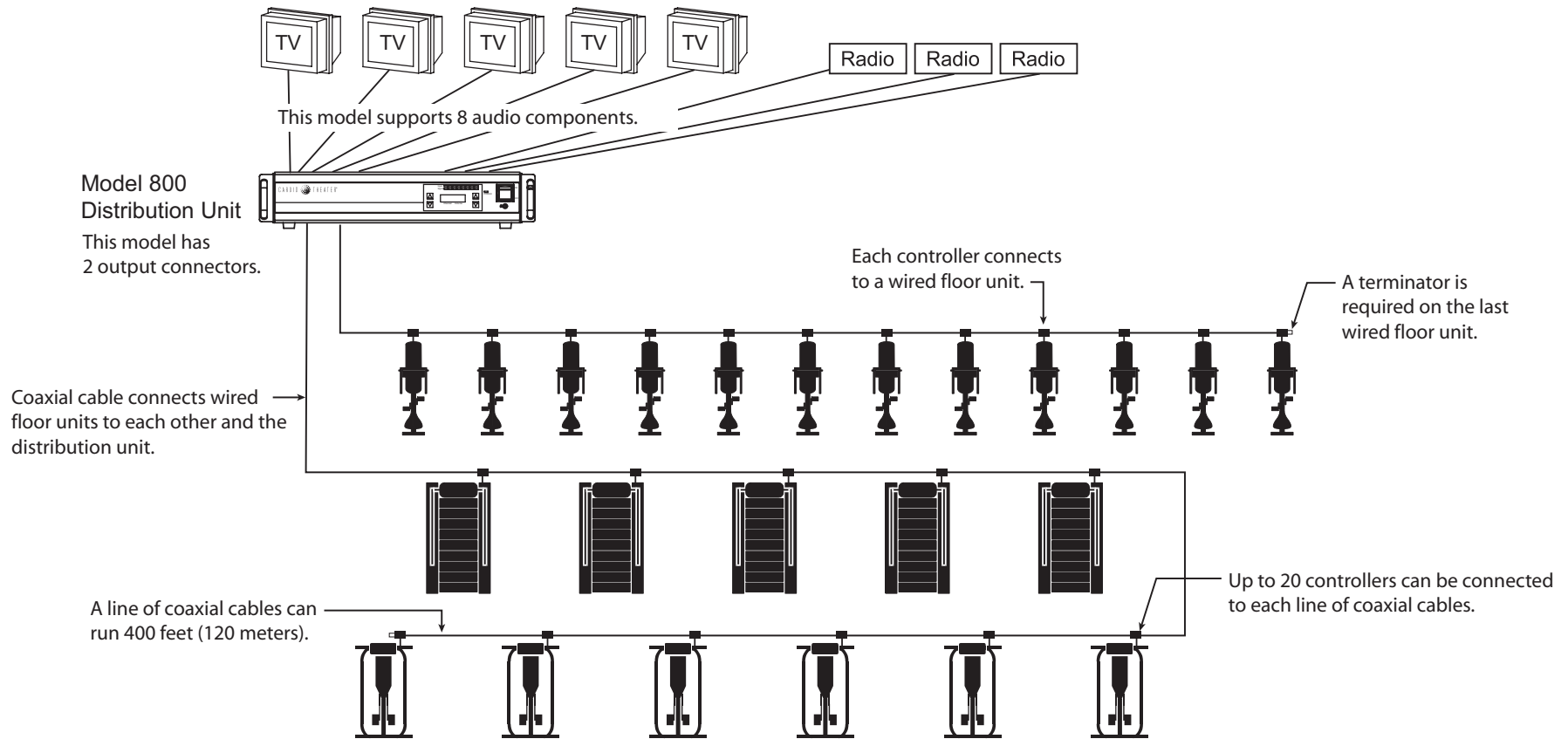


Figure 2: Overview of a Cardio Theater Wired System installation

Installing Wired Floor Units

- Wired floor units are connected to the distribution unit using coaxial cables. You can install the wired floor units and the associated coaxial cables under the floor, either in a sub-floor or conduit. You can also use an above-floor conduit system, such as a rubber raceway, to protect the coaxial cables. A *rubber raceway* is a narrow cable cover with beveled edges and a low profile that will not interfere with traffic flow. It may be secured to the floor with double-sided cloth carpet tape.
- The wired floor units must be secured to the floor or sub-floor to ensure that they remain stationary. The wired floor units may be secured using screws through the mounting holes or strong double-sided cloth carpet tape.
- Do not attach wired floor units to exercise equipment. Movement caused by people exercising on the equipment or from elevating a treadmill will cause problems with wired floor units if they are attached to the equipment.

Installing QuadPac Wired Amplifiers

- QuadPac Wired Amplifier lets a facility expand the number of controllers supported by a distribution unit. With a QuadPac Wired Amplifier, you can add up to 80 additional controllers, basically 20 controllers for each output connector on the wired amplifier. For example, this means a Model 1600 Distribution Unit, which normally supports 80 controllers, when cabled with a single QuadPac Wired Amplifier, can support up to 160 controllers. See Figure 3.

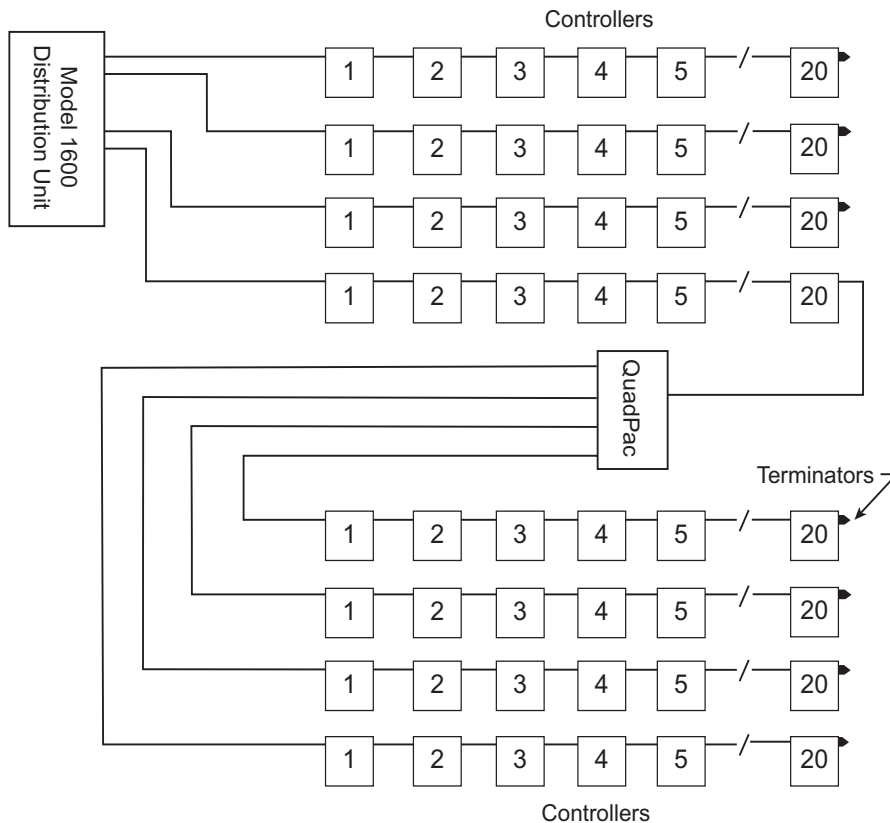


Figure 3: A QuadPac Wired Amplifier adds up to 80 ports

- You can connect two QuadPac Wired Amplifiers to a Model 800 Distribution Unit (one for each output); four wired amplifiers can be connected to a Model 1600 Distribution Unit.
- A site can also use a QuadPac Wired Amplifier to support exercise equipment located farther away than 400 feet (120 meters), which is the limit supported by the distribution unit. The QuadPac Wired Amplifier adds an additional 400 feet (120 meters). This means a facility can support exercise equipment located up to 800 feet (240 meters) away. You might add a wired amplifier, for example, if the club has two separate rooms that are at a distance from each other.
- Each output connector on the wired amplifier that will be used requires an AC power adapter. The AC power adapter provides power to the controllers connected (through coaxial cable) to the output connector.
- Unused output connectors on the QuadPac Wired Amplifier do not require a terminator, unlike the output connectors on a distribution unit.

Connecting the Wired System Together

- You must use 50 ohms impedance coaxial cable, such as RG58/U, which is normally sold with the Cardio Theater Wired System. Cardio Theater offers the coaxial cable in a variety of lengths for connecting a wired system together. Do not substitute any other cables or connectors for those specified and provided with the Cardio Theater Wired system.
- When connecting televisions, use the “Audio Out” or, preferably, “Line Out” connectors. If you are using televisions with Audio Out connectors, the external speakers must be turned off and the volume set to a reasonable, medium level to ensure that the available sound is not too loud or distorted for people using the controllers.

CAUTION: When connecting tuners or receivers, make sure that you connect to the “Record Out” or “Line Out” connectors. Do not use the “Speaker Out” connection because it may damage the distribution unit.

- Connect one coaxial cable to each output connector on a distribution unit; the maximum length of a coaxial cable is 400 feet (120 meters). As you connect cables, label them and use a descriptive name, such as “Treads 1” or “Rows 3 & 4,” to avoid guesswork in the future.

Note: By using a QuadPac Wired Amplifier, you can increase the distance between controllers and the distribution unit an additional 400 feet (120 meters) for a total distance of 800 feet (240 meters).

Important: Do not use splitters on the coaxial cables, even if the total number of controllers is supported (that is, 20 controllers). Using splitters on a coaxial cable will cause interference and poor sound quality. See Figure 4.

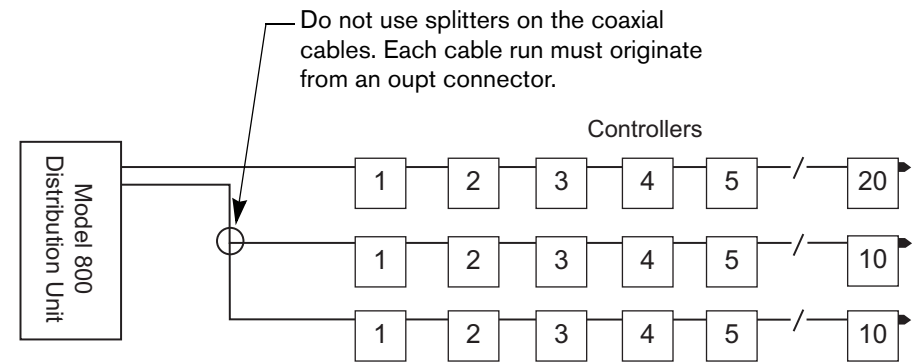


Figure 4: Do not split the main cable run

- Each coaxial cable from the distribution unit must be terminated with a terminator provided with the unit. If the terminator is not installed on the last wired floor unit at the end of the cable, all controllers on that line will experience poor sound quality. If a cable run from the distribution unit includes a QuadPac Wired Amplifier, you must install a terminator at the end of each cable from the wired amplifier as well.
- Unused output connectors on the distribution unit must have a terminator attached to the connector. You do not need to install a terminator on any unused output connectors on a QuadPac Wired Amplifier.

Install the Distribution Unit

1. Place the distribution unit where it will operate. Make sure that it is located in a well-ventilated area with both the front and back easily accessible.
2. Connect one end of the RCA audio cable to a TV or audio source. Observe and follow the color coding of the RCA audio cable connectors. If available, connect the RCA audio cable to the Line Audio Output connector on the TV or audio source.

The Line Audio Output connector is recommended because it always provides a consistent sound level and cannot be modified by users.

CAUTION: When connecting tuners or receivers, make sure that you connect to the “Record Out” or “Line Out” connectors. Do not use the “Speaker Out” connection because it may damage the distribution unit.

3. Connect the other end of the RCA audio cable to the audio inputs on the distribution unit. Observe and follow the color coding of the RCA audio cable connectors. The Model 800 Distribution Unit has 8 audio inputs and the Model 1600 Distribution Unit has 16 audio inputs. See Figure 5.

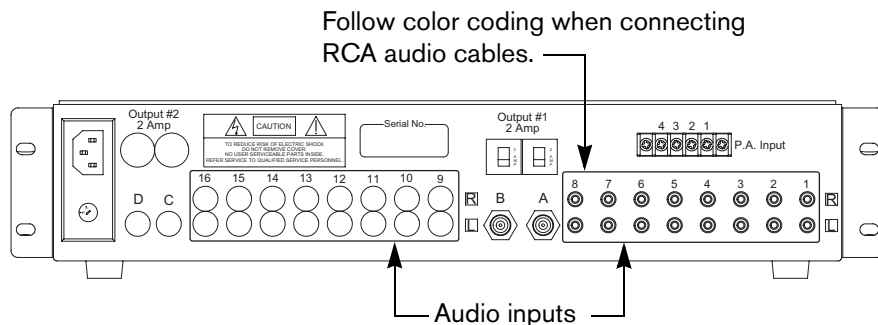


Figure 5: Connect RCA cables to audio inputs on the back of distribution unit

4. Repeat steps 2 and 3 to connect additional TVs and audio sources to the distribution unit.

Important: Keep RCA audio cables away from the power cable, because the power cable may cause interference with the RCA audio signal

5. If desired, connect the public address system to the PA Input terminals on the distribution unit. Connect to the terminals as follows:

Pin	Description
Pin 1	Input for PA microphone
Pin 2	Ground return for PA microphone
Pin 3 Pin 4	When pins 3 and 4 connected, engages PA microphone

Connecting pins 3 and 4 causes the microphone to be heard on all channels. When the microphone is on so someone can speak, the sound on all channels cuts out; sound returns on all channels when the microphone is off (pins 3 and 4 are not connected). You should connect a switching device that lets you connect (short) pins 3 and 4 when needed, placing the on/off switch near the PA microphone for convenience. Also, the microphone should be low impedance with 600 ohm output resistance.

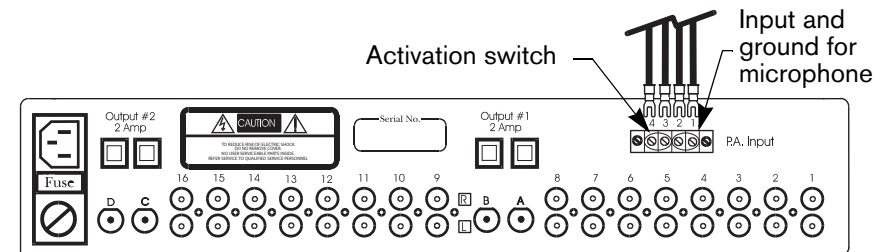


Figure 6: Connections for attaching a public address system

6. Make sure the voltage selector on the back of the distribution unit is set to the correct voltage for your location: 110 or 220.

CAUTION: The voltage on the distribution unit must be set to the proper voltage for the location to avoid damaging the unit.

7. Plug the power cable, packaged with the distribution unit, into the back of the unit.
8. Plug the power cable into a nearby power outlet.

Adjust Sound Levels on the Distribution Unit

Whenever a TV or audio component is connected to the distribution unit, you should adjust the sound level to make sure that its level is not too high or distorted. Once you set the sound level, the distribution unit saves the settings and retains them in memory, even when it is turned off.

Note: If you connected the RCA audio cable to the Line Audio Output connector on a TV or audio component, you can skip this procedure. Line Audio Output maintains a consistent level of sound and cannot be modified by people using the controllers.

1. Turn on TVs and other audio components connected to the distribution unit.
2. If connected to a TV, turn off its speakers using the appropriate menu function.
3. Adjust the volume on each TV or audio component so it is set to a reasonable, medium level.
4. Turn on the distribution unit. As the distribution unit starts up, the Power light and Input Signal lights will turn on for 5 seconds, while the display shows the software version number.
5. Plug headphones into the jack located on the front of the distribution unit (under the power switch). See Figure 7.

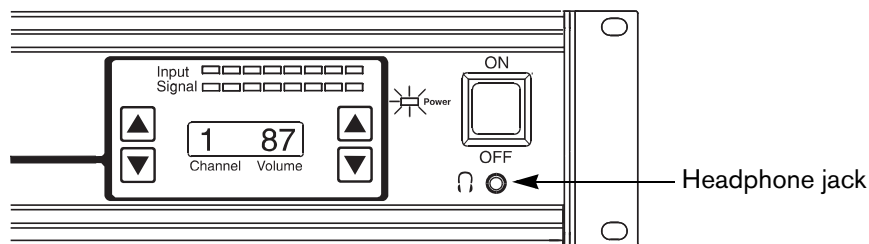


Figure 7: Location of headphone jack on distribution unit

6. Use the Channel ▲ and ▼ buttons to select the desired channel. The display shows the current channel selection (on the left). If you are initially installing the distribution unit, start with channel 1 so you can move sequentially through the channels. If the selected channel has little sound, such as quiet conversation or a soft passage of music, wait for a normal signal before continuing. See Figure 8.

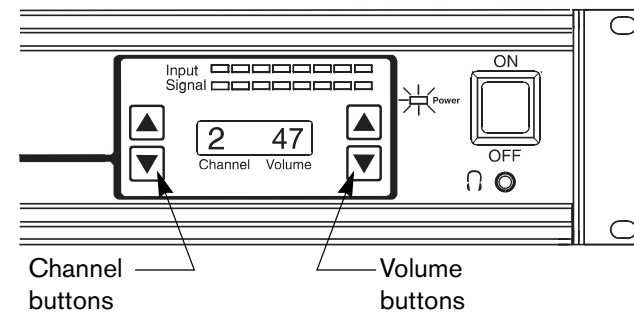


Figure 8: Use Channel and Volume buttons to adjust sound levels for each channel

7. Use the Volume ▲ and ▼ buttons to adjust the sound to a comfortable level. As you press the buttons, the numbers on the right in the display change. Observe the Input Signal lights and adjust the sound as high as possible without causing the red lights to come on. You have gone too far if the red lights flash frequently or glow solidly. In this case, reduce the volume until the red lights barely flash. See Figure 8.
8. Listen for approximately 30 seconds to make sure you are satisfied with the volume level.
9. Repeat steps 6 to 8 for each remaining channel.

Install Controllers on the Exercise Equipment

1. Identify the equipment on which you plan to attach the controllers.

You can attach controllers to almost any exercise equipment.

2. Determine where on the equipment you will install each controller. When you choose a location for the controller, make sure that a person can comfortably reach it and that its controls are easily readable. Also, make sure that the controller does not interfere with the equipment's display console or moving parts.

You can attach a controller either horizontally or vertically. You cannot attach a controller to handlebars that move.

3. Connect the coiled cable into the RJ11 connector on the back of the controller. Push the rubber boot firmly into the recess around the connector to ensure a tight seal. See Figure 9. (You will plug the other end of the coiled cable into the wired floor unit in the next procedure.)

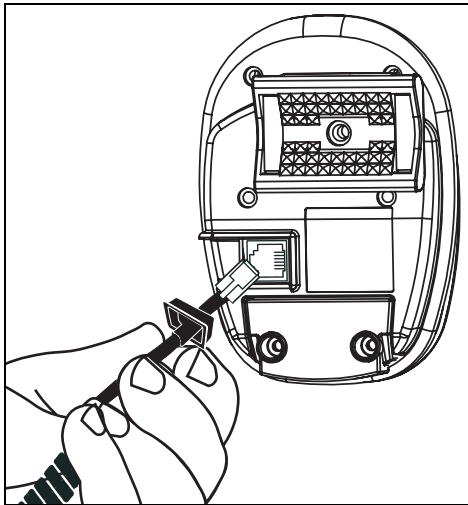


Figure 9: Back of controller showing cable being connected

Important: Make sure that the rubber boot securely covers the connector to prevent moisture damage, or you could void the Limited Warranty.

4. Attach the neoprene mounting pad to the desired location on the handlebar. See Figure 10.

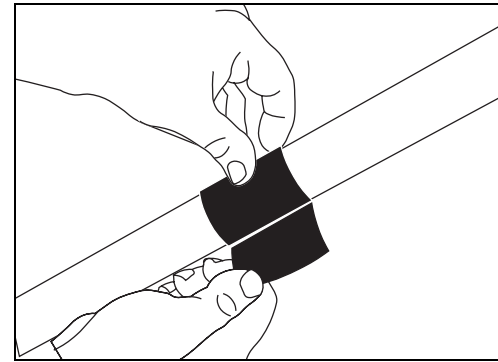


Figure 10: Install the mounting pad to the handlebar

5. Insert two wire ties through the holes in the mounting bracket on the back of the controller.
6. Place the controller on the neoprene mounting pad, and then attach it to the handlebar using the wire ties. See Figure 11. Use the pliers to tighten the wire ties so the controller cannot move.

Important: Be sure to secure the controller on the handlebar so that it does not move. If the controller moves, it may damage the exercise equipment as well as itself, and void the Limited Warranty.

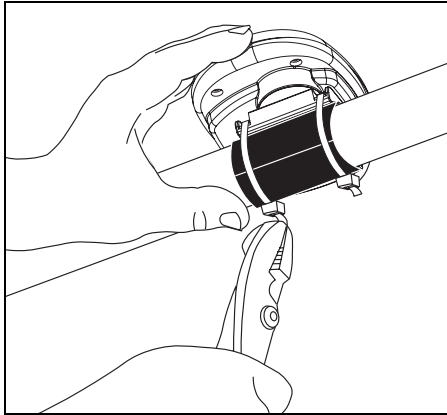


Figure 11: Install the controller on the handlebar with wire ties

7. Cut off the excess plastic from the wire ties, being careful not to leave any sharp edges on the wire ties.
8. Repeat the above steps for each controller that you plan to install.

Set Up the Wired Floor Units

1. Place a wired floor unit on the floor near each controller. Each controller requires a wired floor unit to connect to the distribution unit.
2. Remove the cover on each wired floor unit by unscrewing two screws. You will need a Phillips-head (crosshead) screwdriver to remove the screws. Place the screws and covers in a safe location; you will re-install them later. See Figure 12.

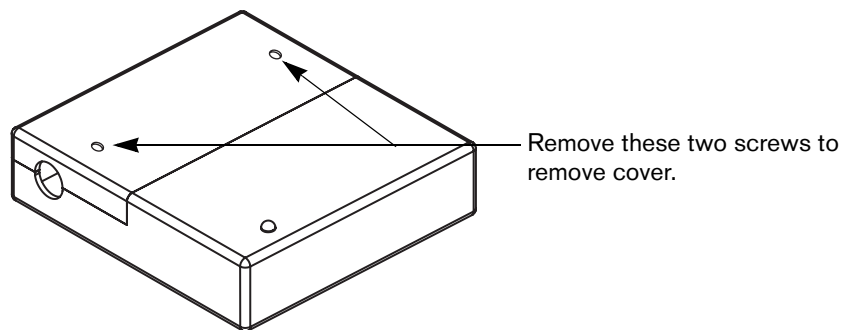


Figure 12: If installed, remove cover

3. To speed cabling later on, connect a T-Connector to each wired floor unit. See Figure 13.

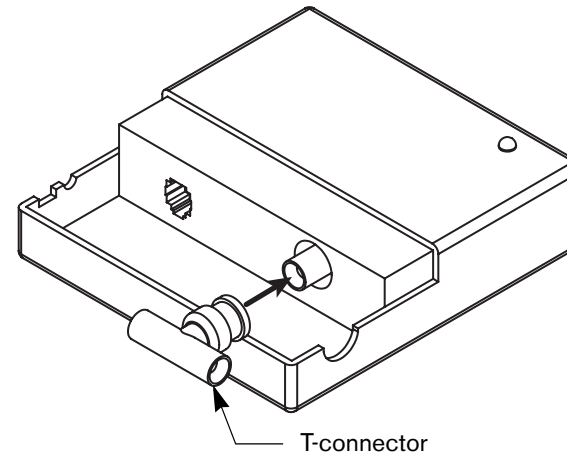


Figure 13: Connect T-connector to speed cabling later

Place QuadPac Wired Amplifier

1. If you have purchased this equipment, place each QuadPac Wired Amplifier where it will operate. Make sure that it is located in a well-ventilated area with both the front and back easily accessible.
2. Put together each supplied AC power adapter, plugging the AC power cord into the DC power box.
3. Plug each supplied AC power adapter into the power adapter connectors on the back of the wired amplifier(s). You need an AC power adapter for each outlet that will be used. See Figure 14. (You will plug the other end of the power adapter into a power outlet later in the process, after attaching the cables.)

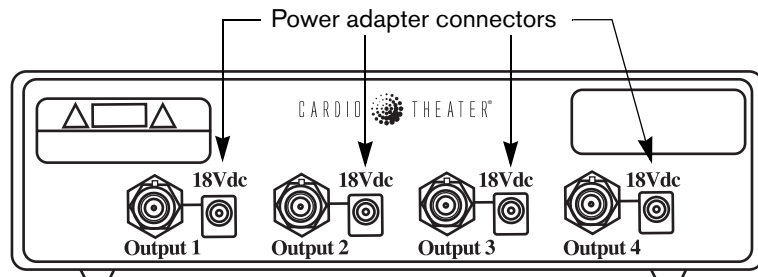


Figure 14: Plug AC power adapter(s) into QuadPac Wired Amplifier

Connect the System Together

1. Identify the coaxial cables required to connect the wired floor units to each other and to the distribution unit, as well as to any QuadPac Wired Amplifiers if used. Lay out the cables as appropriate.

Each output from the distribution unit supports up to 20 controllers. To balance the system, try to evenly divide the controllers between the outputs. For example, if your site will have 30 controllers and you will be using a Model 800 Distribution Unit, install 15 controllers on each output.

2. Connect the coaxial cables to the output connectors on the distribution unit. We recommend that you connect the cables to the outputs as follows:
 - If connecting one cable, connect to output A.
 - If connecting two cables, connect to outputs A and C.
 - If connecting three cables, connect to A, B, and C.
 - If connecting four cables, connect to A, B, C, and D.
3. Label each cable connected to the distribution unit so you know what controllers will be served by this cable run.
4. If any output connectors on the distribution unit do not have coaxial cables connected, attach a terminator to the output connector.

Important: The output connectors on the distribution unit must be terminated, with a terminator installed on an unused connector or on the last wired floor unit on the cable run. Refer to Figure 16. If the output connector is not terminated, the controllers may provide poor sound quality.

5. Start cabling wired floor units together. Connect the coaxial cables to each side of the T-Connector in each wired floor unit. See Figure 15.

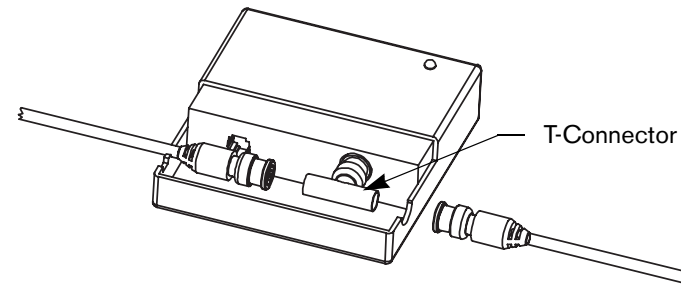


Figure 15: Connecting a wired floor unit

6. When you reach the last wired floor unit for a run of cable from an output connector, attach a terminator to the last T-Connector. See Figure 16.

Important: You must terminate the cable connected to each output connector to ensure good sound quality.

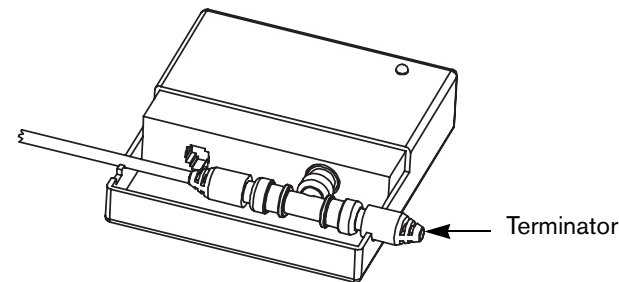


Figure 16: Install a terminator on the last wired floor unit

7. If your site will use a QuadPac Wired Amplifier, connect the coaxial cable from the distribution unit to the Coax Input connector on the front of the wired amplifier. See Figure 17.

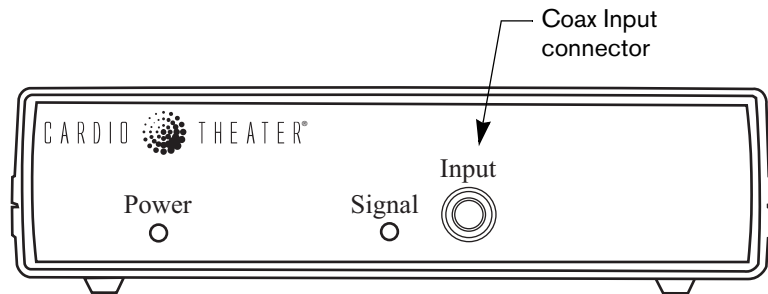


Figure 17: Attach the cable from the distribution unit to the Coax Input connector

8. If you are installing a QuadPac Wired Amplifier, continue to connect wired floor units together as described in steps 5 and 6. Be sure to install a terminator at the end of each cable run.
9. Repeat steps 7 and 8 for each QuadPac Wired Amplifier that will be installed.
10. Connect each controller to its wired floor unit using the coiled cable. Make sure the coiled cable does not interfere with using the exercise equipment.
11. Secure the wired floor units to the floor or sub-floor to make sure that they remain stationary. The wired floor units may be secured using screws through the mounting holes or strong double-sided cloth carpet tape.
Important: Do not attach wired floor units to the exercise equipment. Movement caused by people exercising on the equipment will cause problems with the wired floor units if they are attached to the equipment.
12. On each wired floor unit, replace the cover over the cabling area using the two screws you removed earlier.

13. If you are installing QuadPac Wired Amplifier(s), plug the AC power adapter(s) into a power outlet. The Power light located on the front of the wired amplifier lights.
14. Turn on the distribution unit. If your site is using a QuadPac Wired Amplifier, the Signal light on the amplifier lights.
15. Using a controller, make sure the sound levels provided by the distribution unit are consistent across all channels. Plug headphones into a controller, then move through the channels, listening to the sound level and checking for disturbing or noticeable differences as you switch channels. If necessary, adjust the volume level by using the Volume buttons on the distribution unit.
16. Check each controller to ensure that it receives sound on the appropriate channels, and that it provides high-quality sound for each channel.
17. Place the appropriate numbered signs by each TV or audio component. People will use the number on each sign to select the desired entertainment.

Maintenance and Troubleshooting

In general, the equipment in a Cardio Theater Wired System requires little maintenance beyond regular cleaning and periodic checks of the controllers. Refer to *Cleaning and Periodic Checks*.

Equipment in a Cardio Theater Wired System rarely experiences problems once the system is installed. However, you may find the troubleshooting information in this section useful for solving the odd problem.

This section also explains how to replace the headphone jack in a controller when it no longer provides good sound quality.

Cleaning and Periodic Checks

Periodically dust the distribution unit, wired floor units, and, if installed, QuadPac Wired Amplifier(s) with a soft cloth.

Important: Do not use liquid cleaners or aerosol cleaners to clean the equipment. Do not use any solvents such as alcohol and paint thinner.

Ensure that all cabling is secured and does not pose a tripping hazard.

Each week, clean the controllers with a mild soap and water solution. Lightly dampen a soft cloth with the solution and wipe the controller. Do not use too much solution on the cloth or spray cleaning solution directly on controllers. Doing so could cause moisture to enter through the connector and damage the controller.

Make sure that each controller is secure and cannot be moved. Also, make sure that the controller is positioned so that moisture from people exercising cannot enter through the connection and damage the electronics.

Make sure that the rubber boot around the RJ11 connector is properly positioned. Push the rubber boot firmly into the recess around the connector to ensure a tight seal. See Figure 9.

Troubleshooting the Wired System

Table 1 may help you to understand and troubleshoot any problems that you encounter with the Cardio Theater Wired System. If the suggestions in the table do not help you solve the problems that you encounter, contact Cardio Theater Technical Support.

Table 2: How to solve most problems

Problem		What to Do
Static interference	Single controller	Check headphone jack and replace if needed. Replace controller.
	All controllers	Make sure the distribution unit has power by checking the power cable: Is it plugged into a nearby outlet and into the unit? Sound on TV or audio component may be too high. Check the equipment or distribution unit and adjust the sound level as needed. An output connector on the distribution unit may not be terminated. Make sure any unused output connectors on the distribution unit have a terminator. Also make sure the last wired floor unit on a cable run (even with a Quadpac) has a TERMINATOR .

Problem		What to Do
Noisy sound	Single controller	Check headphone jack and replace if needed. Replace controller.
	All controllers	<p>Make sure the distribution unit and controllers are installed so the total distance between them is no more than 400 feet (120 meters). If a QuadPac is installed, the total distance can be 800 feet (240 meters).</p> <p>An output connector on the distribution unit may not be terminated. Make sure all output connectors on the distribution unit have a terminator.</p> <p>Make sure the sound level of the TV and audio components connected to the distribution unit are set to a reasonable, medium level.</p>
No sound	Single controller	Make sure the display is on; the coiled cable may be disconnected. Try turning up the volume. Check headphone jack and replace. Replace controller.
	All controllers	<p>Sound on the TV or audio component may be too low or muted. Check the equipment and the distribution unit and increase the sound or unmute as needed.</p> <p>Make sure the distribution unit has power by checking the power cable: Is it plugged into a nearby outlet and into the unit?</p>

Problem	What to Do
Controller display is blank.	Make sure the coiled cable is securely connected to the controller and wired floor unit. Try a new coiled cable. Replace the controller.
Controller display shows an error.	<p>Moisture may have corroded the electronics inside; replace the controller.</p> <p>Check the connector on the coiled cable; it may have corroded pins. Replace the cable if needed.</p> <p>The wired floor unit may have a problem; replace the wired floor unit.</p>
Controller provides sound in one ear only	<p>Make sure both ends of the RCA audio cable are securely connected to the distribution unit and to the TV or audio component based on the color coding of the cable.</p> <p>Check for physical damage to the headphone jack. Replace headphone jack if needed.</p> <p>Replace controller.</p>
Light shows on wired floor unit	A short may have occurred in the wired floor unit or controller. Try replacing the wired floor unit or controller.

Replacing the Headphone Jack

When someone using a controller experiences no sound or poor sound quality (such as intermittent sound or crackling), you should check the headphone jack. Try moving the headphone plug in the headphone jack. If the problem continues, the jack should be replaced.

The controller is designed to make changing the headphone jack a quick and easy job, one easily done at the facility. You will need a Phillips-head (crosshead) screwdriver to replace the headphone jack.

You do not need to disconnect the coiled cable from the controller to perform this procedure.

1. Remove the two screws at the bottom of the controller with a screwdriver. See Figure 18.

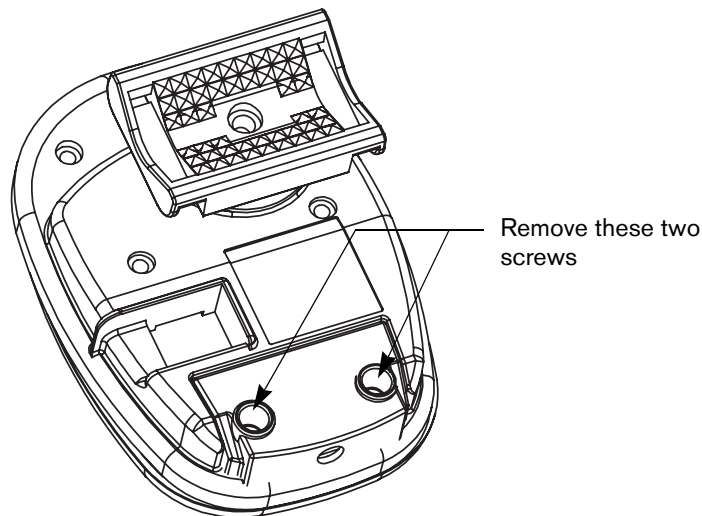


Figure 18: Remove screws holding headphone jack

2. Remove the headphone jack.
3. Insert a new headphone jack.
4. Insert the two screws and tighten.
5. Check the rubber boot over the RJ11 connector to make sure it covers the connector with a tight seal.

Limited Warranty

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Precor Incorporated ("Precor") warrants all new Cardio Theater products to be free from defects in materials and manufacture for the warranty periods set forth below. The warranty periods commence on the invoice date of the original purchase. This warranty applies only against defects discovered within the warranty period and extends only to the original purchaser of the product. Parts repaired or replaced under the terms of this warranty will be warranted for the remainder of the original warranty period only. To claim under this warranty, the buyer must notify Precor or your authorized Cardio Theater dealer within 30 days after the date of discovery of any nonconformity and make the affected product available for inspection by Precor or its service representative. Cardio Theater product deemed defective by a Cardio Theater representative, will be issued a return authorization number. **Precor will not accept returns without a return authorization number.** Precor reserves the right, at their option, to repair or replace the product after verification of defect. Product that fails after the warranty period expires will be repaired or replaced at the current part and labor pricing after authorization from the customer. Repairs are warranted for 90 days.

Precor's obligations under this warranty are limited as set forth below.

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• Cardio Theater Transmitters <i>xTV-T Wireless or Wired Floor Models</i> <i>xTVFM system transmitter</i>	3 Years	Parts & Labor
• Cardio Theater Receivers <i>XTV-R Wireless or Wired Upper Models</i> <i>XTVFM system receiver</i>	1 Year	Parts & Labor
• Cardio Theater LCD Screen (PVS)	1 Year	Parts & Labor
• Cardio Theater Screen Controllers	1 Year	Parts & Labor
• Quick Change Headphone Jack	90 Day	Parts Only
• Optional DVD Player	1 Year	Parts

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 - a. it remains in the possession of the original purchaser and proof of purchase is demonstrated,
 - b. it has not been subjected to accident, misuse, abuse, improper service, or mechanical, electrical or non-Precor modification.
 - c. claims are made within the warranty period.
2. This warranty does not cover damage or product failure caused by electrical wiring not in compliance with electrical codes or Precor owner's manual specifications, or failure to provide reasonable and necessary maintenance as outlined in the owner's manual.
This warranty excludes misuse or failures of, for example, poor quality CD's, multiple discs inserted in the player, failures caused by home-produced copies of discs, etc.
3. Except in Canada, Precor does not pay labor outside the United States.
4. Warranties outside the United States and Canada may vary. Please contact your local Dealer for details.

This Limited Warranty shall not apply to:

1. Software (PROM) version upgrades.
2. Normal wear and tear, consumables and cosmetic items, including, but not limited to the following: labels.
3. Repairs performed on Cardio Theater products missing a serial number or with a serial tag that has been altered or defaced.
4. Service calls to correct installation of the product or instruct owners on how to use the product.
5. Pickup and delivery involved with repairs.
6. Any labor costs incurred beyond the applicable labor warranty period.
7. The user is cautioned that changes or modifications not expressly approved by the manufacturer of the product could void the user's authority to operate the product.

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Complete this portion and keep for your records.

Purchased From: _____
(Dealer or store name)

Phone Number: _____
(Dealer or store telephone number)

Product/Model: _____
(For example: Transmitters, Receivers)

Serial Number: _____
(The serial number is found on the shipping container or item.)

Effective 21 January 2005
P/N CX30037-101



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NOTICE:

Due to continuing advancements in technology, Precor Incorporated reserves the right to make changes in hardware, packaging, and any accompanying documentation without prior written notice.

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24 March 2006