

# **CARDIO** *Theater*<sup>®</sup>

## **PVS 15-inch / 17-inch**

### **Personal Viewing System Assembly and Operation Manual**



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# **Table of Contents**

FCC Compliance Statement.....2

LCD Screen Assembly .....3

Mounting Screen Controller .....5

Auto Programming TV Channels .....6

Controller Features .....7

Smart Controller Programming .....8

RF Distribution .....9

Color LCD Monitor (PVS only) Specifications .....10

Limited Warranty .....11

Technical Support .....12

## **FCC Compliance Statement**

**NOTE:** This equipment has been tested and found to comply with the limits for Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the unit off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult Cardio Theater or an experienced radio/TV technician for help.

**WARNING:** To Prevent Fire Or Electrical Shock, Do Not Expose These Appliances To Rain, Moisture, or Excess Heat.

# LCD Screen Assembly

1. Remove back metal cover plate to expose the monitor connections. (Figure 1)  
Disconnect the connector that is attached to the RJ45 telephone connector board that is mounted on the back cover plate. (Figure 2)
2. Place monitor onto assembled stand and secure with three M4 x 10 mm screws provided. (Figure 3)
3. Plug in power supply cable that was installed in stand in earlier steps to connector labeled "DC12V" on back of monitor. (Figure 4)

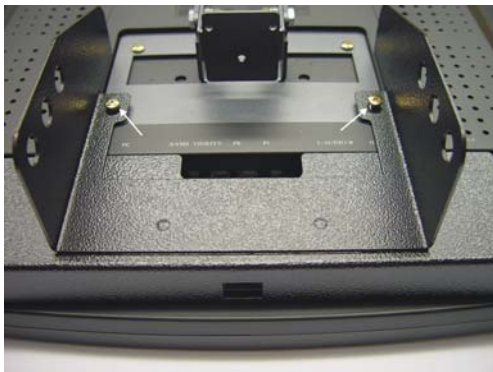


Figure 1



Figure 2



Figure 3



Figure 4

## LCD Screen Assembly (continued)

4. Remove slip on connector from monitor connection labeled “ANT” by pulling straight down as shown in Figure 5.  
Screw on antenna cable coming from stand harness onto the slip on connector just removed. Push slip on connection with antenna cable attached back into monitor “ANT” connection. (Figure 6)
5. Replace back cover onto monitor after re-attaching the connector to the RJ45 jack board coming out of the monitor.

**NOTE:** Before securing back cover, confirm that all cables are connected and have enough slack to permit the monitor to be tilted up and down on the stand.

6. Connect coiled phone cord for controller into RJ45 connection on bottom of monitor back plate and attach the other end that has the molded rubber boot to the controller.
7. Pull excess wire through hole of lower vertical tube on stand and conceal inside bottom plastic base cover.
8. Plug power cord into AC outlet.
9. Power on LCD monitor with controller and check for proper operation.



Figure 5



Figure 6



Figure 7



Figure 8

# Mounting Screen Controller



1. Remove backing from neoprene mounting pad and place either vertically or horizontally around equipment handrail as appropriate as shown below.
2. Insert two nylon wire ties (provided) through the bottom holes in the mounting bracket on the rear of the Screen Controller.
3. Attach wire ties as tightly as possible around the horizontal or vertical bar so the controller can't be rotated. This is very important to keep moisture out of the controller and to keep from damaging the electronics inside unit.



Note: Do not place controller where it would interfere with the cardio unit controls or display panel. The Screen Controller mounting bracket may be removed with pliers and mounted with Super Lock Velcro to any flat surface.

# Auto Programming TV Channels

The following requires the LCD Screen Master IR Remote.

1. Press “Menu” button on Master IR remote
2. Scroll down to “Install” using the Channel down button, press the “Select” button when “install” is highlighted.
3. Highlight “Auto Search” by using the channel down button, then press “Select”
4. On screen menu will then display three options:  
**Air**  
**Cable**  
**HRC** (Use this setting only if using cable input and the “Cable” setting does not work)  
Select the appropriate mode for the input you are using by highlighting your choice and Pressing “Select”.
5. The on screen menu will now display “programming” (this process may take up to 3 minutes to complete).

## Manually Adding Or Erasing Channels

1. Manually select channel you want to add or delete with the Master IR remote (using the 10 key pad on remote)
2. Press the “Menu” button on IR remote
3. Scroll down to “Install” using the channel down button, then press “Select”
4. Scroll to “Store/Clear” using “CH down” button
5. Highlight the appropriate selection (Store or Clear) and press “Select”
6. Channel number on screen will turn red if deleted from channel lineup or green if added to lineup.
7. Tune monitor to the next channel to be added or deleted and repeat steps 2 – 5.



# Controller Features



## • **Description of Features**

There are three programmable features on the Cardio Theater Controller.

### • **Auto power on/off feature**

If this feature is turned on, unit will power down automatically 15 seconds after Headphones are removed from the controller. Unit will automatically power on as soon as headphones are detected in headphone jack.

With feature turned off, unit will be powered up or down manually by pressing the "Power" button on the controller.

### • **TV only or TV / DVD mode feature**

This feature should be turned on when the optional DVD/CD player is installed. It activates the function of the "Source" and "Audio" buttons on the controller. Pressing "Source" will cycle between TV and DVD/CD source inputs. Pressing the "Audio" button when in TV mode activates the Split audio mode. When you press the "audio" button the audio input only is switched between TV and DVD/ CD. This way you can watch TV and listen to your favorite CD at the same time.

(note: audio split can only be done when in TV mode. If it is pressed when in DVD/CD mode nothing will happen)

With the feature off, pressing either "source" or "Audio" buttons has no effect.

### • **Default Channel Mode**

With this feature turned on, when the unit is powered down, the monitor will go through a power down sequence that will tune the monitor to a predetermined default channel before it actually powers off. This will make it so that the next member that turns on the monitor will be viewing the default channel, i.e. an in-house channel, Clubcom channel, etc.

With this feature turned off, the monitor will power down as normal and will power up with whatever channel was being viewed before the last power down.

# Smart Controller Programming

Programming mode is entered into by pressing and holding down both the Volume Up and the Volume Down buttons on the controller at the same time, until the power LED begins blinking, then let go of buttons (LED will continue to blink as long as you are in programming mode). Once in programming mode you have 15 seconds to begin to adjust one of the features, before it times out and automatically goes back into normal operating mode. **If the LED is not blinking you are no longer in programming mode:**

- **Auto Power On/Off**

To turn this **feature on**, put the controller into programming mode. Press the **Channel Up** key and the programming feature will be turned on and the unit will immediately go out of programming mode and return to normal operation.

To turn this **feature off**, put the controller into the programming mode. Press the **Channel Down** key and the programming feature will be turned off and unit will immediately go out of programming mode and return to normal operation.

- **“TV only” or “TV and DVD/CD” mode** (with split audio feature)

(Note: only one of these features may be on at any given time. When one of these features is turned on, the other is automatically turned off)

To turn the **“TV only” feature on** when no DVD/CD player is in use, put the controller into programming mode and then press the **Audio** button. The controller will automatically go out of programming mode return to normal operation.

To turn the **“TV and DVD/CD” feature on**, put the controller into programming mode and press the **Source** key. This will activate both the functioning of the Source and Audio Keys for selecting the desired source input or for the ability to enter into Audio split mode.

- **Default Channel feature**

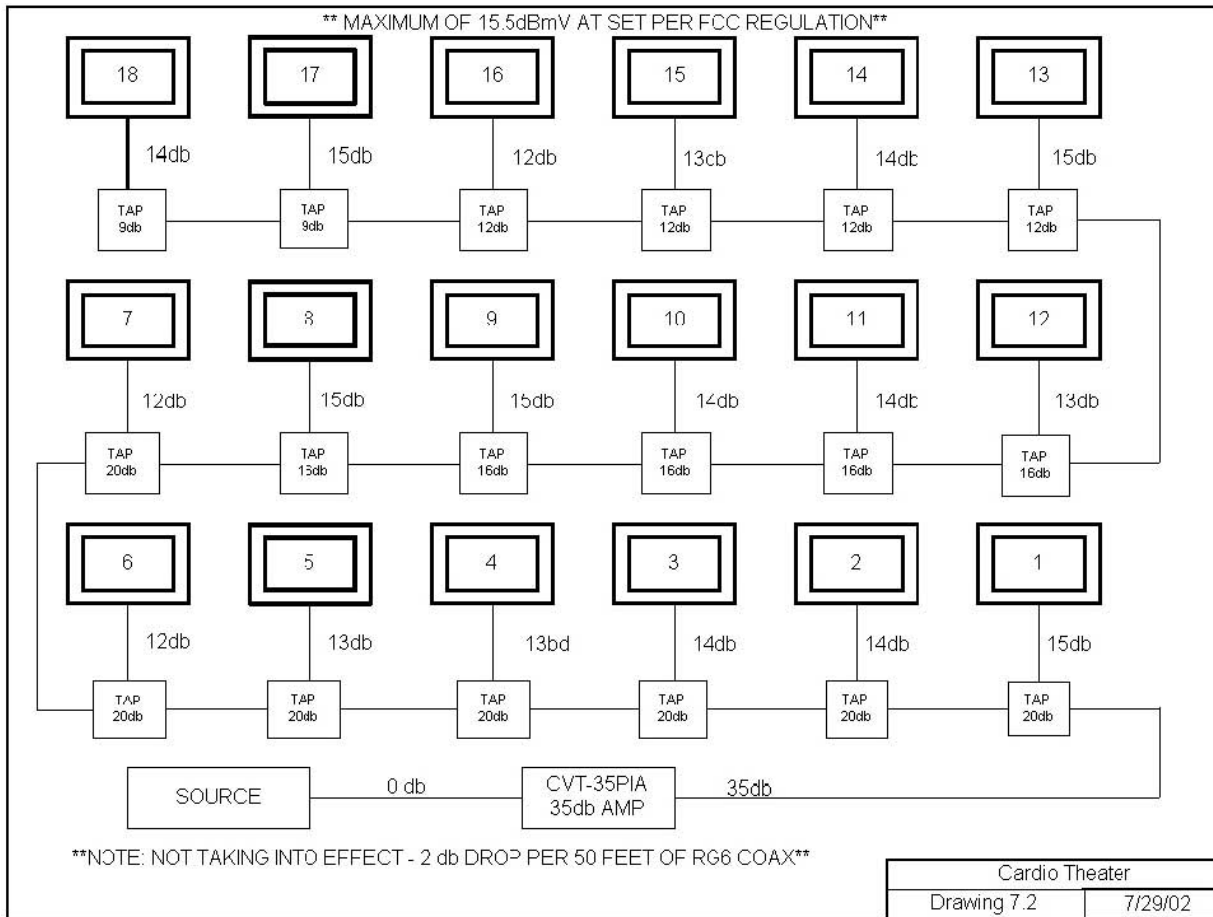
To turn this **feature on**, put the controller into programming mode, and **select the desired channel** number that you want to use as the default channel (up to three digits) on the numeric keypad of the controller. As you press the numbers, they will be displayed on screen. Once channel has been entered, either wait for the 15-second timeout or press either the Volume Up or Volume Down keys. The controller will exit programming mode and store the channel as default.

To turn this **feature off**, go into programming mode and press either the **Volume Up or Volume Down** button and the controller will automatically return to normal operating mode.

# RF Distribution

Below is a diagram of a typical install. Please note that the tap values are dependant on having a 35 db signal at the output of the signal amplifier. It is best to use a quality amplifier that has a variable output so that you can adjust it to match 35 db even if your input is either lower or higher.

These tap values and db readings are based on RF theory.



## Color LCD Monitor (PVS only) Specifications

| Specification Description   | 15" TFT LCD TV Specification  | 17" TFT LCD TV Specification  |
|-----------------------------|---|---|
| Visible Screen Size (mm)    | 304.1(H) X 228.1(V)   | 337.92(H) X 270.336(V)  |
| Pixel Pitch (mm)            | 0.297(H) X 0.297(V)   | 0.264(H) X 0.264(V)   |
| Display Type                | a-Si TFT LCD  | a-Si TFT LCD  |
| View Angle (total)          | (H)140°/(V)120°   | (H)150°/(V)130°   |
| Display Color               | 16.7 million  | 16.7 million  |
| Aspect Ratio                | 4:3   | 4:3   |
| Resolution                  | 1024X768 (XGA)  | 1280X1024 (SXGA)  |
| Contrast Ratio              | 300:1   | 350:1   |
| Luminance of White          | 250 cd/m <sup>2</sup>   | 250 cd/m <sup>2</sup>   |
| V <sub>sync</sub> Frequency | 60~70 Hz  | 60~75 Hz  |
| H <sub>sync</sub> Frequency | 48.36~60 Khz  | 64~79.976 Khz   |
| Receiving Systems           | NTSC, PAL, SECAM  | NTSC, PAL, SECAM  |
| Sound System                | Monaural (2 W/channel)  | Monaural (2 W/channel)  |
| Video Input Systems         | RCA jack (Video+Audio)  | RCA jack (Video+Audio)  |
| RF Input Systems            | RF type "F" connector   | RF type "F" connector   |
| RF Input Frequencies PAL    | 48.25 to 855.25 mHz   | 48.25 to 855.25 mHz   |
| RF Input Frequencies SECAM  | 48.25 to 855.25 mHz   | 48.25 to 855.25 mHz   |
| RF Input Frequencies NTSC   | 55.25 to 801.25 mHz   | 55.25 to 801.25 mHz   |
| Video Output System         | S-Video connector   | S-Video connector   |
| Channel Memory AIR (PAL)    | *   | *   |
| Channel Memory CATV (PAL)   | 125   | 125   |
| Channel Memory AIR (SECAM)  | *   | *   |
| Channel Memory CATV (SECAM) | 125   | 125   |
| Channel Memory AIR (NTSC)   | *   | *   |
| Channel Memory CATV (NTSC)  | 125   | 125   |
| Sleep Timer                 | 0, 30, 60, 120 minutes  | 0, 30, 60, 120 minutes  |
| Features                    | Font OSD<br>Remote Control<br>Close Caption<br>Language selection<br>V-Chip | Font OSD<br>Remote Control<br>Close Caption<br>Language selection<br>V-Chip |
| Operating Temperature Range | 0°C to +40°C  | 0° to +40°C   |
| Storage Temperature Range   | -10°C to +60°C  | -10°C to +60°C  |
| Operating Humidity Range    | 10% to 85%  | 10% to 85%  |
| Storage Humidity Range      | 10% to 85%  | 10% to 85%  |
| Power Supply Input          | 100 to 240VAC 50/60Hz   | 100 to 240VAC 50/60Hz   |
| Power Supply Output         | 12 VDC @ 5.00A  | 12 VDC @ 5.00A  |
| Consumption                 | 30 watts (working)<br>5 watts (standby)                                     | 40 watts (working)<br>5 watts (standby)                                     |

\* Dependent on television format

# Limited Warranty

PLEASE READ THESE WARRANTY TERMS AND CONDITIONS CAREFULLY BEFORE USING YOUR CARDIO THEATER PRODUCT. BY USING THE EQUIPMENT, YOU ARE CONSENTING TO BE BOUND BY THE FOLLOWING WARRANTY TERMS AND CONDITIONS.

## Limited Warranty.

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 products deemed defective by a Precor 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.

## Warranty Periods and Coverage.

- |   |        |               |
|---|--------|---------------|
| • Cardio Theater Transmitters<br>xTV-T Wireless or Wired Floor Models<br>xTVFM system transmitter | 3 Year | Parts & Labor |
| • Cardio Theater Receivers<br>XTV-R Wireless or Wired Upper Models<br>XTVFM system receiver       | 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         |

## Conditions and Restrictions.

This warranty is valid only in accordance with the conditions set forth below:

- The warranty applies to the Cardio Theater product only while
  - it remains in the possession of the original purchaser and proof of purchase is demonstrated,
  - it has not been subjected to accident, misuse, abuse, improper service, or mechanical, electrical or non-Precor modification,
  - claims are made within the warranty period.
- 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.**
- Except in Canada, Precor does not pay labor outside the United States.
- Warranties outside the United States and Canada may vary. Please contact your local Dealer for details.

This Limited Warranty shall not apply to:

- Software (PROM) version upgrades.
- Normal wear and tear, consumables and cosmetic items, including, but not limited to the following: labels.
- Repairs performed on Cardio Theater products missing a serial number or with a serial tag that has been altered or defaced.
- Service calls to correct installation of the product or instruct owners on how to use the product.
- Pickup and delivery involved with repairs.
- Any labor costs incurred beyond the applicable labor warranty period.
- 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.

## Complete this portion and keep for your records.

Purchased From: \_\_\_\_\_ Example: Dealer or store name.  
Phone Number: \_\_\_\_\_ Example: Dealer or store telephone number.  
Product/model: \_\_\_\_\_ Example: Transmitters, Receivers  
Serial number: \_\_\_\_\_  
The serial number is found on the shipping container or item.

## Disclaimer and Release.

The warranties provided herein are the exclusive warranties given by Precor and supersede any prior, contrary or additional representations, whether oral or written. ANY IMPLIED WARRANTIES, INCLUDING THE WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE THAT APPLY TO ANY PARTS DESCRIBED ABOVE ARE LIMITED IN DURATION TO THE PERIODS OF EXPRESS WARRANTIES GIVEN ABOVE FOR THOSE SAME PARTS. PRECOR HEREBY DISCLAIMS AND EXCLUDES THOSE WARRANTIES THEREAFTER. Some States do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. PRECOR ALSO HEREBY DISCLAIMS AND EXCLUDES ALL OTHER OBLIGATIONS OR LIABILITIES, EXPRESS OR IMPLIED, ARISING BY LAW OR OTHERWISE, WITH RESPECT TO ANY NONCONFORMANCE OR DEFECT IN ANY PRODUCT, INCLUDING BUT NOT LIMITED TO: (A) ANY OBLIGATION, LIABILITY, RIGHT, CLAIM OR REMEDY IN TORT, WHETHER OR NOT ARISING FROM THE NEGLIGENCE OF PRECOR OR ITS SUPPLIERS (WHETHER ACTIVE, PASSIVE OR IMPUTED); AND (B) ANY OBLIGATION, LIABILITY, RIGHT, CLAIM OR REMEDY FOR LOSS OF OR DAMAGE TO ANY PRODUCT. This disclaimer and release shall apply even if the express warranty set forth above fails of its essential purpose.

## Exclusive Remedies.

For any product described above that fails to conform to its warranty, Precor will provide, at their option, one of the following: (1) repair; (2) replacement; or (3) refund of the purchase price. Limited Warranty service may be obtained by contacting the authorized dealer from whom you purchased the item. Precor compensates Servicers for warranty trips within their normal service area to repair commercial product at the customer's location. You may be charged a trip charge outside the service area. THESE SHALL BE THE SOLE AND EXCLUSIVE REMEDIES OF THE BUYER FOR ANY BREACH OF WARRANTY.

## EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES.

PRECOR AND/OR ITS SUPPLIERS SHALL HAVE NO OBLIGATION OR LIABILITY, WHETHER ARISING IN CONTRACT (INCLUDING WARRANTY), TORT (INCLUDING ACTIVE, PASSIVE, OR IMPUTED NEGLIGENCE AND STRICT LIABILITY), OR OTHERWISE, FOR DAMAGE TO THE PRODUCT, PROPERTY DAMAGE, LOSS OF USE, REVENUE OR PROFIT, COST OF CAPITAL, COST OF SUBSTITUTE PRODUCT, ADDITIONAL COSTS INCURRED BY BUYER (BY WAY OF CORRECTION OR OTHERWISE) OR ANY OTHER INCIDENTAL, SPECIAL, INDIRECT, OR CONSEQUENTIAL DAMAGES, WHETHER RESULTING FROM NONDELIVERY OR FROM THE USE, MISUSE OR INABILITY TO USE THE PRODUCT. This exclusion applies even if the above warranty fails of its essential purposes and regardless of whether such damages are sought for breach of warranty, breach of contract, negligence, or strict liability in tort or under any other legal theory. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

Effective 21 January 2005  
P/N CX30037-101

## **Technical Support**

### **Technical Support Number:**

**Telephone** 1-800-776-6695

### **Technical Support Hours:**

7:00 AM to 3:30 PM Monday through Friday PST

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### **Notice**

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