

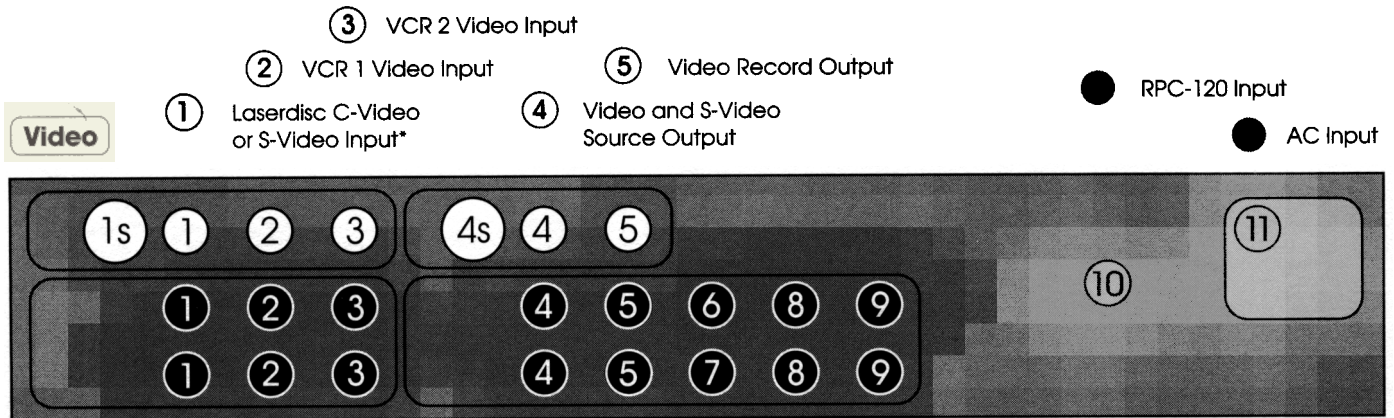
**acurus**

American Custom  
Theatre  
ACT I

surround sound processor

owner's  
information

## CONNECTIONS



### Audio

- 1 Laserdisc Audio Inputs
- 2 VCR 1 Audio Inputs
- 3 VCR 2 Audio Inputs
- 4 Audio Source Outputs
- 5 Audio Record Outputs
- 6 Center Channel Output
- 7 Subwoofer Output with Crossover
- 8 Mono Subwoofer Outputs without Crossover
- 9 Rear Surround Channel Outputs

\*1s and 1 cannot be connected simultaneously.

## OPERATIONS

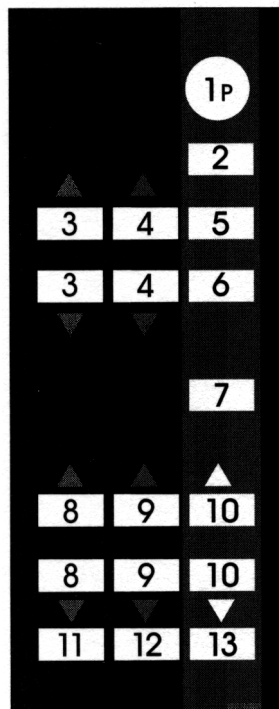


**F1** Power On.  
Turn knob clockwise until LED illuminates. Power Off. Turn clockwise again.

**F2** Source. To change source turn knob counter-clockwise until contact is made. Repeat to change the source again

**F3** Volume. Turn knob clockwise to increase overall volume.

\* Selections are displayed on television screen.



- 1P Power On/Off.
- 2 Delay. Changes perceived ambience.\*
- 3 Record Select.\*
- 4 Source Select.\*
- 5 Test. Tones for front/rear set up.\*
- 6 Center. Selects center channel mode.\*
- 7 Surround. Selects decoding mode.\*
- 8 Center Channel Volume.\*
- 9 Rear Surround Volume.\*
- 10 Overall Volume.
- 11 Record View. To view source recording.
- 12 Input Balance. Auto input balance on/off.\*
- 13 Mute.\*

Please read this manual. Upon completion you will understand the connections and operation of your ACT I processor.

## CONNECTIONS

### Video

#### VIDEO INPUTS

- 1s S-Video Input

#### Composite Video Inputs

- 1 Laserdisc  
2 VCR 1  
3 VCR 2

Connect video sources directly as labeled.

Note: The above labeling is for purposes of convenience. Any composite video source, such as Satellite System, Laserdisc and VCR can be connected to any composite Video Input.

Note: Connect either 1s or 1. DO NOT USE BOTH.

#### VIDEO OUTPUTS

- 4s S-Video Source Output

#### Composite Video Outputs

- 4 Video Source Output  
Connect the Video Source Outputs to the video inputs of your television or monitor.

Note: Some televisions will not have an S-Video Input.

- 5 Video Record Output  
Connect the Video Record Output to the Video Input of the VCR that will be used for recording.  
Note: Video Record Output may also be used to transmit the video signal to an additional television. This allows for viewing two different sources at the same time.

#### AC POWER

When connecting or disconnecting the inputs and outputs of any component be sure AC power is turned off.

- RPC-120 Input  
Connect to RPC output. Remote power On/Off capability for four other components is available with the optional RPC-120 Filtered AC Power Switcher.

- AC Power Connection  
Connect to supplied power cord.

### Audio

#### AUDIO INPUTS

- 1 Laserdisc Audio Inputs  
2 VCR 1 Audio Inputs  
3 VCR 2 Audio Inputs

Connect audio sources directly as labeled.

Note: If an audio D/A convertor or other non-standard A/V source is used, connect to LD Input only

#### AUDIO OUTPUTS

- 4 Audio Source Outputs  
Connect to the inputs of the amplifier channels powering left and right front speakers. Be sure that left and right channel outputs are connected to their corresponding amp inputs.
- 6 Center Channel Output  
Connect to the inputs of the amplifier channel powering the center speaker.
- 9 Rear Surround Outputs  
Connect to the inputs of the amplifier channels powering the rear surround speakers.
- 5 Audio Record Outputs  
Connect to the audio inputs of the VCR that will be used for recording.  
Note: Audio Record Outputs may also be used to transmit the audio signal to an additional television.
- 7 Subwoofer Output (with Crossover)  
If you are using non-powered subwoofers without a built in crossover, connect to the inputs of the amplifier channel powering the subwoofer.
- 8 Mono Subwoofer Outputs (without Crossover)  
If you are using subwoofers with a built in crossover, connect to the inputs of the amplifier channels powering the subwoofers.  
Note: If only one subwoofer is used, connect either output to the amplifier powering the subwoofer.

# OPERATIONS

## On-Screen Display

The ACT I offers on-screen programming. This feature will keep you informed of any commands you may give the unit. An arrow will move on screen to the source or mode you wish to select. A graphic depiction of output level or delay setting will also appear on screen. The following is a list of the commands for set up and operation.

### 6 Center Channel

The function of the center channel is to create a center reference for your home theatre. If you have a center channel speaker you must set the center channel mode to "Normal" or "Wide Band." The best setting for your system will depend on your front channel speakers. Consult your dealer for their recommendation. The "Phantom" setting is for use when no center channel speaker is available.

### 5 Test

This function is for initial calibration and set up. During this set up the "Surround" and "Center" channel volume controls are used to insure that all channels in your system have the same output level. The test tone (pink noise) cycles through each channel starting with the left front speaker, then the center channel speaker and continues in a clock-wise direction through all of the channels. Please note that if the center channel mode is set to Phantom or Off the test tone will skip this channel.

### 10 F3 Overall Volume

The overall volume control on your ACT I raises and lowers the volume of your entire system. This can be achieved from both the front panel of the ACT I and the remote control.

### 8 Center Channel Volume

Controls level of center channel speaker only.

### 9 Rear Surround Volume

Controls level of rear speakers.

### 4 F2 Source Select

Allows the selection of Laserdisc C, Laserdisc S, VCR 1 or VCR 2 input for viewing on the television.

### 7 Surround Mode

There are three distinct modes of surround on the ACT I; Dolby Pro Logic, Music Surround, and Mono-Enhance. Bypass mode is provided for non-surround sound operation. For listening to material encoded with Dolby Stereo (VHS or Beta hi-fi, Laserdiscs, CD-V, MTS broadcast television or Satellite broadcasts) select the Dolby Pro Logic™ mode. The Pro Logic™ will provide active steering of the signal for more accurate placement of sound in the listening area and spectacular audio effects.

For monophonic programs, such as movies not encoded in Dolby Stereo or standard television broadcasts, select the Mono Enhance mode. This mode provides synthesized stereo for the front and synthesized surround for the rear.

Music Mode creates a form of surround sound for stereo sources. In the Bypass mode your ACT I functions as a stereo preamp.

### 12 Input Balance

When Input Balance is on, all sources will have the proper input level to ensure optimum surround performance. You have the option of disabling the Input Balance control when the application does not require it. To disable the Input Balance function go to the Surround Mode screen and select Off.

### 2 Delay

The "Delay" provides an adjustment for rooms of various sizes and is designed so that in most rooms it will sound normal at any setting. The effect may not be very noticeable unless your room is exceptionally large or small. The general rule is; large room small delay, small room large delay.

Note: Dolby specifies the Pro Logic™ delay settings are limited to between 15-40 milliseconds.

To set the delay, start with the delay indicator on screen in the center position. With the remote control in your hand, press the "Delay" button one time. The delay display on screen will move one position to the right. To change the delay more than one setting position hold the button down. If you hear any echo, cycle through the settings until the echo disappears. If you need more delay for effect, move to the next position to the right. The delay control may also be used to create subtle "hall" type sound effects. It will make the room sound larger than it really is.

Note: There are no delay settings in Music Mode.

### 3 Record Select

Allows the selection of Laserdisc C, VCR 1 or VCR 2 as the recording output. The ACT I is capable of allowing you to view one source while recording from a second to a third source. For example; you want to record a movie from a Laserdisc to a VCR but you want to watch the Indy 500. From the Record selector on the remote control pick the source that you wish to record from (be sure that the Record output of the ACT I is connected to the unit you wish to record with!) and start both machines. Then from the Source control select the input that you want to watch (the race) and your ACT I will do the rest!

### 11 Record View

If you need to check the quality of the recording simply press the "Record View" button. This will give you a view of the "Record" out signal. If there is a problem just monitor the "Record" output while you track it down and fix it. (Be sure to refer to the VCR owner's manual for recording problems.) Press the button again to return to the "Source" screen.

### 13 Mute

The mute button silences the entire system.

### 1P Power On/Off

Turns ACT I on and off. With optional RPC-120 Filtered AC Power Switcher attached, this button can also turn on and off the entire system.

**Please follow Set Up instructions on next page.**

## SET UP

Please consult with your American Custom Theater authorized dealer as to the amplification, speakers and proper location of the recommended speakers based upon your listening conditions. Your authorized dealer can consult with us for recommendations. With proper associated equipment and proper installation, an American Custom Theatre System can provide better sound than a movie theatre. Upon completion of Connections please follow these steps:

- 1 Lower the overall volume using the volume control knob **F3**.
  - 2 Turn on the ACT I and your entire audio/video system, including the television or monitor.
  - 3 Seat yourself, with the ACT I remote, in what will be your usual listening/viewing location.
  - 4 Push Center Channel, **6** on the remote, set it to Phantom if you have no center channel speaker and Normal if you do have a center channel speaker. The setting of any mode is accomplished by pushing the button, in this case **6**, until the arrow moves to the setting you wish to select. Within a few seconds the screen will disappear and your selected setting is operative.
  - 5 Push Test **5** and increase the Overall Volume **10** to a comfortable listening level. You will now hear test noise cycle through the speakers of your system. As it is cycling, compare on-screen indication with sound coming from speakers to be sure each channel is properly located.
  - 6 While the noise is cycling, push Center Channel Volume **8** and adjust its volume until the center channel speaker appears to have the same output level as the left and right front channel speakers.
  - 7 While the noise is cycling, push Rear Surround Volume **9** and adjust its volume until the rear channel speakers appear to have the same output level as those in the front. Push Test again to exit.
  - 8 Load a Dolby Surround™ movie into either your VCR or Laser disc and use Source Select via **F2** or **4** to hear and view the source you have just selected.
  - 9 Push Surround Mode **7** and select Dolby Pro Logic™. While in this mode push Input Balance **12** and select On.
  - 10 Push Delay **2** and follow delay instructions on the Operations page. You are now ready to enjoy the American Custom Theatre experience.
- \* *Note: the set up adjustments are not an absolute. The on-screen display is helpful for recalling the approximate set up level. From source to source and movie to movie you may want to subtly adjust the Rear Surround Volume for optimum listening.*
- \* *When listening to non Dolby™ encoded material you should listen to your source through all the modes available and determine which mode you prefer for the current material, you may also need to readjust rear channel level.*

## USING THE ACT I WITH A PREAMPLIFIER

When using the ACT I with a preamplifier connect Preamp Tape Inputs to Audio Source Outputs **4**. This allows you to easily switch the processor in and out of your system.

Connect audio/video sources to the ACT I.  
Connect audio only sources to the preamplifier.

### In the System

- 1 Set VOLUME control to 12 o'clock position.
- 2 Set LISTEN control to TAPE 1.

### Out of the System

- 1 Set LISTEN control to any source other than TAPE 1.

## SPECIFICATIONS

The following specifications are measurements which need not have anything to do with the sound, quality and value of an audio component. The Act I processor was developed with extensive listening.

To improve both the audio and video quality, many engineering solutions were used which will not necessarily be reflected in the specifications. Some examples are as follows.

Separate circuit boards were used of the power supply, video section and the audio section. By isolating all three section on separate circuit boards a higher quality signal is provided for both the audio

and video output. These circuit boards are made of glass epoxy, the same material used for medical and military equipment.

There is no amplification within the Act I to better isolate and protect the low voltage source signals from the noise of an amplifier's power supply.

The finest quality Dolby™ decoding integrated circuit is used along with precision 1% metal film resistors. We believe the ACT I has the smoothness, bass extension and accuracy of sound that can make the home theatre experience enjoyable at the highest possible level.

### Separation

Front center to Surround:  
**65 dB referenced to 1KHz  
Consumer test tape**  
Left to Right:  
**45dB referenced to 1KHz  
Consumer test tape**

### Frequency Response

Front Channels:  
**3 dB 18 to 20,000 Hz**  
Dolby Surround:  
**Dolby Pro Logic™ specifications**  
Music Surround:  
**3 dB 18 to 20,000 Hz**

### Output Noise, A Weighted

Front Channels:  
**-75 dB at 1V RMS,  
-80 dB from peak level**  
Dolby Surround:  
**-65 dB at 1V RMS,  
-70 dB from peak level**  
Music Surround:  
**-75 dB at 1V RMS,  
-80 dB from peak level**

Subwoofer Crossover:  
**100 Hz**

Steering Separation:  
**35 dB**

### Input Balance Range:

**Automatic, 6 dB of correction**

Audio Input Impedance:  
**47K Ohms**

### Power Requirements:

**120 VAC/60Hz or 220 VAC/50Hz**

### Dimensions:

**17" W x 10.5" D x 3.5" H**  
Weight:  
**15 lb.**

## TROUBLE SHOOTING

### Power on, sound off or low

Check all connecting cables. Make sure all connections are correct, firm and free of defects. Make sure the ACT I is receiving signal from your source. Make sure your volume is up. Make sure amplifiers and speakers are connected properly and set correctly. Check input and output selections. Check if muted.

### Indicator light does not light, no sound

Check AC power at outlet- plug in a lamp or other appliance and turn on. Make sure the ACT I is turned on.

### Stereo OK but no surround sound

Be sure you are playing a source that contains surround effects. Be sure the source equipment is playing in stereo. (Some Hi-Fi VCR's play non-Hi-Fi tapes in mono.) Check audio and speaker cables. Be sure that the volume is turned up.

### Sound directionality seems wrong

Make sure that the mode is set correctly. Make sure that the left and right channels are not reversed anywhere in your system. Make sure that all speakers are in phase. (red to red and black to black.)

Dolby is a registered trade mark of Dolby Laboratories.

Noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.

Licensed under one or more of the following patents

US.: 3,632,886; 3,746,792; 3,959,590 CANADA: 1,004,603; 1,037,677

## MONDIAL DESIGNS LIMITED

20 Livingstone Avenue, Dobbs Ferry, NY 10522 • (914) 693-8008 • Fax (914) 693-7199