

# Remote Control User Guide

## Introduction

The Catalyst™ 34 by Universal Electronics, Inc. is the complete solution for all of your remote control requirements. It is designed to operate up to four devices with the emphasis on features and functions of your dedicated component(s).

The Catalyst 34 is also customizable to allow for key configurations that meet your specific needs. It's also packed with these features for you to choose from:

- Preprogrammed technology for easy setup
- Designed for use with up to four devices
- Inclusive audio library
- Upgradeability
- Choice of dedicated device(s)
- Custom silk screening
- Custom color system and key definitions

This manual provides a basic overview on how to set up and operate the Catalyst 34. Please read the following instructions to see how easy setup is.

## Features & Functions

Use the Key Charts to learn how the Catalyst 34 functions.

### Key Charts



The **LED** (red light) blinks to show that the remote control is working and is sending signals.



Use **SETUP** for all programming sequences.



Press **PWR** once to turn on or off the selected home entertainment component.



Press **AUX**, **CBL**, **VCR**, or **TV** once to select a home entertainment component to control.



Use the keypad (**0 - 9**) to directly select channels (for example, 09 or 31).



Press **MUTE** once to turn sound off or on.



Press **ENTER** once after entering channel numbers on some TV models.



Use **VOL +** (or **VOL -**) to raise (or lower) the sound volume.

Use **CH +** (or **CH -**) to select the next higher (or lower) channel.

Press **LAST** once to recall



the last channel and to page back one screen in the main menu.



Press **INPUT** once to switch the input of the chosen component.



Use **GUIDE** to display the program guide.



Use **EXIT** to exit out of the selected component's menu or guide.



Use the cursor keys to move the cursor in the program guide and menu screens.



Use **SELECT** to choose options from your selected component's menu or guide.



Use **INFO** to display current channel and program information.



Press **MENU** to access the menu of your chosen component.



Use the transport keys to control your VCR, or CD or DVD player.



Use these keys for specific features on your dedicated components.

## Installing Batteries

1. On the back of the Catalyst 34, push the tab and lift off the battery cover.
2. Obtain two (2) fully-charged AA alkaline batteries. Match the + and - marks on the batteries to the + and - marks in the battery case, then insert the new batteries.
3. Press the battery cover back into place. The tab should click when the cover is locked.
4. Test the unit by pressing **PWR** and any mode key (e.g., **AUX**, **CBL**, **VCR**, etc.). If the batteries are inserted correctly, the LED will blink once.

**NOTE:** When batteries need replacement, the Catalyst 34 will blink twice with every key press. Simply replace them and the remote control will be restored to its full functionality, including favorite settings.

## Programming Component Control

The Catalyst 34 can control up to four different components. Perform the following instructions for each component you want controlled:

**NOTE:** For TV/VCR Combo control, see the next section.

1. Turn on a component (e.g., VCR) and, if applicable, insert media, (e.g., cassette or disc).

**NOTE:** Please read steps 2-4 completely before proceeding. We recommend highlighting or writing down the codes and device you wish to program before moving onto step 2.

2. On the Catalyst 34, press a component key once (i.e., **AUX**, **CBL**, **VCR**, or **TV**). Press and hold **SETUP** until the LED blinks twice, then release **SETUP**.
3. Use the Manufacturer's Codes (on the back side) to locate the type of component and brand name and then enter the first four-digit code for your component. If performed correctly, the LED will blink twice.

**NOTE:** If the LED did not blink twice, then repeat steps 2 through 3 and try entering the same code again.

4. Aim the Catalyst 34 at the component and press **PWR** once. It should turn off. If it does not respond, repeat steps 2-3, trying each code for your brand until you find one that works. If it still does not work, try searching for the code (see Searching For Your Code).

**NOTE:** If the device does not have a PWR key, press PLAY.

5. Repeat steps 1 through 4 for each component you want the Catalyst 34 to control.

## Programming TV/VCR Combo Control

Perform the following instructions to control a TV/VCR Combo:

1. Turn on the TV/VCR Combo and insert a video cassette.

**NOTE:** Please read steps 2-4 completely before proceeding. We recommend highlighting or writing down the code for the brand you wish to program before moving onto step 2.

2. On the Catalyst 34, press **VCR**. Press and hold **SETUP** until the LED blinks twice, then release **SETUP**.

3. Use the Setup Codes For TV/VCR Combos (on the back side) to locate the brand name and then enter the first four-digit code for your component. If performed correctly, the LED will blink twice.

**NOTE:** If the LED did not blink twice, then repeat steps 2 through 3 and try entering the same code again.

4. Aim the Catalyst 34 at the component and press **PWR** once. It should turn off. If it does not respond, repeat steps 2-3, trying each code for your brand until you find one that works. If it still does not work, try searching for the code (see Searching For Your Code).

**NOTE:** If the device does not have a PWR key, press PLAY.

5. If you've located a setup code that works, but it has a separate TV code, you'll also need to program it into the Catalyst 34 to access volume control as follows:

- a. Press **TV** once. The LED will blink twice.
- b. Enter the TV code for your TV/VCR Combo.

If correct, the LED will blink twice. If there is no separate TV code listed, you will need to perform the following steps to access volume control:

- a. Press and hold **SETUP** until the LED blinks twice, then release **SETUP**.
- b. Enter **9 - 9 - 3**. The LED will blink twice.
- c. Press **VCR** once. The LED will blink twice.

## Searching for Your Code

If your device does not respond to the Catalyst 34 after trying all codes listed for your brand, or if your brand is not listed at all, try searching for your code. For example, to search for a code for your TV:



1. On the Catalyst 34, press **TV** once.
2. Press and hold **SETUP** until the LED blinks twice, then release **SETUP**.
3. Enter **9 - 9 - 1**. The LED will blink twice.
4. Aim the remote control at the the TV and slowly alternate between pressing **PWR** and **TV**. Stop when the TV turns off.

**NOTE:** In the search mode, the Catalyst 34 will send IR codes from its library to the selected device, starting with the most popular code first.

5. Press **SETUP** once to lock in the code.
6. To search for the codes of your other components, repeat steps 1 through 5, but substitute the appropriate key (i.e., **AUX**, **CBL**, or **VCR**) for the (Auxiliary, Cable, or VCR) component you are searching for.

## Checking the Codes

If you have set up the Catalyst 34 using the *Searching For Your Code* procedure, you may need to find out which four-digit code is operating your equipment:

For example, to find out which code is operating your TV:

1. On the Catalyst 34, press **TV** once.
2. Press and hold **SETUP** until the LED blinks twice, then release **SETUP**.
3. Enter **9 - 9 - 0**. The LED will blink twice.
4. To view the code for the first digit, press **1** once. Wait 3 seconds, count the LED blinks (e.g., 3 blinks = 3) and write down the number.

**NOTE:** If a code digit is "0", the LED will not blink.

5. Repeat step 4 three more times for remaining digits. Use **2** for the second digit, **3** for the third digit, and **4** for the fourth digit.
6. To check for the codes of your other components, repeat steps 1 through 5, but substitute the appropriate key (i.e., **AUX**, **CBL**, or **VCR**) component you are checking. As before, write down each four-digit code.

## Re-Assigning Device Keys

The Catalyst 34 can be set up to control a second TV or VCR, or any combination of eight home entertainment components.

For example, to have the Catalyst 34 control a TV, a Cable Converter, and two VCRs, you will need to re-assign the unused **AUX** key to operate the second VCR as follows:

1. On the Catalyst 34, press and hold **SETUP** until the LED blinks twice, then release **SETUP**.
2. Enter **9 - 9 - 2**. The LED will blink twice.
3. Press **VCR** once, then press **AUX** once.
4. The **AUX** key is now ready to be programmed for your second VCR. See Programming Component Control.

To re-assign other device keys, repeat steps 1 through 4 by substituting the key sequence from the below chart for the most popular components:

## To Re-Assign Key Sequence

|                     |                                      |
|---------------------|--------------------------------------|
| TV as 2nd VCR key:  | <b>SETUP - 9 - 9 - 2 - VCR - TV</b>  |
| TV as 2nd CBL key:  | <b>SETUP - 9 - 9 - 2 - CBL - TV</b>  |
| TV as 2nd AUX key:  | <b>SETUP - 9 - 9 - 2 - AUX - TV</b>  |
| TV back to TV:      | <b>SETUP - 9 - 9 - 2 - TV - TV</b>   |
| VCR as 2nd TV key:  | <b>SETUP - 9 - 9 - 2 - TV - VCR</b>  |
| VCR as 2nd CBL key: | <b>SETUP - 9 - 9 - 2 - CBL - VCR</b> |
| VCR as 2nd AUX key: | <b>SETUP - 9 - 9 - 2 - AUX - VCR</b> |
| VCR back to VCR:    | <b>SETUP - 9 - 9 - 2 - VCR - VCR</b> |
| AUX as 2nd TV key:  | <b>SETUP - 9 - 9 - 2 - TV - AUX</b>  |
| AUX as 2nd VCR key: | <b>SETUP - 9 - 9 - 2 - VCR - AUX</b> |
| AUX as 2nd CBL key: | <b>SETUP - 9 - 9 - 2 - CBL - AUX</b> |
| AUX back to AUX:    | <b>SETUP - 9 - 9 - 2 - AUX - AUX</b> |

When a re-assignment is done, the LED will blink twice to confirm your choice. At that time, you will need to program the Catalyst 34 to control the new component (see *Programming Component Control*).

## Changing Volume Lock

The Catalyst 34 is set to control volume of a component through your TV while in the TV, VCR, or Cable mode. However, in the auxiliary mode (i.e., **AUX**), you have separate control of your audio component's volume. If your TV is not remote controllable, or if you want volume to be controlled by a different component, you can change the Volume Lock setting to control a volume through a non-associated mode (e.g., through the cable in the TV mode).

### To change Volume Lock to the another mode:

1. On the Catalyst 34, press and hold **SETUP** until the LED blinks twice, then release **SETUP**.
2. Enter **9 - 9 - 3** and then press any mode key once (except **TV**). The LED will blink twice.
3. Now, whenever you press **VOL +**, **VOL -**, or **MUTE**, volume will be controlled by your mode choice. To change Volume Lock back to the TV mode:

### To change Volume Lock back to the TV mode:

1. On the Catalyst 34, press and hold **SETUP** until the LED blinks twice, then release **SETUP**.
2. Enter **9 - 9 - 3** and then press **TV**. The LED will blink twice.
3. Now, whenever you press **VOL +**, **VOL -**, or **MUTE** on the Catalyst 34, volume will be controlled by your TV.

## Troubleshooting

### PROBLEM: LED does not blink when you press a key.

**SOLUTION:** Replace the batteries with two (2) new AA alkaline batteries.

### PROBLEM: LED blinks when you press a key, but home entertainment component does not respond.

**SOLUTION:** Make sure the Catalyst 34 is aimed at your home entertainment component and is not farther than 15 feet away.

### PROBLEM: Catalyst 34 does not control home entertainment components or commands are not working properly.

**SOLUTION:** Try all listed codes for the component brands being set up. Make sure they can be operated with an infrared remote control.

### PROBLEM: TV/VCR combo does not respond properly.

**SOLUTION:** Use the VCR codes for your brand. Some combo units may require both a TV code and a VCR code for full operation.

### PROBLEM: No volume on a 2nd TV.

**SOLUTION:** Follow instructions in Changing Volume Lock.

### PROBLEM: CH+, CH-, and LAST do not work for your RCA TV.

**SOLUTION:** Due to RCA design (1983-1987), only the original remote control will operate these functions.

### PROBLEM: Changing channels does not work properly.

**SOLUTION:** If original remote control required pressing **ENTER** to change channels, press **ENTER** on the Catalyst 34 after entering the channel number.

### PROBLEM: Tried "Search Method" and still could not find a working code.

**SOLUTION:** Try the "Search Method" again after clearing out the device key as follows: Press and hold **ENTER** until red light blinks twice, then release. Next enter **9 - 9 - 2**.

Then press and release the device key to be cleared twice.

### PROBLEM: Remote control does not turn on Sony or Sharp TV/VCR Combo.

**SOLUTION:** For power on, these products require programming TV codes. For Sony, use TV code 0000 and VCR code 0032. For Sharp, use TV code 0093 and VCR code 0048.

## Manufacturer Codes Setup Codes for TVs:

|                    |   |
|--------------------|---|
| AOC                | 0030,0019   |
| Admiral            | 0093  |
| KLH                | 0092  |
| Aikai              | 0030  |
| Alaron             | 0179  |
| Allegro            | 0720,0774   |
| Ambassador         | 0177  |
| Ampro              | 0751  |
| Anam               | 0180  |
| Audiovox           | 0451,0180,0092,0623   |
| Aumark             | 0060  |
| Baysonic           | 0180  |
| Belcor             | 0019  |
| Bell & Howell      | 0154,0016   |
| Bradford           | 0180  |
| Brookwood          | 0019  |
| Broksonic          | 0236,0463   |
| CKC180             | 0030  |
| Candle             | 0030,0056   |
| Carnivale          | 0030  |
| Carver             | 0054  |
| Celebrity          | 0000  |
| Cineral            | 0451,0092   |
| Citizens           | 0060,0030,0056,0039,0092  |
| Concerto           | 0056  |
| Contec             | 0180  |
| Craig              | 0180  |
| Crosley            | 0054  |
| Crown              | 0180,0039   |
| Curtis Mathes      | 0047,0054,0154,0051,0451,0093,0060,0030,0145,0056,0016,0039,0166,0466,1147,1347 |
| Daewoo             | 0451,0019,0039,0092,0623,0624   |
| Daytron            | 0019,0039   |
| Denon              | 0145  |
| Dumont             | 0017,0019   |
| Dwin               | 0720,0774   |
| Electroband        | 0000  |
| Emerson            | 0154,0236,0463,0180,0282,0178,0019,0179,0039,0177,0623,0624                     |
| Envision           | 0030  |
| Fisher             | 0154  |
| Fujitsu            | 0179  |
| Funai              | 0180,0179,0171  |
| Futuretech         | 0180  |
| GE                 | 0047,0051,0451,0093,0282,0178,0021,0135,1147,1347                               |
| Gibralter          | 0017,0030,0019  |
| Go Video           | 0060  |
| GoldStar           | 0030,0178,0019,0056,0039  |
| Gradiente          | 0053,0056   |
| Grumpy             | 0180,0179   |
| Hallmark           | 0178  |
| Harley Davidson    | 0179  |
| Harman/Kardon      | 0054  |
| Harvard            | 0180  |
| Hitachi            | 0145,0056,0151  |
| Infinity           | 0054  |
| Inteq              | 0017  |
| JBL                | 0054  |
| JCB                | 0000  |
| JVC                | 0053  |
| KEC                | 0180  |
| KTV                | 0180,0030,0039  |
| Kenwood            | 0030,0019   |
| LG                 | 0056  |
| LXI                | 0047,0054,0017,0154,0156,0178,1347  |
| Logik              | 0016  |
| Luxman             | 0056  |
| MGA                | 0150,0030,0178,0019   |
| Megatron           | 0019  |
| MTC                | 0060,0030,0019,0056   |
| Magnavox           | 0054,0030,0179  |
| Majestic           | 0016  |
| Marantz            | 0054,0030   |
| Matsushita         | 0051,0250   |
| Megatron           | 0178,0145   |
| Memorex            | 0154,0250,0150,0060,0178,0056,0016  |
| Midland            | 0047,0017,0051,0039,0135  |
| Minutz             | 0021  |
| Mitsubishi         | 0093,0150,0178,0019   |
| Motorola           | 0019  |
| Multitech          | 0093  |
| NAD                | 0180  |
| NEC                | 0156,0178,0166  |
| NEC                | 0030,0019,0056  |
| NTC                | 0092  |
| Nikko              | 0047,0017,0154,0156,0030,0178,0092,1347   |
| Onwa               | 0180  |
| Optimus            | 0154,0250,0166  |
| Optonica           | 0093,0165   |
| Orion              | 0236,0463,0179  |
| Panasonic          | 0047,0054,0154,0156,0051,0250,0093,0165,0150,0060,0053,0178,0145,1347           |
| Penney             | 0047,0156,0051,0060,0030,0178,0021,0019,0056,0039,0135,1347                     |
| Philco             | 0054,0463,0030,0145,0019  |
| Philips            | 0054,0017,0000,0021,0019,0039   |
| Pilot              | 0030,0019,0039  |
| Pioneer            | 0166  |
| Portland           | 0019,0039,0092  |
| Prism              | 0051  |
| Proscan            | 0047,0030,1347  |
| Proton             | 0178,0466   |
| Pulsar             | 0017,0019   |
| Quasar             | 0051,0250,0165  |
| RCA                | 0047,0051,0093,0104,0019,0090,0135,1047,1147,1247,1347                          |
| Radio Shack        | 0047,0154,0165,0180,0030,0178,0019,0056,0039                                    |
| Realistic          | 0154,0165,0180,0030,0178,0019,0056,0039   |
| Runco              | 0017,0030,0603  |
| SSS 0180,0019      |   |
| Sampo              | 0030,0039   |
| Samsung            | 0060,0030,0178,0019,0056,0039   |
| Samsux             | 0019,0090,0135,1047,1147,1247,1347  |
| Sansel             | 0451  |
| Sansui             | 0463  |
| Sanyo              | 0154  |
| Scimitus           | 0019  |
| Scotch             | 0178  |
| Scott              | 0236,0180,0178,0019,0179  |
| Sears              | 0047,0054,0154,0156,0178,0179,0056,0171   |
| Semivox            | 0180  |
| Semp               | 0156  |
| Sharp              | 0093,0165,0039  |
| Shogun             | 0019  |
| Signature          | 0016  |
| Sony               | 0000  |
| Soundesign         | 0180,0178,0179  |
| Squareview         | 0171  |
| Starlite           | 0180  |
| Supreme            | 0000  |
| Sylvania           | 0054,0030   |
| Symphonic          | 0171  |
| TMK                | 0178,0056,0177  |
| Tandy              | 0093  |
| Technics           | 0047,0017,0051,0250,1347  |
| Technol Ace        | 0179  |
| Techwood           | 0051,0056   |
| Teknika            | 0054,0180,0150,0060,0019,0179,0092  |
| Telefunken         | 0056  |
| Toshiba            | 0154,0156,0060  |
| Totevision         | 0039  |
| Universal          | 0021  |
| Vector Research    | 0030  |
| Victor             | 0053  |
| Vidkron            | 0054  |
| Vidtech            | 0178,0019   |
| Wards              | 0054,0156,0165,0030,0178,0021,0019,0179,0056,0016,0135                          |
| White Westinghouse | 0623,0624   |
| Yamaha             | 0030,0019   |
| Zenith             | 0017,0016,0092  |

## Setup Codes for VCRs:

|                    |  |
|--------------------|--|
| Jensen             | 0041   |
| KEC                | 0037,0278  |
| KLH                | 0072   |
| Kenwood            | 0067,0041,0038,0046                                    |
| Kodak              | 0035,0037  |
| LXI                | 0037   |
| Lloyd's            | 0000   |
| Logik              | 0072   |
| MEI                | 0035   |
| MGA                | 0240,0043  |
| MGI Technology     | 0240   |
| MTC                | 0240,0000  |
| Magnasonic         | 0278   |
| Magnavox           | 0035,0039,0081,0000,0149                               |
| Magnin             | 0240   |
| Marantz            | 0035,0037,0038,0037                                    |
| Matsushita         | 0035,0162,0454   |
| Memorex            | 0035,0037,0048,0039,0047,0240,0000,0104,0046,1162,1262 |
| Minolta            | 0042   |
| Mitsubishi         | 0048,0067,0043   |
| Motorola           | 0035,0048  |
| Multitech          | 0000,0072  |
| NAP                | 0035,0037,0039,0042,0033                               |
| NEC                | 0104,0067,0041,0038                                    |
| Nikko              | 0037   |
| Noblex             | 0240   |
| Olympus            | 0035   |
| Optimus            | 0037,0048,0104,0162,0454,1062,1162,1262                |
| Orion              | 0184,0002  |
| Panasonic          | 0035,0162,0225,0454,1162                               |
| Penney             | 0035,0037,0240,0042,0038                               |
| Pentax             | 0042   |
| Philco             | 0035,0209  |
| Philips            | 0035,0081  |
| Pilot              | 0037   |
| Pioneer            | 0067   |
| Proffrontronic     | 0240   |
| Proscan            | 0060   |
| Protec             | 0039   |
| Pulsar             | 0072   |
| Quarter            | 0046   |
| Quartz             | 0046   |
| Quasar             | 0035,0162,0454,1162                                    |
| RCA                | 0060,0035,0048,0240,0042,0149                          |
| Radio Shack        | 0000   |
| Radix              | 0037   |
| Randex             | 0037   |
| Realistic          | 0035,0037,0048,0047,0000,0104,0046                     |
| Runco              | 0039   |
| STS 0042           |  |
| Samsung            | 0240,0045  |
| Sanky              | 0048,0039  |
| Sansui             | 0000,0067,0041,0271                                    |
| Sanyo              | 0047,0240,0104,0046                                    |
| Scott              | 0184,0045,0121,0043                                    |
| Sears              | 0035,0037,0407,0000,0042,0104,0046                     |
| Semp               | 0000,0042,0104,0046                                    |
| Aiko               | 0045   |
| Sharp              | 0048   |
| Shintom            | 0072   |
| Shogun             | 0240   |
| Signature          | 0035   |
| Singer             | 0072   |
| Beaumont           | 0035,0032,0000,0033                                    |
| Sony               | 0033   |
| Sylvania           | 0035,0081,0000,0043                                    |
| Symphonic          | 0000   |
| TMK                | 0240   |
| Tatung             | 0041   |
| Teac               | 0000,0041  |
| Technics           | 0060,0035,0039,0162                                    |
| Teknika            | 0035,0037,0000   |
| Thorn              | 0000   |
| Toshiba            | 0045,0043  |
| Totevision         | 0037,0240  |
| Unittech           | 0240   |
| Vector             | 0045   |
| Vector Research    | 0038   |
| Video Concepts     | 0045   |
| Videosonic         | 0240   |
| Wards              | 0060,0035,0048,0047,0081,0240,0045,0000,0042,0072,0149 |
| White Westinghouse | 0278   |
| XR-1000            | 0035,0000,0072   |
| Yamaha             | 0041,0038  |
| Zenith             | 0039,0000,0033   |

## Setup Codes for TV/VCR Combos:

|               |                        |
|---------------|------------------------|
| American High | 0035 (for TV use 0051) |
| Broksonic     | 0002,0294              |
| Colt          | 0072                   |
| Curtis Mathis | 0035 (for TV use 0051) |
| Daewoo        | 0278                   |
| Emerson       | 0002,0294,0479         |

|                    |   |
|--------------------|---|
| Funai              | 0000  |
| GE                 | 0035 (for TV use 0051),0060 (for TV use 0047),0048 (for TV use 0093),0230   |
| Hitachi            | 0035 (for TV use 0051),0000   |
| HQ                 | 0000  |
| Lloyds             | 0000  |
| MGA                | 0240  |
| Magnavox           | 0081 (for TV use 0054),0035 (for TV use 0051),0000  |
| Magnin             | 0240  |
| Memorex            | 0037,0162 (for TV use 0250)   |
| Mitsubishi         | 0048 (for TV use 0093)  |
| Orion              | 0002,0294,0479  |
| Panasonic          | 0060 (for TV use 0047),0162 (for TV use 0051),0035 (for TV use 0250),0162 (for TV use 0051),0240,0135 (for TV use 0250) |
| Quasar             | 0035 (for TV use 0051),0162 (for TV use 0250)   |
| RCA                | 0040 (for TV use 0047),0035 (for TV use 0051),0048 (for TV use 0093),0000,0479  |
| Sansui             | 0240  |
| Sanyo              | 0000,0037   |
| Sears              | 0040 (for TV use 0093)  |
| Sharp              | 0147,0173   |
| Sony               | 0032 (for TV use 0000)  |
| Symphonic          | 0000  |
| ABC                | 0003,0008,0014,0017,0007,0011,0013  |
| Allegro            | 0153,0315   |
| Archer             | 0035,0797   |
| Bell & Howell      | 0014  |
| Century            | 0153  |
| Citizen            | 0153,0315   |
| Comtronics         | 0040  |
| Contec             | 0019  |
| Eastern            | 0002  |
| Emerson            | 0797  |
| Everquest          | 0015,0040   |
| Focus              | 0400  |
| Garrard            | 0153  |
| Gemini             | 0015  |
| General Instrument | 0476,0276,0011,0810   |
| GoldStar           | 0144,0040   |
| Goodmind           | 0797  |
| Hamlin             | 0020,0259,0009,0034   |
| Hitachi            | 0011  |
| Hytex              | 0007  |
| Jasco              | 0015,0153,0315  |
| Jerrold            | 0003,0012,0476,0276,0014,0015,0011,0810   |
| Magnavox           | 0000  |
| Memorex            | 0000  |
| Movie Time         | 0063  |
| NAP                | 0007  |
| NSC                | 0063  |
| Oak                | 0019,0007   |
| Optimus            | 0021  |
| Panasonic          | 0000,0107,0021  |
| Paragon            | 0000  |
| Philips            | 0153  |
| Pioneer            | 0144,0533   |
| Popular Mechanics  | 0000  |
| Proscan            | 0021  |
| Pulsar             | 0000  |
| Quasar             | 0000  |
| RCA                | 0021  |
| Radio Shack        | 0015,0315,0797,0883   |
| Recton             | 0000  |
| Regal              | 0020,0259   |
| Regency            | 0002  |
| Rembrandt          | 0011  |
| Runco              | 0000  |
| SL Marx            | 0040  |
| Samsung            | 0144,0040   |
| Scientific Atlanta | 0008,0477,0017,0877   |
| Signal             | 0015,0040   |
| Signature          | 0011  |
| Sprucer            | 0021  |
| Starcorn           | 0003,0015   |
| Samsung            | 0015,0040,0797  |
| Starquest          | 0015  |
| TV86               | 0063  |
| Television         | 0040  |
| Tocom              | 0012,0013   |
| Toshiba            | 0000  |
| Tusa               | 0015  |
| Unika              | 0153  |
| United Artists     | 0007  |
| Universal          | 0153,0191   |
| Viewstar           | 0063  |
| Zenith             | 0008,0000,0015,0525   |
| Zentek             | 0400  |

## Setup Codes for Satellite or DBS Receivers:

|                    |                |
|--------------------|----------------|
| AlphaStar          | 0772           |
| EchoStar           | 0775           |
| ExpressVu          | 0775           |
| General Instrument | 0627,0361,0869 |
| HTS                | 0775           |
| Hitachi            | 0819           |
| Hughes NetSys.     | 0749           |
| JVC                | 0775           |
| Jerrold            | 0627,0361      |

|             |                |
|-------------|----------------|
| Magnavox    | 0724,0722      |
| Memorex     | 0724           |
| Next Level  | 0869           |
| Panasonic   | 0701           |
| Philips     | 0724,0722      |
| Pinestar    | 0627,0361      |
| Proscan     | 0056           |
| RCA         | 0566,0143,0855 |
| Radio Shack | 0566,0869      |
| Sony        | 0639           |
| Star Choice | 0869           |
| Toshiba     | 0790           |
| Uniden      | 0724,0722      |
| Zenith      | 0856           |

### Setup Codes for CD Players:

|                      |  |
|----------------------|--|
| Aiwa                 | 0157,0124                                    |
| Burmester            | 0420   |
| California Audio Lab | 0029   |
| Carver               | 0157,0179,0437                               |
| Curtis Mathes        | 0029   |
| DKK                  | 0000   |
| Denon                | 0003,0873                                    |
| Emerson              | 0305   |
| Fisher               | 0179,0174                                    |
| Garrard              | 0420,0393                                    |
| Genesxa              | 0032,0305                                    |
| Harman/Kardon        | 0032,0173                                    |
| Hitachi              | 0032   |
| JVC                  | 0072   |
| Kenwood              | 0028,0037,0190,0826,0681                     |
| Krell                | 0157   |
| LXI                  | 0205   |
| Linn                 | 0157   |
| MCS                  | 0029   |
| MTC                  | 0420   |
| Magnavox             | 0157,0305                                    |
| Marantz              | 0029,0157,0180                               |
| Mission              | 0157   |
| Bell & Howell        | 0157   |
| NSM                  | 0157   |
| Nikko                | 0174   |
| Onkyo                | 0101,0868                                    |
| Optimus              | 0000,0032,0179,0305,0037,0420,0145,0468,0437 |
| Panasonic            | 0029,0303                                    |
| Parasound            | 0420   |
| Philips              | 0157,0626                                    |
| Pioneer              | 0032,0305,0468,0244                          |
| Proscan              | 0053   |
| Proton               | 0157   |
| QED                  | 0157   |
| Quasar               | 0029   |
| RCA                  | 0179,0305,0053,0764                          |
| Realistic            | 0179,0420,0180                               |
| Rotel                | 0157,0420                                    |
| SAE                  | 0157   |
| Sansui               | 0157,0305                                    |
| Sanyo                | 0179   |
| Scott                | 0305   |
| Sears                | 0205   |
| Sharp                | 0037,0180,0861                               |
| Sherwood             | 0180   |
| Sony                 | 0000,0185,0490                               |
| Soundesign           | 0145   |
| Sylvania             | 0157   |
| Tascam               | 0420   |
| Teac                 | 0420,0393,0174,0180                          |
| Technics             | 0029,0303                                    |
| Victor               | 0072   |
| Wards                | 0157,0053                                    |
| Yamaha               | 0036,0187                                    |
| Yorx                 | 0461   |

### Setup Codes for DVD Players:

|               |           |
|---------------|-----------|
| Harman/Kardon | 0582      |
| JVC           | 0558      |
| Kenwood       | 0534      |
| Magnavox      | 0503      |
| Mitsubishi    | 0521      |
| Onkyo         | 0503      |
| Optimus       | 0525      |
| Panasonic     | 0490      |
| Philips       | 0503,0539 |
| Pioneer       | 0525,0571 |
| Proscan       | 0522      |
| RCA           | 0522      |
| Samsung       | 0573      |
| Sony          | 0533      |
| Technics      | 0490      |
| Theta Digital | 0571      |
| Toshiba       | 0503      |
| Yamaha        | 0490,0545 |
| Zenith        | 0503,0591 |

### Setup Codes for Stereo Tuners or Receivers:

|               |                     |
|---------------|---------------------|
| ADC           | 0531                |
| Aiwa          | 0158,0189,0121,0405 |
| Capetronic    | 0531,0195           |
| Carver        | 0189,0042,0360      |
| Casio         | 0195                |
| Clanette      | 0195                |
| Curtis Mathes | 0039,0080           |
| Denon         | 0004                |
| Emerson       | 0424                |
| Fisher        | 0042,0219,0360,0001 |
| Garrard       | 0463,0424           |
| Harman/Kardon | 0110,0189,0891      |
| JBL           | 0110                |
| JVC           | 0074                |