UNIVERSAL ELECTRONICS

Helix Z-wave 5-Device
Remote Control with Learning

Users Guide

TABLE OF CONTENTS

INTRODUCTION

The Helix Z-wave 5-Device Remote Control with Learning by Universal Electronics is our latest generation universal remote control. Its sophisticated technology allows you to consolidate up to five of your original home entertainment remote controls into one easy-to-use product.

Your remote lets you control individual Z-wave devices with one easy-to-use, compact unit. You can also set up and control different groups and scenes.

You can control your electric lights, turning them on or off, or making them brighter or dimmer.

Moreover, its packed with advanced features such as:

- Preprogrammed control to operate thes satellite receiver supplied by your service provider
- Dedicated keys to control popular functions on your DVR/PVR (Digital/Personal Video Recorder)
- Programmable Master Power key for master on/off control of your home entertainment equipment with a single keystroke
- Programmable Macro Keys to allow you to activate certain keys in a specific order
- Channel Lock to lock channel selection only to the cable converter
- Volume Lock to lock volume controls to one mode or individual modes
- Device Key Re-Assignment to remotely control a second (duplicate) device
- Code Search to help program control of older or discontinued components
- Color-coded keys to quickly locate popular functions
- Code library for popular video and audio devices

Before using the product, you will need to install the enclosed batteries and also perform some programming to operate the specific home entertainment devices you wish to control.

Please follow the instructions detailed in this manual to set up the unit and then start enjoying your new remote control and cable service.
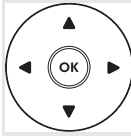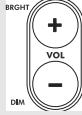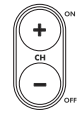
FEATURES AND FUNCTIONS
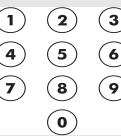
Use the illustration below to locate features on the Helix Z-wave 5-Device Remote Control with Learning and then study the Key Charts (on the next three pages) to learn how they function.

To find out what type of devices can be controlled by each device key after programming, see "Device Table" on page 7 .

Key Charts

Key	Function
(SETUP)	Use **SETUP** for all programming sequences. Also use to turn backlighting on and off, if applicable.
(power)	Press **POWER** once to turn on or off a home entertainment device. For **MASTER POWER** control, see "Using the Master Power Key" on page 21.
TV HOME DVD/VCR SAT AMP	Press **TV, DVD/VCR, SAT,** or **AUX** once to select a home entertainment device to control. Also see "Device Table" on page 7. Each device key has an embedded LED (red light) that blinks upon selection and indicates the remote control is working and (after programming) is sending signals.
ALL GUIDE	Use **ALL/GUIDE** to display the program guide.
INFO	Use **INFO** to display the current channel and program information.
▲ ◄ OK ► ▼	Use the Cursor keys to move the cursor in the program guide and menu screens and to navigate within the interactive service. Use **OK** to choose options, PPV events, and to tune to programs from the program guide.
EXIT	Use **EXIT** to exit out of your cable converters menu and guide.
BRGHT + VOL − DIM	Use **VOL+** (or **VOL-**) to raise (or lower) the audio volume. Use **BRIGHT** or **DIM** to control the brightness level of your lights.
+ ON CH − OFF	Use **CH+** (or **CH-**) to select the next higher (or lower) channel. For DVD players, use these keys to skip forward (or reverse) through chapters. For amplifiers/receivers, use these keys to select the next higher (or lower) preset station. Use **ON** or **OFF** to turn your Z-wave compatible devices on or off.

Key	Function
Cancel MUTE	Press **MUTE** once to turn the sound off or on. Press **CANCEL** to
LAST	Press **LAST** once to recall the last channel.
→I	Use →I to command your PVR/DVR to instantly skip forward 7 seconds in the program you are watching.
↺	Use ↺ to command your PVR/DVR cable box to instantly replay the last 7 seconds of a program you are watching.
LIVE TV	Press **LIVE TV** to command your PVR/DVR cable box to return to watching live TV.
⏮ ▶ ⏸ ⏭ ◀ ■ ⏺ ▶	In all modes except **SAT, use REW**, **PLAY**, **FFWD**, **STOP**, and **PAUSE** to control a VCR, DVD player, or a PVR (after selecting a desired device). To record in the VCR mode, press **REC** twice. In the **SAT** mode, use these keys to control the DVR/PVR functions of the set-top box.
1 2 3 4 5 6 7 8 9 0	Use the keypad numbers (**1**-**9**, and **0**) to directly tune channels (e.g., 09). For amplifiers/receivers, use the keypad numbers to select inputs 1 through 10.
TV/Vid	Use **TV/VID** to select an input source.
ADD REMOVE DELETE SCENE	Use **ADD**, **REMOVE**, **DELETE**, or **SCENE** to control your Z-wave compatible devices.

Device Table

NOTE: Please refer to the table below when performing the instructions in "Programming Device Control" on page 9 or "Setting Up a Combo Unit" on page 11.

After programming, the Helix Z-wave 5-Device Remote Control with Learning will be able to control the following types of devices:

Device Key	Controls these types of devices
AMP	Audio Amplifier, Tuner, Receiver, CD Player, Home Automation, or Miscellaneous Audio
TV	Television
DVD/VCR	DVD Player, VCR, PVR
SAT	Satellite Receiver, Cable Box (Converter), or Video Accessory
HOME	Dedicated to Z-Wave controls

INSTALLING BATTERIES

1

2

3
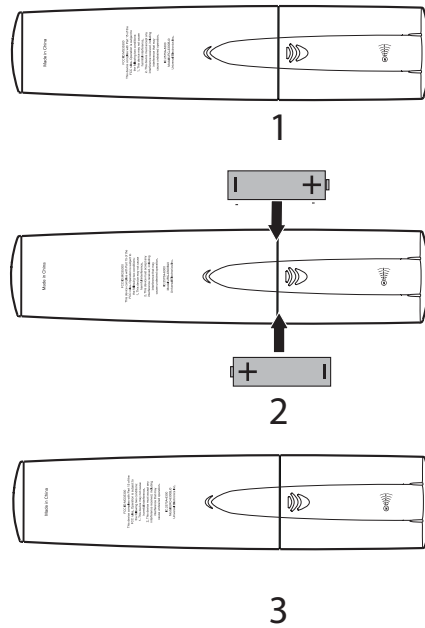
1. On the back of the remote control, push the tab and lift off the battery cover.

2. Locate the four (4) enclosed AAA batteries. Match the + and - marks with those in the battery case, then insert them.

3.   Align the covers keys with the cases holes and press the cover back into place. The tab should click when the cover is locked.

4.   Test the remote control by pressing any mode key (e.g., **TV**). If the batteries are inserted correctly, the LED (red light) will blink once.

NOTE: When batteries need replacement, the remote control will cease to operate. Replace the batteries and the unit will be restored to its full functionality, complete with your favorite settings.

PROGRAMMING DEVICE CONTROL

The Helix Z-wave 5-Device Remote Control with Learning is preprogrammed to operate an RCA satellite receiver, TV, DVD player, and VCR, and a Pioneer audio receiver. It can also control Z-wave compatible devices, such as your home lighting system. To control devices other than the default brands, perform the following steps; otherwise skip this section.

NOTES: For control of a Combo device (for example, a TV/VCR combo), skip this section and perform the instructions on "Setting Up a Combo Unit" on page 11. Also refer to "Device Table" on page 7 to find out which devices can be programmed onto each device key.

     If you have another brand of cable converter or a satellite receiver you would like to control, you'll need to unlock the cable ID Lock before changing the converter code (see "Programming ID Lock" on page 19).

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

NOTE: Please read steps 2 through 4 completely before proceeding. Highlight or write down the codes and device you wish to program before moving on to step 2.

2.   On the remote control, press a device key once (i.e., **TV, DVD/VCR, SAT,** or **AUX**); it will blink once. Then press and hold **SETUP** until the selected mode key blinks twice.

3.   Use the "Manufacturer's Codes" starting on page 34) to locate the type of device and brand name and then enter the first four-digit code for your device. If performed correctly, the selected mode key will blink twice.

NOTE: If the selected mode key emits a long blink, the entry is invalid. Repeat steps 2 through 3 and try entering the same code again.

4. Aim the remote control at the device and press **PWR** once. The device should turn off. If it does not, repeat steps 2 through 3, trying each code for your brand until you find one that works. If it still does not respond, try searching for the code (see "Searching for Your Code" on page 12).

NOTE: If the device does not have a **PWR** key, press the ▶ (Play) key.

5. Repeat steps 1 through 4 for each device you want the remote control to operate. For future reference, write down each working device code in the boxes on the following page.

VCR Code

☐ ☐ ☐ ☐ ☐

Device Type:_____

DVD Code

☐ ☐ ☐ ☐ ☐

Device Type:_____

AMP Code

☐ ☐ ☐ ☐ ☐

Device Type:_____

SAT Code

☐ ☐ ☐ ☐ ☐

Device Type:_____

TV Code

☐ ☐ ☐ ☐ ☐

Device Type:_____

SETTING UP A COMBO UNIT

If you own a combo unit such as a TV/VCR Combo or a TV/DVD Combo, you need to follow special steps to set it up. Perform the following instructions to control combo device:

1. For a TV/VCR Combo, turn on your TV/VCR Combo and insert a video cassette. (For a TV/DVD Combo, insert a DVD).

2. On the remote control, press **DVD/VCR** once; it will blink once. Then press and hold **SETUP** until the **DVD/VCR** key blinks twice.

3. Use the "Manufacturer's Codes" starting on page 34 to locate the brand name and enter the first four-digit code for your combo device (for example, TV/VCR). If you perform this procedure correctly, the **DVD/VCR** key will blink twice.

NOTE: If the **DVD/VCR** key did not blink twice after entering the codes last digit, repeat steps 2 through 3 and try entering the same code again.

   If you've located a setup code that works for your combo device (for example, a TV/VCR Combo) and a separate TV code is also listed, you'll need to program this code into the remote control to access volume control (see "Programming Device Control" starting on page 9).

4. Aim the remote control at your combo device (for example, TV/VCR Combo) and press **PWR** once. The device should turn off. If it does not respond, repeat steps 2 through 3, trying each code listed for your brand until you find one that works. If it still does not respond, try searching for the code ("Searching for Your Code" starting on page 12).

5. For future reference, write down each working device code in the boxes below:

   TV/VCR or TV/DVD Code

   ☐ ☐ ☐ ☐ ☐

   TV Code (if used)

   ☐ ☐ ☐ ☐ ☐

SEARCHING FOR YOUR CODE

If your home entertainment device does not respond to the Helix Z-wave 5-Device Remote Control with Learning after trying all of the 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.   Turn on your TV.

2.   On the remote control, press **TV** once; it will blink once. Then press and hold **SETUP** until the **TV** key blinks twice.

3.   Enter **9 9 1**. The **TV** key will blink twice.

4.   Aim the remote control at the TV and press **PWR** once.

5.   Press and release the **CH+** key continuously, then stop when the TV turns off.

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

6.   Press **PWR**. The TV should turn on, then press **SETUP** to lock in the code.

NOTE: If the TV does not turn on during step 6, then slowly press and release **CH-** to go back through the codes, then press **SETUP** when the TV turns on.

7.   To search for the codes of your other devices, repeat steps 1 through 6, but substitute the appropriate key (e.g., **VCR, DVD, AMP,** or **SAT**) for the device you are searching for.

CHECKING THE CODES

If you have set up the Helix Z-wave 5-Device Remote Control with Learning by searching for your device code (on the previous page), 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 remote control, press **TV** once; it will blink once. Then press and hold **SETUP** until the **TV** key blinks twice.

2.   Enter **9 9 0**. The **TV** key will blink twice.

3.   To view the code for the first digit, press **1** once. Count the number of times the **TV** key blinks (e.g., 3 blinks = 3) and write down the number in the leftmost TV Code box on page 10.

NOTE: If a code digit is 0, the selected mode key will not blink.

4.   Repeat step 3 three more times for the remaining digits. Use **2** for the second digit, **3** for the third digit, and **4** for the fourth digit. Finish writing down the code in the TV Code boxes on page 10.

5.   To check for other device codes, repeat steps 1 through 4, but substitute the appropriate key (e.g., **VCR, DVD, AMP,** or **SAT**) for the device you are checking. Write down the codes in the appropriate boxes on page 10.

USING LEARNING

The Helix Z-wave 5-Device Remote Control with Learning includes a Learning feature so you can add functions that are unique to your home entertainment devices (e.g.,VCR Tracking Up or Down). However, there are some considerations.

Learning Precautions
· Your original remote controls must be in working order for learning to work properly.
· Learned keys are mode-specific, so each one can store a unique function for each mode.
· Do not use the following keys for learning: **Device Keys, SETUP, Record (●), Tune-In Keys**.

- Learning capacity is approximately 16 to 25 keys, depending on the code being learned.
- Certain device functions are not learnable including multi-frequency types, some high frequency ones, and other unusual formats.
- For optimum learning, avoid high levels of ambient light such as natural sunlight or energy-efficient fluorescent lights.

NOTE: Please have your original remote controls handy before programming learning.

Programming a Learned Key

NOTE: If more than 15 seconds pass between key presses, the remote exits programming.

1. Press and hold **SETUP** until the last-selected mode key blinks twice, then press **9 7 5**.

NOTE: If the LED displays one long flash instead, either your batteries are low, or the Helix Z-wave 5-Device Remote Control with Learning has a memory fault.

2. Press a mode key once (i.e., **TV, DVD/VCR, SAT,** or **AUX**) to assign a mode for learning.

3. Then press the key on your Helix Remote Control that learns the new code.

4. Place the Helix Z-wave 5-Device Remote Control with Learning head-to-head (about 2" apart) from your original remote control. Also locate the key (on your original remote control) that you want the Helix Z-wave 5-Device Remote Control with Learning to learn.
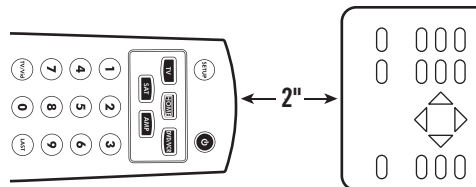
5. On the original remote, press and hold the key to be learned. The Helix Z-wave 5-Device Remote Control with Learning's LED will blink rapidly, then turn off. Continue holding

the key on the original remote until the Helix Z-wave 5-Device Remote Control with Learning's LED blinks twice.

NOTE: If the LED displays one long blink, a learning error has occurred. Try repeating this step again until a successful capture occurs. If the function is still not captured, press and hold **SETUP** to exit programming and review the "Learning Precautions" on the previous page. If needed, also see "Troubleshooting" on page 31. After review, start programming again at step 1.

6.   Repeat steps 2 through 5 for another mode and/or key or press and hold **SETUP** to exit programming.

Deleting a Single Learning Key

This process returns the key to its original programming for the mode you select. You can also delete learned programming by teaching a different function to the key (see "Programming a Learned Key" on page 14)

NOTE: If more than 15 seconds pass between key presses, the remote exits programming.

1.   Press and hold **SETUP** until the last-selected mode key blinks twice, then press **9 7 6**.

2.   Press a mode key once (i.e., **TV, DVD/VCR, SAT,** or **AUX**).

3.   Press the key containing the learned function to be deleted twice. The remote will blink twice.

4.   Repeat steps 2 through 3 for another key or press and hold **SETUP** to exit programming.

Deleting All Learned Keys in a Specific Mode

NOTE: If more than 15 seconds pass between key presses, the remote exits programming.

1. Press and hold **SETUP** until the last-selected mode key blinks twice, then press **9 7 6**.

2. Press a mode key twice (i.e., **TV, DVD/VCR, SAT,** or **AUX**) to clear all the learned keys for that mode. The LED blinks twice.

3. Repeat step 2 for another mode or press and hold **SETUP** to exit programming.

PROGRAMMING CHANNEL CONTROL LOCK

By default, the remote control's channel-control capabilities are locked to the cable converter. The affected keys* are **1** through **0**, **CH+**, **CH-**, and **LAST**. This will guarantee that you do not inadvertently change a channel on your TV or VCR. However, you can de-activate this feature to allow full access to these keys in the **TV** and **VCR** modes.

***NOTE:** This feature does not affect the **AMP** mode.

Unlocking Channel Control

1. On the remote control, press **SAT** once; it will blink once. Press and hold **SETUP** until the **SAT** key blinks twice.

2. Enter **9 7 3**. The **SAT** key will blink twice.

3. Press **CH-** once. The **SATSAT** key will blink four times.

Now the remote control will provide TV and VCR channel-control capabilities while in the TV or VCR mode.

Locking Channel Control to SAT

1. On the remote control, press **SAT** once; it will blink once. Press and hold **SETUP** until the **SAT** key blinks twice.

2. Enter **9 7 3**.The **SAT** key will blink twice.

3. Press **CH+** once. The **SAT** key will blink twice.

Now, regardless of what mode you select (except **AMP**), the channel keys will only change channels on your cable converter.

CHANGING VOLUME LOCK

Volume Lock allows you to control the volume through the device identified as having your primary speaker(s), regardless of which mode you are using. On the Helix Z-wave 5-Device Remote Control with Learning, Global Volume Lock is set to **TV**, so you can control TV volume while in the **VCR**, **DVD**, **TV** or **SAT** mode. You can perform Individual Volume Unlock on a selected device to set its volume control for independent operation.

NOTE: The audio mode's (**AMP**) volume controls are active regardless of Volume Lock settings. However, if you lock the volume controls to the **AMP** mode, you will have control of the audio device's volume in all other modes (i.e., **VCR**, **DVD**, **TV**, and **SAT**). This can be an advantage if, for example, you always listen to home entertainment devices through your receiver's speakers.

Unlocking Volume Control for a Single Device (Individual Volume Unlock)

1. Assuming Global Volume Lock is active, select a mode on the remote control that you want to unlock (e.g., **SAT**) and press it once. Next, press and hold **SETUP** until the device key blinks twice.

2. Enter **9 9 3**. The last-selected device key will blink twice.

3.   Press **VOL-** once. The last-selected device key will blink four times.

4.   Repeat steps 1 through 3 for each device you want volume to be unlocked.

Now, after you select a device that has volume unlocked (e.g., **SAT**), pressing **VOL+**, **VOL-**,or **MUTE**, will control only that device's volume.

Unlocking All Volume Control (Global Volume Unlock)

NOTE: Performing these instructions will set independent volume control for all programmed devices.

1.   On the remote control, press and hold **SETUP** until the last-selected device key blinks twice.

2.   Enter **9 9 3**. The last-selected device key will blink twice.

3.   Press **VOL+** once. The last-selected device key will blink four times.

Locking Volume Control To One Mode (Global Volume Lock)

NOTE: The audio mode's volume controls are active regardless of Volume Lock settings. However, if you lock the volume controls to the **AMP** mode, you will control the audio device's volume in all other modes (i.e., **VCR, DVD, TV,** or **CBL**). This can be an advantage if, for example, you always listen to home entertainment devices through your receiver's speakers.

1.   On the remote control, press and hold **SETUP** until the last-selected device key blinks twice.

2.   Enter **9 9 3**. The last-selected device key will blink twice.

3.   Select a mode (e.g., **TV** or **AMP**) which you want to use to control the volume. The selected device key will blink twice.

Now, when you press **VOL+**, **VOL-**,or **MUTE**, the volume of the selected device (e.g., **TV**) is controlled regardless of mode.

PROGRAMMING ID LOCK

The Helix Z-wave 5-Device Remote Control with Learning is locked at the factory to operate your provider's set top box. However, if you have another brand or model of cable converter or satellite service that you would like to control, then you'll need to perform the following steps to unlock the ID Lock, enter a new manufacturer's code, and lock the ID Lock again.

1. Turn on the cable converter.

2. On the remote control, press **SAT** once; it will blink once. Then press and hold **SETUP** until the **SAT** key blinks twice.

3. Enter **9 8 2**. The **SAT** key will blink four times, indicating ID Lock is unlocked.

4. Perform the instructions under "Programming Device Control" on page 9 to program device control for the desired cable converter or satellite receiver.

    When you are done, perform steps 5 and 6 on this page to again lock the cable ID Lock.

5. On the remote control, press **SAT** once; it will blink once. Then press and hold **SETUP** until the **SAT** key blinks twice.

6. Enter **9 8 2**. The **SAT** key will blink twice, indicating ID Lock is again locked.

PROGRAMMING A MACRO KEY

The Helix Z-wave 5-Device Remote Control with Learning includes a macro key feature. Macro keys allow you to set up key macros to activate certain keys in a specific order. For example, you can set up a key macro to change the channels on your TV, raise or lower the volume, and start recording on your VCR, all with the touch of one key. If you want to change the macros stored in a previously-programmed macro key, you'll

need to clear the key first (see "Clearing a Macro Key" on page 20).

Programming a Macro Key

1. On the remote control, press and hold **SETUP** until it blinks twice.

2. Enter **9 9 5**. The **SETUP** key blinks twice.

3. Select a macro key (for example, **1**) and press it once.

4. Press the key sequence you want to program into the macro. For example, to turn on your TV and raise its volume, press **TV** followed by **VOL+**.

NOTE: You can program up to 15 key presses into one macro.

5. Press and hold **SETUP** until it blinks twice.

6. To add another macro, repeat steps 1 through 5, substituting the new key sequence to be added in step 4.

NOTE: Programming more than five macros on the same macro key overwrites previous settings.

Clearing a Macro Key

1. On the remote control, press and hold **SETUP** until it blinks twice.

2. Enter **9 9 5**. The **SETUP** key blinks twice.

3. Press the macro key you want to clear once.

4. Press and hold **SETUP** until it blinks twice.

This macro key is now clear and ready for reprogramming (see "Programming a Macro Key" on page 20). If desired, repeat these to clear another Tune-In key.

USING THE MASTER POWER KEY

The Helix Z-wave 5-Device Remote Control with Learning has a unique feature that allows you to sequentially turn up to five of your home entertainment devices on or off with a single key press.

NOTE: **MASTER POWER (PWR)** only works in the **SAT** mode. If it is not programmed, only the cable converter will turn on or off. In any other mode, pressing **MASTER POWER (PWR)** once will turn the selected device on or off.

Programming the Master Power Key

1. On the remote control, press and hold **SETUP** until the last-selected device key blinks twice.

2. Enter **9 9 5**. The last-selected device key blinks twice.

3. Press **PWR** once.

4. For the first device you want in the power on sequence, press a device key (e.g., **SAT**) once. Then press **PWR** once. For the second device in the power sequence, press its key once (e.g, **TV**). Then press **PWR**.

5. Repeat step 4 up to four more times to add the second, third, fourth, and fifth device, as desired.

6. To save the settings and exit the program:

   a. Press **SAT** once.

   b. Press and hold **SETUP** until the **SAT** key blinks twice.

Using the Master Power Key

1. After programming, point the remote control at the devices. Press **SAT** once.

2. Press **PWR** once to sequentially turn the programmed home entertainment devices on or off.

You will see the devices turn on or off according to the programmed sequence.

Clearing the Master Power Key

1. On the remote control, press and hold **SETUP** until the last-selected device key blinks twice.

2. Enter **9 9 5**. The last-selected device key blinks twice.

3. Press and release **PWR**.

4. Press and hold **SETUP** until the **SAT** key blinks twice.

RE-ASSIGNING DEVICE KEYS

The Helix Z-wave 5-Device Remote Control with Learning can be set up to control a second device of an already-assigned type. For example, to have the unit control a TV, a Cable Converter, and *two* audio devices (for example, two audio receivers), re-assign the unused **DVD/VCR** key to operate the second audio device as follows:

NOTE: **DVD/VCR** is preset at the factory to control an RCA DVD. Performing the steps below will overwrite those settings.

1. On the remote control, press **DVD/VCR** once; it will blink once. Then press and hold **SETUP** until the **DVD/VCR** key blinks twice.

2. Enter **9 9 2**. The **DVD/VCR** key will blink twice.

3. Press **AMP** once, then press **DVD/VCR** once. The **DVD/VCR** key will blink twice.

The **DVD/VCR** key is now ready to be programmed for your second audio device. See "Programming Device Control" on page 9. To re-assign other device keys, repeat these and substitute the key sequence using the following chart:

NOTE: Only one device can be assigned to an unused device key at a time.

To Re-Assign	Perform Key Sequence
DVD/VCR as 2nd AMP key	**DVD/VCR→SETUP→9→9→2→AMP→DVD/VCR**
DVD/VCR as 2nd TV key	**DVD/VCR→SETUP→9→9→2→TV→DVD/VCR**
DVD/VCR as 2nd SAT key	**DVD/VCR→SETUP→9→9→2→SAT→DVD/VCR**
DVD/VCR back to VCR	**DVD/VCR→SETUP→9→9→2→DVD/VCR→DVD/VCR**

To re-assign another unused device key, substitute it for the **DVD/VCR** key above and then perform the sequence. For example, to re-assign an unused **AMP** key as a second DVD key, perform
AMP→SETUP→9→9→2→DVD→AMP.

When a re-assignment is done, the selected device key (e.g., **AMP**) will blink twice to confirm your choice. At that time, you will need to program device control (see "Programming Device Control" on page 9).

ADDING A NODE TO YOUR Z-WAVE NETWORK

The Helix Z-wave 5-Device Remote Control with Learning allows you to control lights around your home. In order to control the lights, they must be Z-wave compatible and you must first add them to your home network.

Adding a Node to the Network
To add a node to your home network, perform the following steps:

1.   Press **HOME** once.

2.   Press and release **ADD** twice. The red LED blinks rapidly.

3.   Press the button on the node so that it sends its information to the remote and receives information from the remote.

4.   The **HOME** LED blinks green twice.

NOTE: If the **Home** red LED emits one long, steady blink, you have pressed an invalid key or the node has not been successfully added the

node to your home network. Please make sure the remote is close to the node and try again.

Deleting a Node from the Network

To remove a node from your home network, you must delete it from the network. To delete the node from your network, perform the following steps:

1.   Press **HOME** once.

2.   Press and release **DEL** twice. The red LED blinks rapidly.

3.   Press the button on the node so that it sends its information to the remote and receives information from the remote.

4.   The **HOME** LED blinks green twice.

NOTE: If the **Home** red LED emits one long, steady blink, you have pressed an invalid key or the node has not been successfully added the node to your home network. Please make sure the remote is close to the node and try again.

SETTING UP SCENES

A scene is a single node or group of nodes that can be preset to turn to a previously specified setting (brightness level). You can set up a maximum of 20 scenes, containing up to 64 nodes per scene.

Adding a Node to a Scene

1.   Press **HOME** once.

2.   Press **ADD** once.

3.   Press **SCENE** once.

4.   Press a digit (**1-9**) for the scene you wish to add the node to. The red LED blinks rapidly.

5.   Press the button on the node so that it sends its information to the remote and receives information from the remote.

6.   The green LED blinks twice, then the red LED blinks rapidly. Adjust the brightness on the node within 30 seconds.

NOTE: If the red LED emits one long, steady blink, you have pressed an invalid key or the node has not been successfully added the node to your home network. Please make sure the remote is close to the node and try again.

Removing a Node from a Scene

1.   Press **HOME** once.

2.   Press **REMOVE** once.

3.   Press **SCENE** once.

4.   Press a digit (**1-9**) for the node location you wish to remove. The red LED blinks rapidly.

5.   Press the button on the node so that it sends its information to the remote and receives information from the remote.

6.   The green LED blinks twice, then the red LED blinks rapidly.

NOTE: If the red LED emits one long, steady blink, you have pressed an invalid key or the node has not been successfully removed from the scene.

Deleting a Scene

1.   Press **HOME** once.

2.   Press **DELETE** once.

3.   Press **SCENE** once.

4.   Press a digit (**1-9**) for the scene you wish to remove.

5.   Press the button on the node so that it sends its information to the remote and receives information from the remote.

6.   The green LED blinks twice. The scene has been removed successfully.

NOTE: If the red LED emits one long, steady blink, you have pressed an invalid key or the scene has not been successfully deleted.

CONTROLLING SCENES

To control a scene, perform the following steps:

1.   Press **HOME** once.

2.   Press the digit key for the scene you wish to control (**1-9**).

3.   Press the **ON**, **OFF**, **DIM**, or **BRIGHT** key. The green LED blinks once.

        If ON or OFF is pressed, all nodes associated to the scene turn on or off. If DIM or BRIGHT is pressed, all nodes associated with a scene dim or brighten with each key press.

NOTE: If the red LED emits one long, steady blink, the remote has not successfully communicated with the node.

Turning All Nodes On or Off

To turn all nodes either on or off, perform the following steps:

1. Press **HOME** once.

2. Press **ALL** once.

3. Press either **ON** to turn the nodes on, or **OFF** to turn the nodes off. Any **ON** or **OFF** can be pressed. The green LED blinks once.

NOTE: If the red LED emits one long, steady blink, you have pressed an invalid key or the All-On/All-Off command was not successful. Repeat the steps above to try again.

Adding Nodes to All Control

1. Press **HOME** once.

1. Press **ADD** once.

2. Press **ALL** once. The red LED blinks rapidly.

3. Press the button on the node so that it sends its information to the remote and receives information from the remote.

4. The green LED blinks twice. The node has been successfully added.

NOTE: If the red LED emits one long, steady blink, the node has not been successfully added to the group.

Deleting Nodes from All Control

1. Press **HOME** once.

1. Press **REMOVE** once.

2. Press **ALL** once. The red LED blinks rapidly.

3. Press the button on the node so that it sends its information to the remote and receives information from the remote.

4. The green LED blinks twice. The node has been successfully deleted.

NOTE: If the red LED emits one long, steady blink, the node has not been successfully added to the group.

TRANSFERRING NODE AND NETWORK INFORMATION TO A SECONDARY REMOTE

You can add a secondary remote to your network, and transfer your primary remote's node and network information to it. To transfer node and network information to a secondary remote, perform the following steps:

1. Place the two remotes near each other.

2. Press **HOME**.

3.   Press and hold **SETUP** until the red LED blinks twice.

4.   Enter **9 6 6** on the numeric keypad. The red LED blinks twice.

5.   Press **CH+**. The red LED blinks rapidly.

6.   Put the target (secondary) remote into programming mode so that it sends its information to the primary remote, as well as receives information from the remote. The remote then transfers the network and node information to the new secondary remote. Refer to the user manual for the secondary remote for more information.

7.   The green LED blinks twice. You have successfully transferred the information.

NOTE: If the red LED emits one long, steady blink, the information has not been successfully transferred.

8.   Add nodes, groups, and scenes to the new secondary remote as needed.

TRANSFERRING NETWORK INFORMATION TO A SECONDARY REMOTE

You can add a secondary remote to your network, and transfer your primary remote's network information to it. To transfer network information to a secondary remote, perform the following steps:

1.   Place the two remotes near each other.

2.   Press **HOME**.

3.   Press and hold **SETUP** until the red LED blinks twice.

4.   Enter **9 6 6** on the numeric keypad. The red LED blinks twice.

5.   Press **CH-**. The red LED blinks rapidly.

6.   Put the target (secondary) remote into programming mode so that it sends its information to the primary remote, as well as receives information from the remote. The remote then transfers the network and node information to the new secondary remote. Refer to the user manual for the secondary remote for more information.

7.   The green LED blinks twice. You have successfully transferred the information.

NOTE: If the red LED emits one long, steady blink, the information has not been successfully transferred.

8.   Add nodes, groups, and scenes to the new secondary remote as needed.

PRIMARY CONTROLLER SHIFT

You can transfer all of your remote's information to another remote, so it becomes the new primary remote. You can do this in two ways: either transferring all information, or just transferring network information.

Transferring All Network and Remote Information

1. Place the two remotes near each other.
2. Press **HOME**.
3. Press and hold **SETUP** until the red LED blinks twice.
4. Enter **9 6 8** on the numeric keypad. The red LED blinks twice.
5. Press **CH+**. The red LED blinks rapidly.
6. Put the target (secondary) remote into programming mode so that it sends its information to the primary remote, as well as receives information from the remote. The remote then transfers the network and node information to the new secondary remote. Refer to the user manual for the secondary remote for more information.
7. The green LED blinks twice. You have successfully transferred the information.

NOTE: If the red LED emits one long, steady blink, the information has not been successfully transferred.

8. Add nodes, groups, and scenes to the new primary remote as needed.

Transferring Only Network Information

1. Place the two remotes near each other.
2. Press **HOME**.
3. Press and hold **SETUP** until the red LED blinks twice.
4. Enter **9 6 6** on the numeric keypad. The red LED blinks twice.
5. Press **CH-**. The red LED blinks rapidly.
6. Put the target (secondary) remote into programming mode so that it sends its information to the primary remote, as well as receives information from the remote. The remote then transfers the network and node information to the new secondary remote. Refer to the user manual for the secondary remote for more information.
7. The green LED blinks twice. You have successfully transferred the information.

NOTE: If the red LED emits one long, steady blink, the information has not been successfully transferred.

8.   Add nodes, groups, and scenes to the new primary remote as needed.

CONTROLLER COPY RECEIPT

Controller Copy Receipt allows your controller to receive information from another controller. This would then allow the unit to become a new primary or secondary controller.

Copying Information from Another Controller
1.   Place the two remotes near each other.

2.   Press **HOME**.

3.   Press and hold **SETUP** until the red LED blinks twice.

4.   Enter **9 6 7** on the numeric keypad. The red LED blinks twice.

5.   Press **CH-**. The red LED blinks rapidly.

6.   Put the target (secondary) remote into programming mode so that it sends its information to the primary remote, as well as receives information from the remote. The remote then transfers the network and node information to the new secondary remote. Refer to the user manual for the secondary remote for more information.

7.   The green LED blinks twice. You have successfully transferred the information.

NOTE: If the red LED emits one long, steady blink, the information has not been successfully transferred.

8.   Add nodes, groups, and scenes to the new primary remote as needed.

NETWORK RESET

Network Reset clears all Node and Network features. The remote resets to the default setting for the Z-wave network and node information.

Resetting the Network
1.   Press **HOME**.

2.   Press and hold **SETUP** until the red LED blinks twice.

3.   Enter **9 6 9** on the numeric keypad. The red LED blinks continuously.

4.   The green LED blinks twice. The network has been successfully reset.

NOTE: If the red LED emits one long, steady blink, the network has not been successfully reset.

NETWORK UPDATE

Network Update allows your controller to update the entire Z-wave network.

Updating the Network

1.   Press **HOME**.

2.   Press and hold **SETUP** until the red LED blinks twice.

3.   Enter **9 6 3** on the numeric keypad. The red LED blinks continuously.

4.   The green LED blinks twice. The network has been successfully reset.

NOTE: If the red LED emits one long, steady blink, the network has not been successfully updated.

NETWORK RECOVERY

Network Recovery allows your controller to recover network information.

Recovering Network Information

1.   Press **HOME**.

2.   Press and hold **SETUP** until the red LED blinks twice.

3.   Enter **9 6 1** on the numeric keypad. The red LED blinks continuously.

4.   The green LED blinks twice. The network has been successfully reset.

NOTE: If the red LED emits one long, steady blink, the network has not been successfully updated.

REMOVING A FAILED NODE FROM THE NETWORK

You can remove a failed node from the network. If a node fails in the network the controller's LED emits a long blink when trying to access that node.

If the nodes fails, make sure that the node is properly plugged in. If the node still fails to respond, you can remove the from the network. The failed node is permanently removed from the network and scene. In case, the node responds, then the node is not removed.

Removing a Failed Node

1. Press and hold **SETUP** until the red LED blinks twice.

2. Press **9 7 2**. The green LED blinks continuously.

3. The node has been successfully removed from the network.

NOTE: If the red LED emits one long, steady blink, the network has not been successfully updated.

CLEARING CUSTOM PROGRAMMING

The Helix Z-wave 5-Device Remote Control with Learning contains a *Custom Programming Reset* program. You can use it to remove all custom programming, except your setup codes and reassigned device keys.

IMPORTANT: Executing this program will erase all custom settings for Volume Lock, Learned Keys, Tune-In Keys, and Channel Lock. However, your device programming remains.

1. On the remote control, press and hold **SETUP** until the last-selected device key blinks twice.

2. Enter **9 8 0**. The last-selected device key blinks twice, pauses, and blinks twice again to confirm that all custom programming is cleared.

TROUBLESHOOTING

PROBLEM: Device key does not blink when you press a key.

SOLUTION: Replace the batteries with two (2) new AA batteries (see "Installing Batteries" on page 8).

PROBLEM: Device key blinks when you press a key, but home entertainment device does not respond.

SOLUTION: Make sure you are aiming the remote control at your home entertainment device and that you are within 15 feet of the device you are trying to control.

PROBLEM: The remote control does not control home entertainment devices or commands are not performing properly.

SOLUTION: Try all listed codes for the device brand being set up. Make sure all devices 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 (see page 11).

PROBLEM: No volume on a second TV.

SOLUTION: Follow instructions under "Changing Volume Lock" on page 17.

PROBLEM: PLAY and **STOP** keys do not work on a Motorola DCT-2000 cable converter.

SOLUTION: Re-program the SAT key for cable code 0476 (see "Programming Device Control" on page 9).

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:

    a. Press and hold **SETUP** until device key blinks twice.

    b. Enter **9 9 2**.

    c. 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 on the remote control. For Sony, use TV code 0000 and VCR code 0032. For Sharp, use TV code 0093 and VCR code 0048.

FCC NOTICE

This equipment has been tested and found to comply with the limits for a class B 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. This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions, 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 equipment 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 the dealer or an experienced radio/TV technician for help.

This equipment has been verified to comply with the limits for a class B computing device, pursuant to FCC Rules. In order to maintain compliance with FCC regulations, shielded cables must be used with this equipment. Operation with non-approved equipment or unshielded cables is likely to result in interference to radio and TV reception. The user is cautioned that changes and modifications made to the equipment without the approval of manufacturer could void the user's authority to operate this equipment.

FCC ID: MG35300

ADDITIONAL INFORMATION

This product does not have any user-serviceable parts. Opening the case, except for the battery cover, may cause permanent damage to your Helix Z-wave 5-Device Remote Control with Learning.

•   For help via the Internet, visit us at: www.urcsupport.com

©Copyright 2006 by Universal Electronics Inc. No part of this publication may be reproduced, transmitted, transcribed, stored in any retrieval system, or translated to any language, in any form or by any means, electronic, mechanical, magnetic, optical, manual, or otherwise, without prior written permission of Universal Electronics Inc.

URC-5300   07/07

MANUFACTURER'S CODES

Setup Codes for Audio Amplifiers

Adcom	30577, 31100
Aiwa	30406
Bose	30674
Carver	30269
Denon	30160
Durabrand	31561
Elan	30647
GE	30078
Harman/Kardon	30892
JVC	30331
Left Coast	30892
Lenoxx	31561
Linn	30269
Luxman	30165
Magnavox	30269
Marantz	30892, 30321, 30269
McIntosh	30251
Nakamichi	30321
NEC	30264
Optimus	30395, 30823
Panasonic	30308, 30521
Parasound	30246
Philips	30892, 30269
Pioneer	30823
Polk Audio	30892, 30269
RCA	30823
Realistic	30395
Sansui	30321
Shure	30264
Sony	30689, 30220, 30815, 31126
Soundesign	30078, 30211
Technics	30308, 30521
Victor	30331
Wards	30078, 30211
Yamaha	30354, 30133, 30143

Setup Codes for Audio Receivers

ADC	30531
Aiwa	31405, 30158, 30189, 30121, 30405, 31243, 31388, 31641
Akai	31512
Alco	31390
Amphion Media Works	31563, 31615
AMW	31563, 31615
Anam	31609, 31074
Apex Digital	31257, 31430, 31774
Arcam	31120
Audiotronic	31189
Audiovox	31390, 31627
B & K	30701, 30820, 30840
BK	30702
Bose	31229, 30639, 31253, 31629, 31841, 31933
Brix	31602
Cambridge Soundworks	31370
Capetronic	30531
Carver	31189, 30189, 30042
Classic	31352
Coby	31263, 31389
Criterion	31420
Curtis Mathes	30080
Daewoo	31250
Dell	31383
Delphi	31414
Denon	31360, 30004, 31142
Fisher	30042, 31801
Garrard	30463
Gateway	31517
Glory Horse	31263
Go Video	31532
Harman/Kardon	30110, 30189, 30891, 31304, 31306
Hewlett Packard	31181
Hitachi	31273, 31801
Initial	31426
Insignia	31030

Integra	30135, 31298, 31320
JBL	30110, 31306
JVC	30074, 31263, 31374, 31495, 31811, 31871
Kenwood	31313, 31570, 31569, 30027, 31916, 31670, 31262, 31261, 31052, 31032, 30569, 30337, 30314, 30313, 30239, 30186, 30077, 30042
KLH	31390, 31412, 31428
Koss	31366, 31497
Lasonic	31798
Lenoxx	31437
LG	31293
Linn	30189
Liquid Video	31497
LXI	30181
Magnavox	31189, 31269, 30189, 30391, 30531, 31514
Marantz	31189, 31269, 30039, 30189, 31289
MCS	30039, 30346
Mitsubishi	31393
NAD	30320, 30845
Nakamichi	30097, 30876, 31555
Norcent	31389
Nova	31389
Onkyo	30135, 30380, 30842, 31298, 31320, 31531
Optimus	31023, 30042, 30080, 30181, 30186, 30531, 30670, 30738, 30801, 31074
Oritron	31366, 31497
Panasonic	31308, 31518, 30039, 30309, 30367, 31288, 31316, 31548, 31633, 31763, 31764
Philips	31189, 31269, 30189, 30391, 31120, 31266
Pioneer	31023, 30014, 30080, 30150, 30244, 30531, 30630, 31384
Polaroid	31508
Polk Audio	30189, 31289, 31414

Proscan	31254
Quasar	30039
RadioShack	31263
RCA	31023, 31609, 31254, 30054, 30080, 30346, 30530, 30531, 31074, 31154, 31390, 31511
Realistic	30181
Regent	31437
Rio	31383, 31869
Saba	31519
Samsung	31295, 31500
Sansui	30189, 30346
Sanyo	30801, 31251, 31469, 31801
Sharp	30186, 31286
Sharper Image	31263, 31556
Sherwood	30491, 30502, 31077, 31423, 31517, 31653, 31905
Shinsonic	31426
Sirius	31602, 31627, 31811, 31987
Sonic Blue	31383, 31532, 31869
Sony	31058, 31441, 31258, 31759, 31622, 30158, 30168, 31349, 31406, 31442, 31558, 31658, 31758, 31858, 31958
Soundesign	30670
Stereophonics	31023
Sunfire	31313, 30313, 30314, 31052
Teac	30463, 31074, 31390, 31528
Technics	31308, 31518, 30039, 30309
Thorens	31189
Toshiba	31788
Venturer	31390
Victor	30074
Wards	30158, 30189, 30014, 30054, 30080
XM	31406, 31414
Yamaha	30176, 30186, 31176, 31276, 31331, 31375, 31476
Zenith	30857, 31293

Setup Codes for Audio Accessories

Accurian	31106
Aiwa	30159
Altec Lansing	31056, 31485
Apple	31115, 31644
Cambridge Soundworks	31530
Creative	30872
iDeck	31106
Marantz	31491
Monitor Audio	31106
Motorola	31464
NaviPod	31644
Netgear	31785
Omnifi	31605
Roku	31828
Russound	31302
Slim Devices	31844
Sony	30159
Yamaha	31809, 31810

Setup Codes for Cable Boxes/Converters

ABC	00003, 00008
Americast	00899
Bell South	00899
Digeo	01187
Director	00476
General Instrument	00476, 00810, 00276, 00003
GoldStar	00144
Hamlin	00273
Jerrold	00476, 00810, 00276, 00003
Memorex	00000
Motorola	01376, 00476, 00810, 00276, 01187
Pace	01877, 00237, 00008
Panasonic	00000, 00107
Paragon	00000
Philips	01305, 00317
Pioneer	01877, 00877, 00144, 00533
Pulsar	00000
Quasar	00000
RCA	01256

Regal	00273
Runco	00000
Samsung	00144
Scientific Atlanta	01877, 00877, 00477, 00008
Sony	01006
Starcom	00003
Supercable	00276
Thomson	01256
Torx	00003
Toshiba	00000
Zenith	00000, 00525, 00899

Setup Codes for CD Players

Aiwa	30157
Burmester	30420
California Audio Labs	30029, 30303
Carver	30157, 30179
Denon	30873, 30003, 30034
DKK	30000
DMX Electronics	30157
Fisher	30179
Garrard	30420
Genexxa	30032
Harman/Kardon	30157, 30173
Hitachi	30032
Integra	30101
JVC	30072
Kenwood	30681, 30626, 30028, 30037, 30190
KLH	31318, 31372, 31373, 31711
Krell	30157
Linn	30157
Magnavox	30157
Marantz	30626, 30029, 30157
MCS	30029
Miro	30000
Mission	30157
MTC	30420
NSM	30157
Onkyo	30868, 30101

Optimus	31063, 30000, 30032, 30037, 30087, 30145, 30179, 30420, 30468, 31075
Panasonic	30029, 30303, 30388, 30752
Parasound	30420
Philips	30626, 30157
Pioneer	31063, 31062, 30032, 31087, 30468
Polk Audio	30157
Proton	30157
QED	30157
Quad	30157
Quasar	30029
RadioShack	31075
RCA	31062, 30032, 30053, 30179, 30420, 30468
Realistic	30179, 30420
Rotel	30157, 30420
SAE	30157
Sansui	30157
Sanyo	30087, 30179
Sharp	30861, 30037
Sherwood	31067
Sonic Frontiers	30157
Sony	30490, 30000, 30100, 31364, 30185
Soundesign	30145
TAG McLaren	30157
Tascam	30420
Teac	30420
Technics	30029, 30303
Victor	30072
Wards	30157, 30053
Yamaha	30490, 30888, 30036, 31292

Setup Codes for DBS

AlphaStar	00772
Coolsat	01806
DirecTV	01377, 00392
Dishpro	01505, 01005, 00775, 01775
Echostar	01505, 01005
Hitachi	00819

HTS	00775, 01775
Hughes Network Systems	00749, 01749
JVC	00775, 01775
LG	01414
Magnavox	00724, 00722
Memorex	00724
Motorola	00869
Panasonic	00247, 00701
Philips	00724, 01076, 00722, 00099
RCA	00566, 00855, 00143, 01392
Samsung	01276, 01109
Sony	01639
Star Choice	00869
Toshiba	00749, 00790, 01285
Uniden	00724, 00722
Zenith	01856

Setup Codes for DVD Players

Accurian	21072, 21416
Adcom	21094
Advent	21016
Aiwa	20641
Akai	20695, 20770, 20899, 21089
Alco	20790
Allegro	20869
Amphion Media Works	20872
AMW	20872
Apex Digital	20672, 20717, 20755, 20794, 20796, 20797, 20830, 21004, 21020, 21056, 21061, 21100
Arrgo	21023
Aspire Digital	21168, 21407
Audiovox	20790, 21071, 21072, 21121, 21122
Axion	21071, 21072
Bel Canto Design	21571
Blaupunkt	20717
Blue Parade	20571
Broksonic	20695, 20868
Cinea	20831

CineVision	20876, 20833, 20869
Citizen	20695, 21277
Coby	20778, 21086, 21107, 21177
Craig	20831
Curtis Mathes	21087
CyberHome	20816, 20874, 21023, 21024, 21117, 21129, 21502
Daewoo	20784, 20705, 20833, 20869, 21169, 21172, 21234, 21242
Denon	20490, 20634
Desay	21407
DigitalMax	21738
Disney	20675, 21270
Dual	21068, 21085
Durabrand	21127
DVD2000	20521
Emerson	20591, 20675, 20821, 21268
Enterprise	20591
ESA	20821, 21268
Fisher	20670
Funai	20675, 21268, 21334
Gateway	21073, 21077, 21158, 21194
GE	20522, 20815, 20717
Go Video	20744, 20715, 20741, 20783, 20833, 20869, 21044, 21075, 21099, 21158, 21304, 21730
Go Vision	21071, 21072
GoldStar	20741
Greenhill	20717
Harman/Kardon	20582, 20702
Hitachi	20573, 20664, 21247
Hiteker	20672
Humax	21588
iLo	21348
Initial	20717
Insignia	21268
Integra	20627
JBL	20702
Jensen	21016

JVC	20558, 20623, 20867, 21164, 21275, 21602, 21863
Kawasaki	20790
Kenwood	20490, 20534
KLH	20717, 20790, 21020, 21149
Koss	20651
Lasonic	20798
Lenoxx	21127
LG	20591, 20741, 20801, 20869
LiteOn	21058, 21158, 21416, 21440, 21738
Loewe	20511
Magnavox	20503, 20539, 20646, 20675, 20821, 21268, 21506
Malata	20782
Marantz	20539
McIntosh	21273
Memorex	20695, 20831, 21270
Microsoft	20522, 21708
Mintek	20839, 20717
Mitsubishi	21521, 20521
NAD	20741
Nakamichi	21222
NEC	20785
Nesa	20717
NexxTech	21402
Norcent	21003, 20872, 21107, 21265
Onkyo	20503, 20627, 20792
Oritron	20651
Panasonic	20490, 20632, 20703, 21362, 21462, 21490, 21762
Philips	20503, 20539, 20646, 20675, 20854, 21260, 21267, 21354
Pioneer	20525, 20571, 20631, 20632
Polaroid	21020, 21061, 21086
Polk Audio	20539
Portland	20770
Presidian	20675, 21072, 21738
Prima	21016
Proscan	20522
ProVision	20778

Qwestar	20651
RCA	20522, 20571, 20717, 20790, 20822, 21022, 21132, 21769
Rio	20869
Rotel	20623, 21178
Rowa	20823
Sampo	20698, 20752
Samsung	20490, 20573, 20199, 20820, 20899, 21044, 21075
Sansui	20695
Sanyo	20670, 20695, 20873
Sensory Science	21158
Sharp	20630, 20675, 20752, 21256
Sharper Image	21117
Sherwood	20633, 20770, 21043, 21077
Shinsonic	20533, 20839
Sonic Blue	20869, 21099
Sony	20533, 21533, 20864, 21033, 21070, 21431, 21892
Sova	21122
Superscan	20821
Sylvania	20675, 20821, 21268
Symphonic	20675, 20821
TAG McLaren	20894
Teac	20790
Technics	20490, 20703
Theta Digital	20571
Tivo	21503
Toshiba	20503, 20695, 21045, 21154, 21503, 21588, 21769
Tredex	20800
Urban Concepts	20503
US Logic	20839
Venturer	20790
Vizio	21064, 21226
Xbox	20522, 21708
Yamaha	20490, 20539, 20545
Zenith	20503, 20591, 20741, 20869
Zoece	21265

Setup Codes for DVD/PVR Combos

Controlled by the DVD

Go Video	21730
Humax	21588
Panasonic	20490
Pioneer	20631
RCA	20522
Sharp	21256
Sylvania	20675
Toshiba	21503, 21588

Controlled by the VCR

RCA	20880
Sylvania	20000
Toshiba	21008, 21996
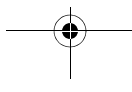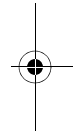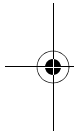
Setup Codes for Home Automation

Accutek	31215
Amana	31716
Audio Access	30154
Bionaire	30846, 31215
Comfortex	30400
Da-Lite	30780
Frigidaire	31333, 31845
GE	30240
GoldStar	31537
Holmes	31215
Hunter Douglas	30433
Kenmore	31537
Lasko	30846
LG	31537
Lightolier	30184
LiteTouch	30084
Lutron	30597, 30318, 31239, 31597
One For All	30167
PCS	30184
RadioShack	30240
Royal Sovereign	31651
Russound	31232, 31233
Security System	30167
Sharper Image	30846
SmartLinc	30184
Somfy	30780
Universal X10	30167
Whirlpool	31332
Windmere	31215
X10	30167

Setup Codes for Satellite Receivers

AlphaStar	00772
Bell ExpressVu	00775, 01170
Chaparral	00216
Coolsat	01806
Crossdigital	01109

DirecTV	01377, 00392, 00566, 00639, 01639, 01142, 00247, 00749, 01749, 00724, 00819, 01856, 01076, 01108, 00099, 01109, 01392, 01414, 01442, 01443, 01444, 01609, 01640
Dish Network System	01505, 01005, 00775, 01170, 01775
Dishpro	01505, 01005, 00775, 01775
Echostar	01505, 01005, 00775, 01170, 01775
Expressvu	00775, 01775
GE	00566
General Instrument	00869
GOI	00775, 01775
Hisense	01535
Hitachi	00819, 01250
HTS	00775, 01775
Hughes Network Systems	01142, 00749, 01749, 01442, 01443, 01444
Humax	01790
iLo	01535
JVC	00775, 01170, 01775
LG	01226, 01414
Magnavox	00724, 00722
Memorex	00724
Mitsubishi	00749
Motorola	00869
Next Level	00869
Panasonic	00247, 00701
Pansat	01807
Paysat	00724
Philips	01142, 00749, 01749, 00724, 01076, 00722, 00099, 01442, 00856
Proscan	00392, 00566
Proton	01535
RadioShack	00869
RCA	00566, 00855, 00143, 01392
Samsung	01377, 01276, 01108, 01109, 01442, 01609
Sony	00639, 01639, 01640

Star Choice	00869
Tivo	01142, 01442, 01443, 01444
Toshiba	00749, 01749, 00790, 01285
UltimateTV	01392, 01640
Ultrasat	01806
Uniden	00724, 00722
US Digital	01535
USDTV	01535
Voom	00869
Zenith	01856, 00856

Setup Codes for DVR/PVR Systems

ABS	21972
Alienware	21972
CyberPower	21972
Dell	21972
DirecTV	20739
Gateway	21972
Go Video	20614
Hewlett Packard	21972
Howard Computers	21972
HP	21972
Hughes Network Systems	20739
Humax	20739
Hush	21972
iBUYPOWER	21972
Linksys	21972
Media Center PC	21972
Microsoft	21972
Mind	21972
Niveus Media	21972
Northgate	21972
Panasonic	20614, 20616
Philips	20618, 20739
RCA	20880
ReplayTV	20614, 20616
Samsung	20739
Sonic Blue	20614, 20616
Sony	20636, 21972
Stack 9	21972
Systemax	21972
Tagar Systems	21972
Tivo	20618, 20636, 20739
Toshiba	21008, 21972, 21996
Touch	21972
Viewsonic	21972
Voodoo	21972
ZT Group	21972

Setup Codes for TVs

A-Mark	10003

Abex	10032
Accurian	11803
Action	10873
Admiral	10093, 10463
Advent	10761, 10783, 10815, 10817, 10842, 11933
Adventura	10046
Aiko	10092
Akai	10812, 10702, 10030, 10672, 11207, 11675, 11676, 11903, 11935
Alaron	10179
Albatron	10700, 10843
Ambassador	10177
America Action	10180
Ampro	10751
Anam	10180
AOC	10030, 10003, 10052, 11365
Apex Digital	10748, 10879, 10765, 10767, 10890, 11217, 11943
Archer	10003
Astar	11531, 11548
Audiovox	10451, 10180, 10092, 10003, 10623, 10710, 10802, 10846, 10875, 11284, 11937, 11951, 11952
Aventura	10171
Axion	11937
Bell & Howell	10154, 10016
BenQ	11032, 11315
Bradford	10180
Broksonic	10236, 10463, 10003, 11911, 11929, 11935, 11938
Byd:sign	11309, 11311
Cadia	11283
Candle	10030, 10046, 10056
Carnivale	10030
Carver	10054
Celebrity	10000
Celera	10765
Champion	11362
Changhong	10765

Cinego	11986
Citizen	10060, 10030, 10092, 10039, 10046, 10056, 10280, 11928, 11935
Clarion	10180
Commercial Solutions	11447, 10047
Concerto	10056
Contec	10180
Craig	10180
Crosley	10054
Crown	10180, 10039
Curtis Mathes	10047, 10054, 10154, 10451, 10093, 10060, 10702, 10030, 10145, 10166, 11919, 11347, 11147, 10466, 10056, 10039, 10016
CXC	10180
CyberHome	10794
Cytron	11326
Daewoo	10451, 10092, 11661, 10039, 10623, 10661, 10672, 11928
Dell	11080, 11178, 11264, 11403
Denon	10145, 10511
Denstar	10628
Diamond Vision	11996, 11997
Dumont	10017
Durabrand	10463, 10180, 10178, 10171, 11034, 10003
Dwin	10720, 10774
Electroband	10000
Electrograph	11623, 11755
Electrohome	10463
Emerson	10154, 10236, 10463, 10180, 10178, 10171, 11963, 11944, 11929, 11928, 11911, 11394, 10623, 10280, 10179, 10177, 10039, 10038
Emprex	11422, 11546
Envision	10030, 10813, 11365
Epson	10833, 10840, 11290
ESA	10812, 10171, 11944, 11963

Fisher	10154
FlexVision	10710
Fujitsu	10179, 10683, 10809, 10853
Funai	10180, 10171, 10179, 11271, 11904, 11963
Futuretech	10180
Gateway	11001, 11002, 11003, 11004, 11755, 11756
GE	11447, 10047, 10051, 10451, 10178, 10021, 10027, 11347, 11917, 11919, 11922
Gibralter	10017, 10030
Go Video	10886
GoldStar	10178, 10030, 10032, 11926
Grunpy	10180, 10179
Haier	11034, 10768
Hallmark	10178
Hannspree	11348, 11351, 11352
Harley Davidson	10179, 11904
Harman/Kardon	10054
Harvard	10180
Havermy	10093
Helios	10865
Hello Kitty	10451
Hewlett Packard	11088, 11089, 11101, 11494, 11502, 11642
Hisense	10748
Hitachi	11145, 10145, 10016, 10032, 10038, 10056, 10797, 11904, 11960
HP	11088, 11089, 11101, 11494, 11502, 11642
Hyundai	10849, 11219, 11294
iLo	11286, 11603, 11990
Infinity	10054
Initial	11603, 11990
Insignia	10171, 11204, 11326, 11517, 11564, 11963, 12002
Inteq	10017
Janeil	10046
JBL	10054
JCB	10000

Jensen	10761, 10815, 10817, 11299, 11933
JVC	10053, 10731, 11253, 11923
Kaypani	10052
KDS	11498
KEC	10180
Kenwood	10030
KLH	10765, 10767, 11962
Kloss	10024, 10046
Konka	10628, 10632, 10638, 10703, 10707
Kost	11262, 11483
KTV	10180, 10030, 10039, 10280
LG	11265, 10178, 10700, 10823, 10829, 10856, 11178, 11325, 11423, 11758, 11993
Lloyd's	11904
Logik	10016
Luxman	10056
LXI	10047, 10054, 10154, 10156, 10178
MAG	11498
Magnasonic	11928
Magnavox	11454, 10054, 10030, 10706, 11990, 11963, 11944, 11931, 11904, 11525, 11365, 11254, 11198, 10802, 10386, 10187, 10179, 10096, 10024, 10020
Majestic	10016
Marantz	10054, 10030, 10704, 10854, 10855, 11154, 11398
Matsushita	10250, 10650
Maxent	10762, 11211, 11755
Megapower	10700
Megatron	10178, 10145, 10003
Memorex	10154, 10463, 10150, 10178, 10016, 10179, 11911, 11926
MGA	10150, 10178, 10030
Midland	10047, 10017, 10051, 10032, 10039

Mintek	11603, 11990
Minutz	10021
Mitsubishi	10093, 11250, 10150, 10178, 10836, 10868, 11550, 11917
Monivision	10700, 10843
Motorola	10093, 10835
Moxell	10835
MTC	10060, 10030, 10056
Multitech	10180
NAD	10156, 10178, 10056, 10866, 11156
NEC	10030, 10056, 10497, 10882, 11398, 11704
NetTV	10762, 11755
Nikko	10178, 10030, 10092
Norcent	10748, 10824, 11089, 11365, 11589, 11590, 11591
Norwood Micro	11286, 11296, 11303
Noshi	10018
NTC	10092
Olevia	11144, 11240, 11331, 11610
Olympus	11342
Onwa	10180
Optimus	10154, 10250, 10166, 10650
Optoma	10887
Optonica	10093
Orion	10236, 10463, 11463, 10179, 11911, 11929
Panasonic	10250, 10051, 10650, 11291, 11410, 11480, 11919, 11941, 11946, 11947
Penney	10047, 10156, 10051, 10060, 10178, 10030, 10003, 10018, 10021, 10027, 10032, 10039, 11347, 11919, 11926
Petters	11523
Philco	10054, 10030, 10020, 10096
Philips	11454, 10054, 10690, 11154, 11483, 11961
Pilot	10030, 10039
Pioneer	10166, 10038, 10679, 10866, 11260, 11398

Polaroid	10765, 10865, 11262, 11276, 11314, 11316, 11326, 11327, 11328, 11341, 11498, 11523, 11962, 11991, 11992
Portland	10092, 10039
Prima	10761, 10783, 10815, 10817, 11933
Princeton	10700, 10717
Prism	10051
Proscan	11447, 10047, 11347, 11922
Proton	10178, 10003, 10052, 10466
Protron	11320, 11323
Proview	10835, 11401, 11498
Pulsar	10017
Quasar	10250, 10051, 10650, 11919
RadioShack	10047, 10154, 10180, 10178, 10030, 10032, 10039, 10056, 11904
RCA	11447, 10047, 12002, 11958, 11953, 11948, 11922, 11919, 11917, 11547, 11347, 11247, 11147, 11047, 10679, 10090, 10038, 10018
Realistic	10154, 10180, 10178, 10030, 10032, 10039, 10056
Runco	10017, 10030, 10497, 10603, 11398
Sampo	10030, 10032, 10039, 10052, 10762, 11755
Samsung	10060, 10812, 10702, 10178, 10030, 10032, 10056, 10766, 10814, 11060, 11312, 11395, 11575, 11903, 11959
Samsux	10039
Sansui	10463, 11409, 11904, 11911, 11929, 11935
Sanyo	10154, 10088, 10146, 10799, 10893, 11142
Sceptre	10878, 11217, 11360, 11599
Scotch	10178
Scott	10236, 10180, 10178, 10179

Sears	10047, 10054, 10154, 10156, 10178, 10171, 10056, 10146, 10179, 11904, 11926
Sharp	10093, 10039, 10386, 10491, 10688, 10689, 10818, 10851, 11602, 11917, 11393
Sheng Chia	10093
Sherwood	11399
Signature	10016
Signet	11262
SIM2 Multimedia	11297
Simpson	10187
Sony	11100, 10000, 10834, 11317, 11685, 11904, 11925
Soundesign	10180, 10178, 10179
Sova	11320, 11952
Soyo	11520
Spectricon	10003
Spectroniq	11498
Squareview	10171
SSS	10180
Starlite	10180
Studio Experience	10843
Superscan	10093, 10864
Supre-Macy	10046
Supreme	10000
SVA	10748, 10587, 10768, 10865, 10870, 10871, 10872
Sylvania	10054, 10030, 10171, 10020, 10096, 11271, 11314, 11394, 11931, 11944, 11963
Symphonic	10180, 10171, 11904, 11944
Syntax	11144, 11240, 11331
Tandy	10093
Tatung	10003, 11101, 11285, 11286, 11287, 11288, 11361, 11756
Technics	10250, 10051
Technol Ace	10179
Techview	10847
Techwood	10051, 10003, 10056

Teknika	10054, 10180, 10150, 10060, 10092, 10016, 10039, 10056, 10179
Telefunken	10702, 10056
Thomas	11904
TMK	10178, 10056, 10177
TNCi	10017
Toshiba	10154, 11256, 10156, 11265, 10060, 11945, 11936, 11935, 11918, 11704, 11656, 11635, 11524, 11356, 11343, 11325, 11306, 11156, 10845, 10832, 10650, 11971
Totevision	10039
TVS	10463
Ultra	11323
Universal	10027
US Logic	11286, 11303
Vector Research	10030
Victor	10053
Vidikron	10054, 11398
Vidtech	10178
Viewsonic	10797, 10857, 10864, 10885, 11330, 11342, 11578, 11627, 11640, 11755
Viking	10046
Viore	11207
Visart	11336
Vizio	10864, 10885, 11499, 11756, 11758
Wards	10054, 10178, 10030, 10016, 10020, 10021, 10027, 10056, 10096, 10179, 10866, 11156
Waycon	10156
Westinghouse	10885, 10889, 10890, 11282, 11577
White Westinghouse	10463, 10623
Wyse	11365
Yamaha	10030, 10769, 10797, 10833, 10839
Zenith	10017, 10463, 11265, 10178, 10092, 10016, 11904, 11911, 11929

Zonda	10003

Setup Codes for TVs (DLP)

Hewlett Packard	11494
HP	11494
LG	11265
Magnavox	11525
Mitsubishi	11250
Optoma	10887
Panasonic	11291
RCA	11447
Samsung	10812, 11060, 11312
SVA	10872
Toshiba	11265, 11306
Vizio	11499

Setup Codes for TVs (LCD)

Accurian	11803
Action	10873
Akai	11675, 11676, 11935
AOC	11365
Apex Digital	10890, 11217
Astar	11531, 11548
Audiovox	10180, 10710, 10802, 10846, 10875, 11284, 11937, 11951, 11952
BenQ	11315
Byd:sign	11309, 11311
Cadia	11283
Citizen	11935
CyberHome	10794
Dell	11080, 11178, 11264
Emprex	11422, 11546
Envision	10813, 11365
FlexVision	10710
Funai	10171
Go Video	10886
Hannspree	11348, 11351
Hewlett Packard	11088, 11642

HP	11088, 11642
Hyundai	10849, 11219, 11294
iLo	11286, 11603, 11990
Initial	11603, 11990
Insignia	11204, 11517, 11564, 12002
Jensen	11299
Kost	11262
LG	10856, 11178, 11993
Magnavox	10802, 11198, 11365, 11990
Marantz	10855
Maxent	10762, 11211, 11755
Mintek	11603, 11990
Mitsubishi	11250
NetTV	10762
Norcent	11365, 11589, 11591
Norwood Micro	11286, 11296
Olevia	11144, 11240, 11331, 11610
Panasonic	10650, 11941
Petters	11523
Philips	11454, 11483
Polaroid	11262, 11276, 11316, 11341, 11498, 11523
Protron	11320, 11323
Proview	11401
RCA	10047, 11958
Sampo	10762, 11755
Samsung	10812, 10766, 10814, 11395, 11575
Sansui	11409
Sanyo	11142
Sceptre	10878, 11217, 11360, 11599
Sharp	10093, 10818, 11602
Sherwood	11399
Signet	11262
Sony	11685
Sova	11320
Soyo	11520
Superscan	10864
SVA	10587, 10870, 10871
Sylvania	10171, 11271, 11314, 11394
Symphonic	10171

Syntax	11144, 11240, 11331
Tatung	11286
Techview	10847
Toshiba	10845, 11343, 11524, 11635, 11656
Ultra	11323
US Logic	11286
Vidikron	11398
Viewsonic	10857, 10864, 10885, 11330, 11578, 11627, 11640
Visart	11336
Vizio	10864, 10885, 11756, 11758
Westinghouse	10885, 10889, 10890, 11282, 11577
Wyse	11365
Zenith	11265

Setup Codes for TVs (Plasma)

Akai	10812, 11207, 11675
Albatron	10843
BenQ	11032
Byd:sign	11311
Daewoo	10661
Dell	11264
Electrograph	11623, 11755
ESA	10812
Fujitsu	10683, 10809, 10853
Funai	11271
Gateway	11001, 11002, 11003, 11004, 11755, 11756
Helios	10865
Hewlett Packard	11089, 11502
Hitachi	10797
HP	11089, 11502
Insignia	11564
JVC	10731
LG	10178, 10829, 10856, 11423, 11758
Marantz	10704, 11398
Maxent	11755
Mitsubishi	10836

Monivision	10843
Motorola	10835
Moxell	10835
NEC	11398, 11704
NetTV	11755
Norcent	10824, 11089, 11590
Norwood Micro	11303
Panasonic	10250, 10650, 11480
Philips	10690
Pioneer	10679, 11260, 11398
Polaroid	10865, 11276, 11327, 11328
Proview	10835
Runco	11398
Sampo	11755
Samsung	10812, 11312
Sony	10000, 11317
Studio Experience	10843
SVA	10865
Sylvania	11271, 11394
Tatung	11101, 11285, 11287, 11288, 11756
Toshiba	10650, 11704
US Logic	11303
Viewsonic	10797, 11755
Viore	11207
Vizio	11756, 11758
Yamaha	10797
Zenith	10178

Setup Codes for TV/DVD Combos

Controlled by the TV

Accurian	11803
Advent	11933
Akai	11675, 11935
Apex Digital	11943
Audiovox	11937, 11951, 11952
Axion	11937
Broksonic	11935
Cinego	11986
Citizen	11935
Diamond Vision	11997
Emerson	11394, 11963
ESA	11963
Funai	11963
Hitachi	11960
iLo	11990
Initial	11990
Insignia	11963, 12002
Jensen	11933
KLH	11962
LG	11993
Magnavox	11963, 11990
Mintek	11990
Panasonic	11941
Philips	11961
Polaroid	11962, 11991
Prima	11933
RCA	11948, 11958, 12002
Samsung	11903
Sansui	11935
Sova	11952
Sylvania	11394, 11963
Toshiba	11635, 11935

Controlled by the DVD

Advent	21016
Akai	20695
Apex Digital	20830
Audiovox	21071, 21121, 21122

Axion	21071
Broksonic	20695
Citizen	20695
Emerson	20675, 21268
ESA	21268
Funai	21268
Go Vision	21071
Hitachi	21247
Insignia	21268
Jensen	21016
Magnavox	21268
Panasonic	21490
Philips	20854, 21260
Prima	21016
RCA	21022
Samsung	20899
Sansui	20695
Sova	21122
Sylvania	20675, 21268
Toshiba	20695

Setup Codes for TV/VCR Combos

Controlled by the TV

America Action	10180
Audiovox	10180
Broksonic	11911, 11929
Citizen	11928
Curtis Mathes	11919
Daewoo	11928
Emerson	10236, 11911, 11928, 11929
Funai	11904
GE	11917, 11919, 11922
GoldStar	11926
Harley Davidson	11904
Hitachi	11904
JVC	11923
Lloyd's	11904
Magnasonic	11928
Magnavox	11904, 11931
Memorex	11926
Mitsubishi	11917
Orion	11911, 11929
Panasonic	11919
Penney	11919, 11926
Quasar	11919
RadioShack	11904
RCA	11917, 11919, 11922
Samsung	11959
Sansui	11904, 11911, 11929
Sears	11904, 11926
Sony	11904, 11925
Sylvania	11931
Symphonic	11904
Thomas	11904
Toshiba	11918, 11936
Zenith	11904, 11911, 11929

Controlled by the VCR

America Action	20278
Audiovox	20278
Broksonic	20002, 20479, 21479

Citizen	21278
Colt	20072
Curtis Mathes	21035
Daewoo	21278
Emerson	20002, 20479, 20593, 21278, 21479
Funai	20000
GE	20240, 20807, 21035, 21060
GoldStar	21237
Harley Davidson	20000
Hitachi	20000
LG	21037
Lloyd's	20000
Magnasonic	20593, 21278
Magnavox	20000, 20593, 21781
Magnin	20240
Memorex	20162, 21037, 21162, 21237, 21262
MGA	20240
Mitsubishi	20807
Optimus	20162, 20593, 21162, 21262
Orion	20002, 20479, 21479
Panasonic	20162, 21035, 21162, 21262
Penney	20240, 21035, 21237
Quasar	20162, 21035, 21162
RadioShack	20000, 21037
RCA	20240, 20807, 21035, 21060
Samsung	21014
Sansui	20000, 20479, 21479
Sanyo	20240
Sears	20000, 21237
Sony	20000, 21232
Sylvania	21781
Symphonic	20000, 20593
Thomas	20000
Toshiba	20845, 21145
Zenith	20000, 20479, 21479

Setup Codes for VCRs

ABS	21972
Admiral	20048, 20209
Adventura	20000
Aiko	20278
Aiwa	20037, 20000, 20124
Alienware	21972
America Action	20278
American High	20035
Asha	20240
Audiovox	20037, 20278
Beaumark	20240
Bell & Howell	20104
Broksonic	20184, 20121, 20209, 20002, 20479, 21479
Calix	20037
Canon	20035
Carver	20081
CCE	20072, 20278
Citizen	20037, 20278, 21278
Colt	20072
Craig	20037, 20047, 20240, 20072
Curtis Mathes	20060, 20035, 20162, 21035
Cybernex	20240
CyberPower	21972
Daewoo	20045, 20278, 21278
Dell	21972
Denon	20042
DirecTV	20739
Durabrand	20039, 20038
Dynatech	20000
Electrohome	20037
Electrophonic	20037
Emerex	20032
Emerson	20037, 20184, 20000, 20121, 20043, 20209, 20002, 20278, 20479, 20593, 21278, 21479, 21593
Fisher	20047, 20104
Fuji	20035, 20033
Funai	20000, 20593, 21593

Garrard	20000
Gateway	21972
GE	20060, 20035, 20240, 20807, 21035, 21060
Go Video	20432, 20614
GoldStar	20037, 20038, 21237
Gradiente	20000
Harley Davidson	20000
Harman/Kardon	20081, 20038
Harwood	20072
Hewlett Packard	21972
HI-Q	20047
Hitachi	20000, 20042, 20089
Howard Computers	21972
HP	21972
Hughes Network Systems	20042, 20739
Humax	20739
Hush	21972
iBUYPOWER	21972
JVC	20067
KEC	20037, 20278
Kenwood	20067, 20038
KLH	20072
Kodak	20035, 20037
LG	21037
Linksys	21972
Lloyd's	20000
Logik	20072
LXI	20037
Magnasonic	20593, 21278
Magnavox	20035, 20039, 20081, 20000, 20149, 20563, 20593, 21593, 21781
Magnin	20240
Marantz	20035, 20081
Marta	20037
Matsushita	20035, 20162, 21162
Media Center PC	21972
MEI	20035

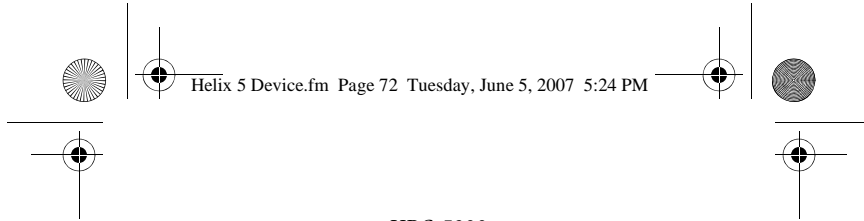|	
Memorex	20035, 20162, 20037, 20048, 20039, 20047, 20240, 20000, 20104, 20209, 20479, 21037, 21162, 21237, 21262
MGA	20240, 20043
MGN Technology	20240
Microsoft	21972
Mind	21972
Minolta	20042
Mitsubishi	20067, 20043, 20807
Motorola	20035, 20048
MTC	20240, 20000
Multitech	20000, 20072
NEC	20104, 20067, 20038
Nikko	20037
Niveus Media	21972
Noblex	20240
Northgate	21972
Olympus	20035
Optimus	21062, 20162, 20037, 20048, 20104, 20432, 20593, 21162, 21262
Orion	20184, 20209, 20002, 20479, 21479
Panasonic	21062, 20035, 20162, 20225, 20614, 20616, 21035, 21162, 21262
Penney	20035, 20037, 20240, 20042, 20038, 21035, 21237
Pentax	20042
Philco	20035
Philips	20035, 20081, 20618, 20739, 21081, 21181
Pilot	20037
Pioneer	20067
Polk Audio	20081
Presidian	21593
Profitronic	20240
Proscan	20060, 21060
Protec	20072
Pulsar	20039
Quasar	20035, 20162, 21035, 21162

RadioShack	20000, 21037
Radix	20037
Randex	20037
RCA	20060, 20240, 20042, 20149, 20807, 20880, 21035, 21060
Realistic	20035, 20037, 20048, 20047, 20000, 20104
ReplayTV	20614, 20616
Ricavision	21972
Runco	20039
Samsung	20240, 20045, 20739, 21014
Sanky	20048, 20039
Sansui	20000, 20067, 20209, 20479, 21479
Sanyo	20047, 20240, 20104
Scott	20184, 20045, 20121, 20043
Sears	20035, 20037, 20047, 20000, 20042, 20104, 21237
Sharp	20048, 20807, 20848
Shintom	20072
Shogun	20240
Singer	20072
Sonic Blue	20614, 20616
Sony	20035, 20032, 20033, 20000, 20636, 21032, 21232, 21972
Stack 9	21972
STS	20042
Sylvania	20035, 20081, 20000, 20043, 20593, 21593, 21781
Symphonic	20000, 20593, 21593
Systemax	21972
Tagar Systems	21972
Teac	20000
Technics	20035, 20162
Teknika	20035, 20037, 20000
Thomas	20000
Tivo	20618, 20636, 20739, 21996
TMK	20240
Toshiba	20045, 20043, 20845, 21008, 21145, 21972, 21996
Totevision	20037, 20240

Touch	21972
Unitech	20240
Vector	20045
Vector Research	20038
Video Concepts	20045
Videomagic	20037
Videosonic	20240
Viewsonic	21972
Villain	20000
Voodoo	21972
Wards	20060, 20035, 20048, 20047, 20081, 20240, 20000, 20042, 20072, 20149
White Westinghouse	20209, 20072
XR-1000	20035, 20000, 20072
Yamaha	20038
Zenith	20039, 20033, 20000, 20209, 20479, 21479
ZT Group	21972

Setup Codes for Video Accessories

ABS	01272
Accurian	01653
Alienware	01272
CyberPower	01272
D-Link	01554, 01731
Epson	01563
Escient	01151, 01370, 01371
Gateway	01272
Hewlett Packard	01272, 01267
Howard Computers	01272
HP	01272
Hush	01272
iBUYPOWER	01272
JVC	01384
LG	01415
Linksys	01272, 01365
Media Center PC	01272
Microsoft	01272
Mind	01272
Motorola	01363

Niveus Media	01272
Northgate	01272
Panasonic	01120
Pioneer	01010
Ricavision	01272
Roku	01486
Samsung	01190, 01490
Sensory Science	01126
Sharp	01010
Sony	01272, 01324, 01364
Stack 9	01272
Sylvania	01563
Systemax	01272
Tagar Systems	01272
Toshiba	01272
Touch	01272
Viewsonic	01272, 01329
Vizio	01126
Voodoo	01272
ZT Group	01272

URC-5300

Revision 1.0