


# AT6420™ AllTouch® RF Universal Remote Control User's Guide (Qwest version)


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## Device Program Codes

If you program codes to control devices, record your codes here:

iTV: \_\_\_\_\_

 TV: \_\_\_\_\_

 DVD: \_\_\_\_\_

 AUX: \_\_\_\_\_



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# Welcome to the Ultimate Control Experience!

Your new AT6420™ AllTouch® Universal Remote Control (remote) is a true universal remote, functioning as four remotes in one. As one example, you can use this remote to operate your TV, DVD player, set-top box, and receiver.

## Important Information About Your Remote

Your remote is initially programmed to only operate your set-top box. The Volume and Mute keys will not work until a TV code is programmed into the remote. You must program the remote to operate your TV, VCR, etc. See **Program the Remote to Control My Devices** to learn how to enter device codes and program your remote.

## How Does A Universal Remote Control Work?

You tell the remote which type of device you want to operate using the five keys arched across the top of the remote. These keys, known as **mode keys**, are labeled **iTV**, **TV**, **DVD**, and **AUX**. Each mode key is associated with a specific device. As an example, if you want the remote to operate your TV, you simply press the TV key. Other keys you press on the remote thereafter should operate your TV. Want to switch the remote to operate a different device? Just press the mode key for the next device you want to operate. In this guide, you will learn which types of devices you can control and how to program the remote to control your specific devices.

**Note:** Some remote keys may not operate in all modes. You can even program your remote to assign specific functions, such as channel control, to operate one device only. You will learn more about these advanced functions later in this guide.

## Where Do I Start?

Before you begin using your remote, complete the following initial setup tasks.

### Install the Batteries

The remote requires two AA batteries (alkaline recommended). A diagram in the battery compartment of the remote indicates proper placement of the batteries. When batteries are properly installed, the light on the remote blinks each time a key is pressed.

### Visit the Quick Reference

Timing is often important when you program advanced features. Therefore, knowing where certain keys are on the remote gives you an edge in pressing the right key at the right time.

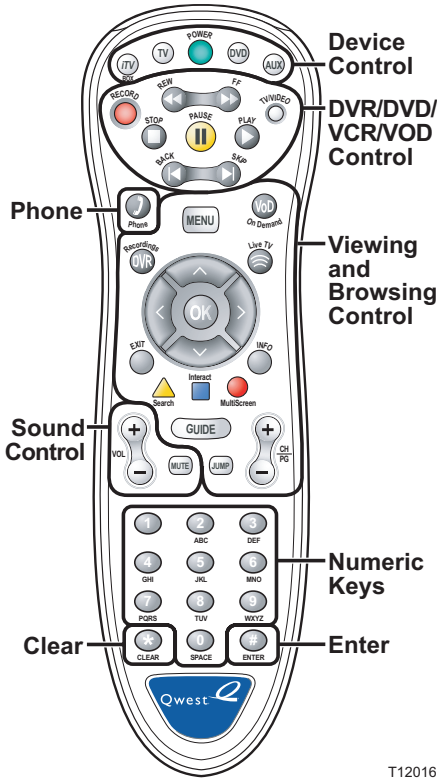
### Important Information About Power Control

Scientific-Atlanta strongly recommends that you turn off your set-top box every time you turn off your TV. To make this easier, you can program your remote to turn both devices on or off at the same time. After you program the remote to control your four favorite entertainment devices, see **Change Power Control** to learn more about programming your remote to control power for the TV and cable box at the same time.

### Find a Place to Store Your Remote






Keeping up with one remote is much easier than keeping up with five remotes. However, it is still a good idea to find a storage location for your remote. The AT6420 is not a toy. It should be kept out of the reach of children under the age of 6 years.

# Quick Reference



T12016








## Device Control

-  Turns the set-top box standby mode on or off
-  Controls set-top functions
-  Controls TV functions
-  Controls DVD functions
-  Controls AUX functions



## DVR/DVD/VCR/VOD Control

### Notes:

- In DVD mode, these keys control your DVD or VCR.
- These keys also control DVR functions.

-  Records the selected program
-  Moves back through recorded or On Demand content
-  Moves ahead through recorded or On Demand content
-  Scrolls through available TV or video input sources
-  Plays DVD, VCR, VOD, or recorded content
-  Stops DVD, VCR, VOD, or recorded content
-  Pauses DVD, VCR, VOD, or recorded content
- Back** Skips back through recorded or On Demand content
- Skip** Skips ahead through recorded or On Demand content

## Viewing and Browsing Control

- Phone** Go to phone menu
-  Opens or closes the Main Menu
- VoD On Demand** Go to On Demand TV and movie menu
- DVR Recordings** Go to DVR menu
- Live TV** View live TV
-  Moves through selections
- OK** Selects and deselects screen items



Returns viewing to normal full screen viewing

Search Go to search menu

Interact Go to Qwest “Walled Garden” (Internet content)

MultiScreen Turns MultiScreen mode on or off. You can view up to 3 video streams on the screen at one time



Displays or removes program information for the currently selected program. Obtains Info about a highlighted program or channel while in the program guide



Displays or closes the program guide

Jump Jump to next section or switch to last channel



Selects channel, up or down and pages, up or down while in the program guide and in lists



Returns to last channel

## Sound Control



Adjusts volume



Mutes sound

**Note:** These keys will not work until you program a TV code into the remote.

## Numeric Keys



Enters channel numbers, text, and remote codes. Also use to enter your parental control PIN

Clear Clears text and numbers in text fields

Enter Enters and saves (stores) an entry

## LED Indicators

There are red LEDs under each of the four mode keys: *i*TV, TV, DVD, and AUX that respond during use. If any key corresponding to the mode is pressed, the mode key will flash.

There are green LEDs used for backlighting several keys during use and remain lighted. They will turn off if a key has not been pressed for a short duration to conserve battery life.

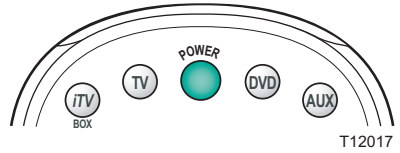
**Note:** The flash response may be of varying duration: short to indicate a “0”, normal to indicate acknowledgment, and long to indicate programming failure.

During programming, if the remote control times out before you complete the code setup, you will need to start over. This is indicated by two quick flashes of the green backlighting.

# What Devices Can I Control?

The **mode keys** arched across the top of the remote tell the remote which device you want to operate.

Each mode key is associated with different groups of devices. You can use each mode key to control *one* of its associated devices:



## Mode Key Associated Devices

**iTV** ..... set-top boxes and satellite devices

**TV** ..... standard TVs and high-definition televisions (HDTVs)

**DVD** ..... DVD players, CD players, VCRs, and DVRs

**AUX** ..... VCRs, CD players, receivers, tuners, and Home Theatre in a Box (HTIB)

## Regarding Non-Responsive Modes

The AT6420 is pre-programmed with the TV and AUX keys set to an inactive (non-responsive) mode. After you program these keys on the remote control, you can return them to the non-responsive mode by using the specific non-responsive mode code found in the **Code Tables**, later in this guide.

# What Devices Do I Want to Control?

To help you keep track of the devices you want to control, list the type of devices (including brand) in the following table. Locate your device type in the list above and write the associated mode key. If you have two devices that use the same key, you must reassign the AUX or the DVD keys. Go to **Reassign Mode Keys**. Otherwise, go to **Program the Remote to Control My Devices**.

Device	Mode Key	Device	Mode Key
Example: DVD Sony	DVD	Example: VCR Zenith	AUX
1.		4.	
2.		5.	
3.			

## Reassign Mode Keys

With the AT6420, you can reassign a mode key to operate a different device. For example, you can reassign the AUX key to operate a receiver, a tuner, or a Home Theatre in a Box system.

You can reassign the AUX key or the DVD key. However, the TV key and the iTV key cannot be reassigned. If you reassign a key, be sure you update the table found in the previous section.

# Program the Remote to Control My Devices

Your remote is initially programmed to only operate your Qwest set-top box. You will need to set up the remote control to operate your AUX, TV, and DVD modes. The AUX key may be programmed to operate a VCR, HTIB, receiver, or amplifier. The TV key may be programmed to operate a standard or high-definition television (HDTV). The DVD key may be programmed to operate a DVD player, a CD player, or a VCR. If the remote provides only limited functionality for a device, you can look for a code that provides more functionality. Before you begin, make sure you know the brand name of the device you want to control.

**Note:** Some remote keys may be assigned to operate one device type only. For example, volume control may be assigned to the TV only. If this is the case, you can reprogram power, volume, and channel control using procedures later in this guide.



## Assigning a Different Device Code to a Mode Key

1. Find the codes for your brand of device in the appropriate setup code list at the end of this guide. For example, look under **TV Group** if you need to program the remote to operate your TV.

**Note:** If your device is not listed, you may be able to program the remote using the Auto-Search function.

2. Turn on your device.
3. Press and while holding a mode key (**TV**, **DVD**, or **AUX**) on the remote control, press and hold the **OK** key.
4. Release *both* the desired mode key (**TV**, **DVD**, or **AUX**) and the **OK** key and all the mode keys will flash twice.
5. Enter the first 4-digit setup code for the device using the number keys (0-9) on the remote control. The selected mode key will flash three times to indicate that the code entry was accepted and return to normal operation.


### Notes:

- When an invalid code is entered, the selected mode key will display a long flash to indicate that you have not entered the code correctly.
  - Should the remote control time-out before you complete the code setup, you will need to start over. This is indicated by two quick flashes of the green backlighting.
5. Point the remote at the device, and press **POWER**, **PLAY** , or  to test the device.
  6. Did the device operate correctly?
    - If **yes**, write down the code that worked on the cover of this guide. You may need it again if the device code is accidentally erased.
    - If **no**, repeat these steps using a different setup code.
- Note:** If none of the codes listed for your brand of device operate the device correctly, go to **What If None of the Codes Work** for instructions.
7. Repeat this procedure for each mode key you want to program.

# What If None of the Codes Work?


If none of the codes listed for your brand of device operate the device correctly, you can search through the code library for a valid code.

## Searching the Code Library for TV or DVD Modes (Program Code 9 2 2)

1. Turn on the device you wish to program for use with the remote control.
2. Point the remote control at the device.
3. Press and *while holding* a selected mode key (**TV** or **DVD**), press the **OK** key.
4. Release both the selected mode key and the **OK** key and all the mode keys will blink twice. For example, to search for a TV code, press and hold **OK** and **TV** at the same time.
5. Enter the programming code **9 2 2** by pressing the number keys on the remote control. The selected mode key you selected in step 3 blinks twice indicating a successful entry.
6. Point the remote toward the device, and press and hold **PLAY** . The remote automatically tests each code in its library, beginning with the most common codes.
7. Without releasing the **PLAY** key, observe the device. When a usable code is found, the device will respond by turning off. As soon as the device powers off, release the **PLAY** key to temporarily pause the auto-search function until you choose one of the following actions:
  - **Save code and exit**—Press the **ENTER** key on the remote control to program the code in the remote control and the mode key will flash three times indicating successful entry.
  - **Step forward**—Press the fast-forward (**FF**) key on the remote control to step ahead through the codes one at a time. Then, return to step 6.
  - **Step backward**—Press the rewind (**REW**) key on the remote control to step back through the codes one at a time. Then, return to step 6.
  - **Exit without saving the code**—Press the **EXIT** key on the remote control. The selected mode key will flash three times and return to normal operation.
  - **Send the current code**—Press the **POWER** key on the remote control to send the current code. If the device turns back on, press the **ENTER** key. If the device does not turn on, return to step 6.
  - **Continue with auto-search function**—Press the **PLAY** key on the remote control to continue with the auto-search function. Then, return to step 6.



## Searching the Code Library for AUX Mode (Program Code 922)

1. Turn on the device you wish to program for use with the remote control.
2. Point the remote control at the device.
3. Press and *while holding* the **AUX** key, press the **OK** key.
4. Release both the **AUX** key and the **OK** key and all the mode keys will blink twice. For example, to search for a TV code, press and hold **OK** and **TV** at the same time.
5. Enter the programming code **9 2 2** by pressing the number keys on the remote control. The **AUX** key 3 blinks twice indicating a successful entry.
6. The device categories are number-coded to provide a more direct programming method. Select the device you wish to program by entering a number from 1 through 4 using the number keys on the remote control according to the selections in the following list:
  - 1 = VCRs
  - 2 = Receiver/Tuners
  - 3 = Amplifiers
  - 4 = HTIB
7. Point the remote toward the device, and press and hold **PLAY** . The remote automatically tests each code in its library, beginning with the most common codes.
8. Without releasing the **PLAY** key, observe the device. When a usable code is found, the device will respond by turning off. As soon as the device powers off, release the **PLAY** key to temporarily pause the auto-search function until you choose one of the following actions:
  - **Save code and exit**—Press the **ENTER** key on the remote control to program the code in the remote control and the mode key will flash three times indicating successful entry.
  - **Step forward**—Press the fast-forward (**FF**) key on the remote control to step ahead through the codes one at a time. Then, return to step 7.
  - **Step backward**—Press the rewind (**REW**) key on the remote control to step back through the codes one at a time. Then, return to step 7.
  - **Exit without saving the code**—Press the **EXIT** key on the remote control. The selected mode key will flash three times and return to normal operation.
  - **Send the current code**—Press the **POWER** key on the remote control to send the current code. If the device turns back on, press the **ENTER** key. If the device does not turn on, return to step 7.
  - **Continue with auto-search function**—Press the **PLAY** key on the remote control to continue with the auto-search function. Then, return to step 7.

## Auto-Search Features

Consider the following items when using the auto-search function:

- The auto-search functions begins searching from the first code.
- If a valid code is not found, the green backlight will flash 2 times and the remote control will return to normal operation.
- If any other key is pressed except PLAY, ENTER, POWER, EXIT, REW, FF, or NUMBER KEYS 1 through 4, the mode key will display a long red flash (error message) and the remote control will return to normal operation.
- Should the remote control time-out before you complete the auto-search function, the green backlighting will flash and you will need to start over.
- If the device is not listed and the auto-search function is unable to find a usable code, you may need to use the original remote provided with the device.

## Verifying the Codes (Program Code 933)

There are 4 digits in each code. The remote control uses its green backlight and the red LED of the selected mode key to indicate the codes. You will need to observe the green backlight and count the mode key's red light flashes to determine the correct code.

The green backlight indicates the position of each digit by flashing in the following manner:

- One time for the first digit
- Two times for the second digit
- Three times for the third digit
- Four times for the fourth digit

By counting the number of flashes of the red mode light you can determine the code number. If the number is "0" (zero), the mode key will display a short flash.

You can verify the codes that have been programmed by completing the following steps.

1. Press and *while holding* a selected mode key, press the **OK** key.
2. Release both the mode key and the **OK** key and all the mode keys will flash twice.
3. Enter programming code **933** by pressing the number keys on the remote control. The mode keys will flash twice.
4. Press the PLAY key to start the code checking process. You should see the green backlight flash one (1) time, indicating that the remote control will begin to show you the number for the first digit of the code.

### Example, if the code is 0187:

- 0 = The green backlight flashes 1 time followed by the mode key flashing red 1 short flash indicating the number "0" (zero).
- 1 = The green backlight flashes 2 times followed by the mode key flashing red 1 time, indicating the number "1".
- 8 = The green backlight flashes 3 times followed by the mode key flashing red 8 times, indicating the number "8".
- 7 = The green backlight flashes 4 times followed by the mode key flashing red 7 times, indicating the number "7".

After the numbers for all 4 digits are revealed, the code checking process will temporarily pause until you choose one of the following actions:

- **Repeat the code checking process**—Press the **REW** key on the remote control to repeat the code checking process. Then, return to step 4.
- **Exit the code checking process**—Press the **EXIT** key on the remote control to stop the code checking process. The selected mode key will flash three times and return to normal operation.

**Notes:**

- If you press any other key except the REW and EXIT key, the mode key will display a long flash and the remote control will then return to normal operation.
- Should the remote control time out before you complete the code checking, you will need to start over. This is indicated by two quick flashes of the green backlighting.

## Power On Control

Your remote has been set up to turn your Qwest set-top box and your TV on and off at the same time. Two additional devices may be added for this function such as a DVD player or an amplifier.

## Volume and Channel Control

Your remote has been set up to control the volume and channel from your TV.

## Troubleshooting

If there is no response when you press the keys on the remote control and before calling for service, please check the following:

### Check the batteries

- Are the batteries inserted correctly?
- Check the battery condition for leakage
- Replace with new alkaline batteries

### Check the Device

- Is the device's power cord connected to the power outlet?
- Is the device switched on?

### Check the IR database codes list

- Is the device brand listed in the code list?
- If there is more than one code listed for your device brand it is possible that using a different code may provide more functionality
- If the device brand is not listed, use the Auto-Search function to find a usable code
- If the device is not listed and the Auto-Search function is unable to find a usable code, you may need to use the original remote provided with the device

# Change Power Control

Your remote is originally programmed in one of the following ways:

- The remote controls power for only one device at a time. For example, in *i*TV mode the POWER key controls the set-top box only. However, in TV mode, the POWER key controls the TV only.
- The remote controls power for either one device or for multiple devices at once, based on the selected mode. For example, in set-top mode, the POWER key controls both the set-top box and the TV at the same time.



Before you change how the power control functions, try your remote to see how the power control currently works. When trying out your remote, keep in mind that the remote provides a temporary override for power control. For example, if you press the TV key and then the POWER key within 3 seconds, the remote turns on the TV only, regardless of the programmed power settings. To see how the remote was originally programmed, wait at least 5 seconds before pressing the POWER key after you press any mode key.

Does your remote already control power for your set-top box and TV at the same time? If not, we strongly recommend that you program the remote to turn off the set-top box each time you turn off your TV. Turning off the set-top box is especially important for high-end set-top boxes that contain hard drives for recording and storing TV programs and movies. Not only will you reduce wear and tear from the hard disk spinning constantly, but you'll also conserve electricity. As long as the set-top box remains plugged in, the set-top box will receive programming updates, and, if applicable, record programs and movies.

# Change Volume Control

Your remote is originally programmed in one of the following ways:

- The remote controls volume for one device, such as your TV, whether the remote is in TV, VCR, DVD, or *i*TV mode. The AUX mode always retains separate volume control.
- The remote controls volume for different devices, depending on the mode key you press. For example, in *i*TV mode, the volume keys control the cable box. However, in TV mode, the volume keys control the TV.

Try your remote to see how the volume control currently works. The volume keys include , , and **MUTE**. If you want to change the volume control, complete the procedure that fits your needs.

# Program HomeID (Program code 914)

Programming the HomeID in the remote control is necessary when radio frequency (RF) is used to transmit signals to the set-top box from the remote control.

The set-top box is equipped with an RF receiver. A HomeID in RF is required for proper communication between the RF remote control and the set-top box. After the appropriate assignment, the RF remote will then be uniquely used for the assigned set-top box.

The use of RF in the remote enables “through walls” control of the set-top box. It may be used to transmit instructions from another room. The use of HomeID limits any interference with set-tops in other rooms or in your neighbors’ homes.

All RF devices have the HomeID set to **000** by default. Complete the following steps to set a *new* HomeID.

1. Press and hold the **iTV** mode key on the remote control.
2. Without releasing the **iTV** mode key, press and hold the **OK** key.
3. Release *both* the **iTV** mode key and the **OK** key. You should see *all* the mode keys flash red two times. This indicates that you are now ready to enter the power switch control code.
4. Enter the 3-digit code **9 1 4** by pressing the number keys on the remote control. You should see the **iTV** mode key flash red two times. This indicates that you have successfully entered the code.
5. Now enter your own 3-digit code from **000** to **255** by pressing the number keys on the remote control. This will be your unique new HomeID code.

## Notes:

- If a valid HomeID code is entered, the **iTV** mode key will flash red two times. This indicates that you have successfully entered a valid HomeID code (000 to 255). Go to step 6 of this procedure.
  - If an *invalid* HomeID code is entered, the **iTV** mode key will display a long red flash. This indicates that you have not entered a valid HomeID code (000 to 255). The remote control then returns to normal operation. You will have to start over from step 1 of this procedure.
6. Press the **ENTER** key on the remote control.
  7. To store your new HomeID code into the remote code, press the **ENTER** key on the remote again.

## Notes:

- If any other key is pressed except the number keys and the **ENTER** key, the remote control will not accept any changes or updates. The **iTV** mode key will display a long red flash and the remote control will return to normal operation.
- If the remote control times out before you complete programming the HomeID code, the remote control will not accept any changes. You will have to start over from step 1 of this procedure.





# Code Tables

If the remote does not recognize your device, you can find codes for your device by brand. With combination devices (such as a TV with a built-in DVD player), you have separate codes for each device component. Therefore, for ease of use, the combination device codes are listed first. All other code tables are organized by devices assigned to each mode (iTV, TV, DVD, AUX).

## Combination Device Codes

If you have a combination device, you may need to reassign the AUX key to operate one of the devices. See **Reassign Mode Keys** for more information. The following tables provide some examples of combination devices. If your combination device is not listed, simply look for the codes for each separate device.

### CBL/DVD Combo Codes

Brand	CBL	DVD	Model
Scientific-Atlanta	0000	2209	Explorer 8xxx (56.9kHz)
Scientific-Atlanta	0004	2210	Explorer 8xxx (36.7kHz)

### DVD/VCR Combo Codes

Brand	DVD	AUX (VCR)	Model
Go Video	2141	2038	DVR5000
Go Video	2147	2044	DVR4200
JVC	2142	2039	HRXVC1U
RCA	2143	2040	VC125HF
Samsung	2144	2041	DVD-V2000
Sanyo	2145	2042	DVW5000
Zenith	2146	2043	XBV243

### Tuner/CD Combo Codes

Brand	Tuner/CD
Bose	3084

### TV/DVD Combo Codes

Brand	TV	DVD	Model
Broksonic	1181	2148	SC975
RCA	1182	2149	BD20TF10
Sansui	1185	2196	
Toshiba	1183	2150	MD20FL3

### TV/DVD/VCR Combo Codes

Brand	TV	DVD	VCR
Panasonic	1188	2200	2180
RCA	1190	2202	2183
Sylvania	1189	2201	2182

## Other Device Codes

### CBL Group: Cable, HDTV Tuner, and Satellite Devices

#### Set-top Codes

Scientific-Atlanta	0000, 0001, 0002, 0003, 0004, 0005
ABC	0010
GE	0010
Gemini	0011
General Instruments	0010
Hitachi	0010
Jerrold	0010, 0011
Motorola	0007
Pioneer	0009
Proscan	0010
Signature	0010
Starcom	0011
Stargate	0011

### HDTV Tuner Codes

Panasonic	0021
Philips	0022
RCA	0017

### Satellite Device Codes

Dish Network	0016
Dishnet	0013
Echostar	0014
GE	0012
Hughes	0015
Philips	0023
Proscan	0012
RCA	0012
Sony	0019, 0020
Zenith	0024



## TV Group: TVs and HDTVs

### TV Codes

Admiral	1001, 1139, 1159
Aiko	1014
Akai	1002
Amtron	1034
Anam National	1003, 1034
AOC	1004, 1005, 1006, 1007, 1140, 1141, 1153
Apex	1180, 1184, 1186
Audiovox	1034
Bell & Howell	1001, 1042, 1062
Broksonic	1181, 1187
Carver	1000
Celebrity	1002
Citizen	1004, 1006, 1008, 1014, 1034, 1062, 1087, 1137, 1160
Colortyme	1004, 1006, 1009
Contec/Cony	1010, 1011, 1012, 1034
Craig	1034
Crosley	1000
Crown	1034
Curtis Mathes	1000, 1004, 1006, 1013, 1042, 1053, 1062, 1087, 1137, 1160, 1167
Daewoo	1004, 1005, 1006, 1014, 1015, 1016, 1103, 1137, 1151
Daytron	1004, 1006, 1137
Dimensia	1053
Dumont	1004, 1122
Electroband	1002
Electrohome	1002, 1003, 1004, 1006, 1017, 1018
Emerson	1004, 1006, 1010, 1019, 1020, 1021, 1022, 1023, 1024, 1025, 1026, 1027, 1028, 1029, 1030, 1031, 1032, 1033, 1034, 1035, 1036, 1037, 1038, 1039, 1040, 1042, 1062, 1101, 1137, 1142, 1143, 1152, 1168
Envision	1004, 1006
Fisher	1041, 1042, 1043, 1062, 1144
Fujitsu	1040
Funai	1034, 1040
Gateway	1237
GE	1003, 1004, 1006, 1018, 1044, 1045, 1046, 1053, 1072, 1132, 1133, 1134, 1145, 1161
Goldstar	1004, 1005, 1006, 1010, 1017, 1047, 1048, 1049, 1126, 1127, 1137, 1138
Hallmark	1004, 1006

### TV Codes

Hitachi	1004, 1006, 1010, 1011, 1012, 1050, 1051, 1052, 1109, 1110, 1111, 1112, 1113, 1114, 1115, 1116, 1117, 1118, 1119, 1120, 1121, 1143, 1154, 1166, 1169
Infinity	1000
JBL	1000
JC Penney	1004, 1005, 1006, 1008, 1011, 1018, 1044, 1045, 1048, 1049, 1053, 1061, 1072, 1086, 1087, 1104, 1137, 1138, 1145
Jensen	1004, 1006
JVC	1010, 1011, 1012, 1045, 1051, 1054, 1055, 1056, 1128, 1129, 1146, 1168
Kawasho	1002, 1004, 1006
Kenwood	1004, 1006, 1017
Kloss Novabeam	1034, 1057, 1058
KTV	1034, 1059, 1137, 1142
LG	1005
Logik	1001
Luxman	1004, 1006
LXI	1000, 1006, 1042, 1053, 1060, 1061, 1062, 1145
Magnavox	1000, 1004, 1006, 1008, 1017, 1057, 1058, 1063, 1064, 1065, 1073, 1106, 1107, 1108
Majestic	1001
Marantz	1000, 1004, 1006, 1050, 1066
Megatron	1006, 1050
Memorex	1001, 1005, 1006, 1042, 1062
MGA	1004, 1005, 1006, 1017, 1018, 1043, 1067, 1068
Mitsubishi	1004, 1005, 1006, 1017, 1018, 1043, 1067, 1068, 1069, 1102
Montgomery Ward	1001
Motorola	1003, 1139
MTC	1004, 1005, 1006, 1087
Multitech	1034
Multivision	1070
NAD	1006, 1060, 1061, 1147, 1166
NEC	1003, 1004, 1005, 1006, 1009
Nikko	1006, 1014
Onwa	1034
Optimus	1147, 1166

### TV Codes

Optonica	1079, 1139
Orion	1031, 1152
Panasonic	1003, 1045, 1136, 1162, 1188, 1238
Philco	1000, 1003, 1004, 1005, 1006, 1008, 1010, 1017, 1057, 1058, 1063, 1065
Philips	1000, 1003, 1004, 1008, 1010, 1017, 1057, 1058, 1063, 1071, 1072, 1073, 1074
Pioneer	1004, 1006, 1075, 1076, 1143, 1147, 1166
Portland	1004, 1005, 1006, 1014, 1137
Price Club	1087
Prism	1045
Proscan	1053, 1145
Proton	1004, 1006, 1010, 1077
Quasar	1003, 1045, 1059, 1078, 1162
Radio Shack	1042, 1062
Radio Shack/ Realistic	1004, 1006, 1010, 1034, 1042, 1053, 1062, 1079, 1137, 1138
RCA	1003, 1004, 1005, 1006, 1007, 1017, 1053, 1080, 1081, 1082, 1083, 1084, 1085, 1105, 1143, 1145, 1148, 1149, 1151, 1155, 1163, 1167, 1170, 1182, 1190
Realistic	1042, 1062
Runco	1122
Sampo	1004, 1006, 1137, 1138, 1191
Samsung	1004, 1005, 1006, 1010, 1013, 1017, 1086, 1087, 1088, 1137, 1138, 1156
Sansui	1152, 1185
Sanyo	1004, 1041, 1042, 1062, 1068, 1089, 1090, 1135, 1144
Scott	1004, 1006, 1010, 1020, 1031, 1034, 1040
Sears	1000, 1004, 1006, 1011, 1012, 1017, 1040, 1041, 1042, 1043, 1053, 1055, 1060, 1061, 1062, 1091, 1092, 1144, 1145, 1150
Sharp	1004, 1006, 1010, 1022, 1025, 1079, 1093, 1094, 1095, 1100, 1137, 1139
Signature	1001
Sony	1002, 1157, 1164, 1165

## TV Codes

Soundesign	1004, 1006, 1008, 1034, 1040
Starlite	1034
Sylvania	1000, 1004, 1006, 1008, 1017, 1057, 1058, 1063, 1064, 1065, 1073, 1096, 1131, 1189
Symphonic	1029, 1034, 1150
Tandy	1139
Tatung	1003
Technics	1045
Techwood	1004, 1006, 1045
Teknika	1000, 1001, 1004, 1005, 1006, 1008, 1010, 1011, 1012, 1014, 1034, 1040, 1064, 1087, 1136, 1137, 1162
Telecaption	1097
Toshiba	1042, 1060, 1061, 1062, 1087, 1091, 1097, 1098, 1130, 1131, 1183
Totevision	1137
Universal	1044, 1072
Vidikron	1000
Wards	1000, 1001, 1004, 1005, 1006, 1017, 1020, 1029, 1040, 1044, 1053, 1057, 1058, 1063, 1064, 1072, 1073, 1079, 1099
Yamaha	1004, 1005, 1006, 1017
Zenith	1001, 1004, 1122, 1123, 1124, 1125, 1158

## HDTV Codes

Daewoo	1223
Hitachi	1193, 1236
JVC	1175, 1194
Mitsubishi	1195, 1206, 1207, 1208, 1209
Panasonic	1179, 1192, 1203, 1211, 1221
Philips	1201, 1212
Pioneer	1216, 1218, 1234
RCA	1198, 1202, 1215
Sampo	1220
Samsung	1178, 1232
Sharp	1197
Sony	1174, 1176, 1177, 1226, 1227, 1229, 1231
Thomson	1171
Toshiba	1172, 1173
Zenith	1225, 1233, 1235

## VCR Group: VCR and DVR Devices

### DVR Codes

Dish Network	2186
Echostar	2037
Philips	2036, 2185, 2187
ReplayTV	2178, 2188, 2192
Sony	2189
TiVo	2177
Toshiba	2190
Zenith	2191

### VCR Codes

Admiral	2035, 2047
Aiko	2018
Aiwa	2017
Akai	2002, 2003, 2004, 2031, 2032
Audiovox	2010
Bell & Howell	2007
Broksonic	2008, 2179
Calix	2010
Canon	2014, 2015
Capchart	2030
Carver	2000
CCE	2018, 2024
Citizen	2009, 2010, 2011, 2012, 2013, 2018, 2045
Colortyme	2005
Craig	2009, 2010, 2016, 2024
Curtis Mathes	2005, 2009, 2012, 2013, 2014, 2015, 2025, 2046
Daewoo	2011, 2017, 2018, 2030, 2045
Daytron	2030
Dimensia	2025, 2046
Electrohome	2010, 2019
Emerson	2002, 2008, 2010, 2011, 2014, 2017, 2019, 2026, 2032
Fisher	2007, 2016, 2020, 2021
Fuji	2003, 2014
Funai	2017
Garrard	2017
GE	2001, 2009, 2014, 2015, 2025, 2046
Go Video	2038, 2044, 2184
Goldstar	2005, 2010, 2013
Gradiente	2017
Harman	2000, 2005
Kardon	
Harwood	2024
Hitachi	2022, 2023, 2029, 2031
JC Penney	2005, 2006, 2007, 2008, 2009, 2010, 2014, 2015, 2022, 2023, 2024, 2029
Jensen	2022, 2023, 2031

## VCR Codes

JVC	2005, 2006, 2007, 2013, 2031, 2033, 2039
Kenwood	2005, 2006, 2007, 2012, 2013, 2031, 2033
KLH	2024
Kodak	2010, 2014
LG	2010
Logik	2024
LXI	2010
Magnavox	2000, 2014, 2015, 2028
Marantz	2000, 2005, 2006, 2007, 2012, 2013, 2014
Matsushita	2014
Memorex	2007, 2009, 2010, 2014, 2016, 2017, 2028, 2035, 2047
MGA	2019, 2026, 2032
Minolta	2022, 2023, 2029
Mitsubishi	2019, 2022, 2023, 2026, 2032, 2033
Montgomery Ward	2035, 2047
Motorola	2014, 2035, 2047
MTC	2009
Multitech	2009, 2012, 2017, 2024
NEC	2005, 2006, 2007, 2012, 2013, 2031, 2033
Nikko	2010
Noblex	2009
Olympus	2014
Optimus	2010, 2035, 2047
Optonica	2027
Panasonic	2014, 2015, 2180
Pentax	2012, 2022, 2023, 2029
Pentex Research	2013
Philco	2014, 2015
Philips	2000, 2014, 2027, 2176
Pioneer	2006, 2022, 2033
Portland	2012, 2030, 2045
Proscan	2001, 2025, 2046
Quasar	2014, 2015
Radio Shack	2010, 2027, 2047
Radio Shack/Realistic	2007, 2009, 2010, 2014, 2015, 2016, 2017, 2019, 2020, 2021, 2027, 2035
Radix	2010
RCA	2001, 2002, 2009, 2014, 2022, 2023, 2025, 2029, 2040, 2046, 2183
Realistic	2007, 2009, 2010, 2011, 2014, 2015, 2016, 2017, 2019, 2020, 2021, 2027, 2035, 2047
Ricoh	2034

## VCR Codes

Runco	2028
Samsung	2004, 2009, 2011, 2041
Sansui	2006, 2031, 2033
Sanyo	2007, 2009, 2016, 2042
Scott	2008, 2011, 2026
Sears	2007, 2010, 2014, 2016, 2020, 2021, 2022, 2023, 2029
Sharp	2019, 2027, 2035, 2045, 2047
Shintom	2003, 2023, 2024
Signature	2035, 2047
Singer	2014, 2024, 2034
Sony	2003, 2181
STS	2014, 2029
Sylvania	2000, 2014, 2015, 2017, 2026, 2182
Symphonic	2017
Tandy	2007
Tashiko	2010
Tatung	2031
Teac	2017, 2031
Technics	2014
Teknika	2010, 2014, 2017
Toshiba	2011, 2020, 2022, 2026, 2032
Totevision	2009, 2010
Unitech	2009
Vector Research	2005, 2006, 2011, 2012
Video Concepts	2005, 2006, 2011, 2012, 2032
Wards	2000, 2009, 2010, 2011, 2014, 2016, 2017, 2019, 2022, 2023, 2024, 2027, 2029, 2035, 2047
XR-1000	2014, 2017, 2024
Yamaha	2005, 2006, 2007, 2013, 2031
Zenith	2003, 2028, 2034, 2043

## DVD Group: DVD and CD Devices

### CD Codes

ADC	2166
Aiwa	2151
Akai	2167
Emerson	2152
Fisher	2153
GE	2169
Hitachi	2154
JVC	2155
Kenwood	2156
Marantz	2158
Mitsubishi	2170
Nakamichi	2172
NEC	2157
Onkyo	2159

### CD Codes

Panasonic	2160
Pioneer	2161
RCA	2162
Sanyo	2175
Sears	2168
Sherwood	2173
Sony	2163
Teac	2174
Technics	2164
Toshiba	2171
Yamaha	2165

### DVD Codes

Aiwa	2057, 2070
Alpine	2071
Apex	2068, 2069, 2072, 2073, 2199, 2205
Audiovox	2204
BOSE	2140
Broksonic	2074, 2148
Clarion	2075
Classic	2076
Daewoo	2077
Denon	2078, 2079, 2080, 2081
Emerson	2082, 2083
Fisher	2084
Funai	2083
GE	2048, 2085*, 2086
Go Video	2141, 2147
GPX	2087
Hitachi	2056, 2088, 2089, 2090, 2091
JVC	2050, 2058, 2092, 2142
Kenwood	2093
Konka	2059, 2060
Koss	2206
Lasonic	2197
Magnavox	2051, 2094, 2195
Memorex	2095
Mintek	2096
Mitsubishi	2052
NAD	2082
Nakamichi	2097
Norcent	2098, 2099
Onkyo	2100
Oritron	2114
Panasonic	2061, 2101, 2102, 2103, 2104, 2105, 2106, 2080, 2200
Philips	2051, 2067, 2107
Pioneer	2053, 2108, 2109, 2110, 2111
Proscan	2048, 2112
Qwestar	2113, 2114
RCA	2048, 2049*, 2115, 2143, 2149, 2202, 2203
Sampo	2116
Samsung	2117, 2118, 2119, 2144
Sansui	2120, 2196
Sanyo	2061, 2122, 2198

### DVD Codes

Sharp	2122, 2123, 2198
Sherwood	2124
Sony	2054, 2063, 2064, 2125, 2126, 2127, 2128, 2129
Sylvania	2083, 2201
Teac	2130
Technics	2131
Techwood	2132
Toshiba	2055, 2065, 2133, 2134, 2135, 2150, 2207
Yamaha	2136, 2137, 2138
Zenith	2066, 2139, 2146

\*Use **PLAY**  when testing this code.

## AUX Group: Receivers, Tuners, Home Theatre in a Box (HTB)

### Receiver/Tuner Codes

Aiwa	3000, 3001, 3002, 3003, 3004, 3014, 3020
Bose	3033, 3034
Carver	3000
Harman Kardon	3000, 3013
JBL	3013
JVC	3005
Kenwood	3006
Linn	3000
Maganvox	3000
Marantz	3000
Onkyo	3015
Panasonic	3016, 3017
Philips	3000
Pioneer	3012**
RCA	3007, 3022, 3023, 3032
Sansui	3000
Sherwood	3019
Sony	3008, 3009, 3018
Technics	3016, 3017
Wards	3000, 3012**
Yamaha	3010, 3011, 3012**

\*\* Use  or  when testing this code.

### Home Theatre in a Box Codes

Bose	3033
JBL	3027
JVC	3028
Koss	3026
Onkyo	3029
Panasonic	3030
Philips	3025
Pioneer	3031
RCA	3024
Sony	3021

# FCC Compliance

## United States FCC Compliance

**Note:** This device 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 such interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy. If not installed and used in accordance with the instructions, it 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 cable company or an experienced radio/television technician for help.

Any changes or modifications not expressly approved by Scientific-Atlanta could void the user's authority to operate the equipment.

The information shown in the FCC Declaration of Conformity paragraph below is a requirement of the FCC and is intended to supply you with information regarding the FCC approval of this device. *The phone numbers listed are for FCC-related questions only and not intended for questions regarding the connection or operation for this device. Please contact your cable service provider for any questions you may have regarding the operation or installation of this device.*

## FCC Declaration of Conformity

This device complies with *Part 15 of FCC Rules*. Operation is subject to the following two conditions: 1) the device may not cause harmful interference, and 2) the device must accept any interference received, including interference that may cause undesired operation.

AT6420 AllTouch Universal Remote Control  
Scientific-Atlanta, Inc.  
5030 Sugarloaf Parkway  
Lawrenceville, Georgia 30044 USA  
Telephone: **770-236-1077**

## Canada EMI Regulation

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la class B est conforme à la norme NMB-003 du Canada.