## **User Guide**



52" LCD HD TV

NS-LCD52HD-09



# Insignia NS-LCD52HD-09 52" LCD HD TV

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## Introduction

Congratulations on your purchase of a high-quality Insignia product. Your NS-LCD52HD-09 represents the state of the art in HD television design, and is designed for reliable and trouble-free performance.



## **CHILD SAFETY**

It makes a difference how and where you use your flat panel display

# As you enjoy your new product, keep these safety tips in mind

## The issue

The home theater entertainment experience is a growing trend, and larger TVs are popular purchases. However, TVs are not always supported on the proper stands or installed according to the manufacturer's recommendations. We and the consumer electronics industry are committed to making home entertainment enjoyable and safe.

TVs that are inappropriately placed on dressers, bookcases, shelves, desks, speakers, chests, or carts may fall over and cause injury.

## Tune into safety

- One size of TV stand does not fit all. Use only a TV stand rated for the weight of your TV.
- Carefully read and understand all enclosed instructions for proper use of this product.
- Don't let children to climb on or play with entertainment system furniture and TVs.
- Don't place TVs on furniture that can easily be used as steps, such as a chest of drawers.
- Remember that children can become excited while watching a program, especially on a "larger-than-life" TV. Make sure that you place or install the TV where it cannot be pushed, pulled over, or knocked down.
- Make sure that you route all cords and cables so that they cannot be pulled or grabbed by curious children.



## Wall mounting

If you decide to wall mount your TV, always:

- One size of wall mount does **not** fit all. Use only a wall mount rated for the weight
  of your TV and that has been recommended by this TV manufacturer, listed in this
  manual, or otherwise listed by an independent laboratory (such as UL, CSA, or
  ETL) as suitable for your TV.
- Follow all instructions supplied by the TV and wall mount manufacturers.
- If you have any doubts about your ability to safely wall mount your TV, get help from a professional installer.
- Make sure that the wall where you are mounting the TV is appropriate. Some wall mounts are not designed to be mounted to walls backed with steel studs or cinder blocks. If you are unsure, ask a professional installer.



TVs can be heavy. At least two people are required for safe wall mount installation.

## INSIĞNIA

## **Safety information**



#### Warning

To reduce the risk of electric shock, do not remove the cover or back. There are no user-serviceable parts inside. Refer servicing to qualified service personnel.

To reduce the risk of fire or electric shock, do not expose your TV to rain or moisture.

## Caution

To prevent electric shock, match the wide blade on the power cord plug to the wide slot on an electric outlet. If the plug does not fit, consult a licensed electrician to replace the obsolete outlet. Do not modify the power cord plug, or you will defeat this safety feature.



This symbol indicates that dangerous voltage constituting a risk of electric shock is present within your TV. This label is located on the back of your TV.



This symbol indicates that there are important operating and maintenance instructions in the literature accompanying your TV.

#### Warnings

Your TV contains tin-lead solder and a fluorescent lamp containing a small amount of mercury. Disposal of these materials may be regulated for environmental reasons. For disposal or recycling information, contact your local authorities or the Electronic Industries Alliance at www.eia.org.

Your TV should not be exposed to dripping or splashing, and no objects filled with liquids, such as vases, should be placed on the TV.

## Read instructions

Read all of the safety and operating instructions before you use your TV.

#### Retain instructions

Retain safety and operating instructions for future reference.

### Follow warnings and instructions

Follow all warnings on your TV and in the operating instructions. Follow all operating and use instructions.

#### Water and moisture

Do not use your TV near water. For example, do not use it near a bath tub, wash bowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool.

#### Cleaning

Unplug your TV before cleaning. Do not use liquid or aerosol cleaners. Use only a soft, lint-free cloth to clean the exterior of your TV.

#### Ventilation

Slots and openings in the cabinet and the back or bottom are provided for ventilation, reliable operation, and protection from overheating. These openings must not be blocked or covered. Do not block the openings by placing your TV on

a bed, sofa, rug, or other similar surface. Do not place your TV near or over a radiator or heat register. Do not place your TV in a built-in installation, such as a bookcase or rack, unless you provide correct ventilation or follow the manufacturer's instructions.

#### Heat

Make sure that your TV is located away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

#### Grounding or polarization

Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a grounding prong. The wide blade or grounding prong are provided for your safety. If the plug does not fit, contact an electrician to replace the obsolete outlet.

## Power cord protection

Route power cords so that they are not likely to be walked on or pinched by items placed on or against them. Pay particular attention to cords at plugs, convenience receptacles, and the point where they exit from your TV.

#### **Accessories**

Use only attachments/accessories recommended by Insignia.

#### Stand

Do not place your TV on an unstable cart, stand, tripod, bracket, or table. Your TV may fall, causing serious personal injury and serious damage to your TV. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with your TV. If you mount your TV to the wall, follow the manufacturer's instructions and use a mounting accessory recommended by the manufacturer. Your TV and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause your TV and cart combination to overturn.

## Lightning

For added protection for your TV's receiver during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the power outlet and disconnect the antenna or cable system. This helps prevent damage to your TV from lightning and power line surges.

#### Servicing

Do not attempt to service your TV yourself because opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

#### Replacement parts

When replacement parts are required, make sure that the service technician uses replacement parts specified by the manufacturer that have the same characteristics as the



original part. Unauthorized substitutions may result in fire, electric shock, personal injury, or other hazards.

## Overloading

Do not overload power outlets and extension cords because this can result in a risk of fire or electric shock.

## Object and liquid entry

Never push objects of any kind into your TV through openings because objects may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on your TV.

## Damage requiring service

Unplug this TV from the power outlet and refer servicing to qualified service personnel under the following conditions:

- When the power supply cord or plug is damaged or frayed.
- If liquid has been spilled or objects have fallen into your TV.
- If your TV has been exposed to rain or water.
- If your TV does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions because incorrect adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore your TV to its normal operation.
- If your TV has been dropped or damaged in any way.
- When your TV exhibits a distinct change in performance.

#### Safety check

After completing any service or repair to this TV, ask the service technician to perform routine safety checks to determine that your TV is in correct operating condition.

## Power source

Operate your TV only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied to your home, consult your TV dealer or local power company.

#### Screen protection

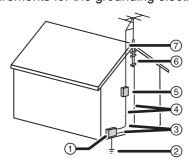
Your TV's screen is made of glass. Do not drop your TV or hit the glass screen. If the screen breaks, be careful of broken glass.

### Non-active pixels

The LCD panel contains almost 3 million thin film transistors, which provide exceptionally sharp video quality. Occasionally, a few non-active pixels may appear on the screen as a fixed blue, green, or red point. These non-active pixels do not adversely affect the performance of your TV, and are not considered defects.

## Outdoor antenna grounding

If an outside antenna or cable system is connected to your TV, make sure that the antenna or cable system is grounded to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code, ANSI/NFPA No. 70, provides information with respect to correct grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of the antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.



1	Electric service equipment
2	Power service grounding electrode system
3	Ground clamps
4	Grounding conductors
5	Antenna discharge unit
6	Grounding clamp
7	Antenna lead-in wire

#### Note to CATV system installer

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for correct grounding and in particular, specifies that the cable ground must be connected to the grounding system of the building as close to the point of cable entry as practical.

## Mobile telephone warning

To avoid interference with your TV picture and sound, operating problems, or even damage, keep your mobile telephone away from the TV.

#### End of life directives

Your new TV contains materials which can be recycled and reused. At the end of your TV's life, specialized companies can dismantle the discarded TV to concentrate the reusable materials and to minimize the amount of materials to be disposed of. Dispose of your old TV according to local regulations.

### Disconnect

An apparatus with CLASS I construction shall be connected to an AC power outlet with a protective earthing connection. Where the AC plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.

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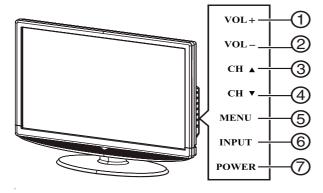
## **Features**

## **Accessories**

Make sure that the following accessories are provided in the packaging:

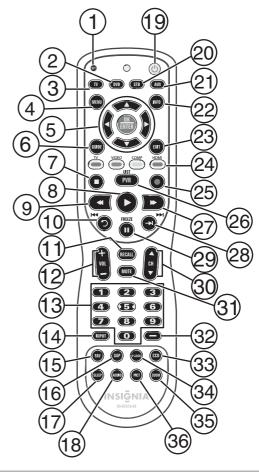
- Remote control and batteries (2-AA)
- AC power cord
- PC audio cable
- VGA cable
- User guide
- Quick Start Guide

## **Front**



#	Button	Description
1	VOL +	Press to increase the volume. In Menu mode, functions as the right arrow to go to the next menu or increase a setting.
2	VOL –	Press to decrease the volume. In Menu mode, functions as the left arrow to go to a previous menu or decrease a setting.
3	CH 📥	Press to go to the next higher channel. In Menu mode, functions as the up arrow.
4	CH <b>▼</b>	Press to go to the next lower channel. In Menu mode, functions as the down arrow.
5	MENU	Press to show the on-screen menu.
6	INPUT	Press to show the input source menu, then use the arrow keys to cycle through the available input sources. In Menu mode, functions as the OK/ENTER key.
7	POWER	Press to turn on your TV or put it into Standby mode.

## Remote



#	Button	Description
1	SET	Press to program your remote control to control other devices.*
2	DVD	Press to control your DVD player. Your remote control must be programmed first.*
3	TV	Press to control your TV.
4	MENU	Press to open the on-screen menu.
5	OK/ENTER	Press the arrows to move down, up, left, or right in the on-screen menu.  Press the <b>OK/ENTER</b> button to confirm changes or to toggle options on and off in the on-screen menu.
6	GUIDE	Press to display the program guide for the selected device if your device supports this feature. This TV does not support program guide.
7	(stop)	Press to stop playback on DVD, DVR, PVR, or CD devices.*
8	► (play)	Press to start playback on DVD, DVR, PVR, or CD devices.*
9		Press to fast backward on DVD, DVR, PVR, or CD devices.*
10	5/► (skip back)	In DVD, DVR, PVR, or CD mode, press to skip back to the previous title or track.*
11	RECALL	In TV mode, press to return to the previous channel.
12	<b>VOL</b> + or –	Press to adjust the volume up or down.



#	Button	Description
13	[Number buttons]	Press to enter channel numbers. In the on-screen menu, press to enter your parental control's password.
14	INPUT	Press to cycle through the available input sources on the active device.
15	FAV	Press to switch between the Favorite and Normal modes.
16	SAP	Press to select one of the preset audio mode in NTSC mode. You can select <b>MONO</b> , <b>STEREO</b> , or <b>SAP</b> . In ATSC mode, press to select the audio language.
17	SLEEP	Press to set the sleep timer. For more information, see "Setting the sleep timer" on page 12.
18	AUDIO	Press to select the bass and treble adjustment. Lets you adjust the bass and treble without opening the on screen menu.
19	ტ POWER	Press to turn on your TV, or the active device, or put it into Standby mode.
20	STB	Press to control your set top box.*
21	AUX	Press to control your auxiliary device.*
22	INFO	Press to current channel and program information.
23	EXIT	Press to close the on-screen menu.
24	TV, VIDEO, COMP, and HDMI (color buttons)	TV: Press to select TV source. VIDEO: Press to toggle between S-Video and Composite source modes. COMP: Press to select Component source mode. HDMI: Press to select HDMI mode.
25	• (record)	In DVD, DVR, PVR, or CD mode, press to begin recording.*
26	LIST/PVR	Press to list all the recorded programs in PVR/STB.*
27	►► (fast forward)	Press to fast forward on DVD, DVR, PVR, or CD devices.*
28	<b>▶▶</b> I/ <b>→</b> I	In DVD, DVR, PVR, or CD mode, press to skip forward to the next title or track.*
29	FREEZE	Press to freeze the video image. Press again to unfreeze the image.  Note: Do not freeze the video image for long periods of time. You may damage the TV screen.
30	CH <b>▼</b> or <b>▲</b>	Press to change TV channels.
31	MUTE	Press to mute the sound. Press again to restore the sound.
32	_	Use with 0-9 number buttons and OK/ENTER key to select digital channels.
33	CCD	Press to turn closed captions on and off. For more information, see "Viewing closed captions" on page 12.
34	P-LOCK	Press to activate or deactivate parental control lock.
35	Z00M	Press to select the display aspect ratio.
36	PICT	Press to select the brightness or contrast adjustment. Lets you adjust the brightness and contrast without opening the on screen menu.

\* For information on programming your remote control to control other devices, see "Programming your remote control" on page 17.

## Using the remote control

#### To use the remote control:

 Point the remote control towards the remote sensor on the front of your TV.

## Notes

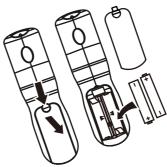
- Do not expose the remote control to shock or liquids.
- Do not use the remote control in an area with high humidity.
- Do not place the remote control in direct sunlight.
- Do not place objects, such as furniture, between the remote control and the remote sensor.
- The remote control may not work if direct sunlight or bright light shines on the remote sensor. Either move your TV or change the angle at which you use the remote control.

## Setting up your TV

## Installing remote control batteries

## To install the remote control batteries:

1 Remove the battery cover.



- 2 Insert two AA batteries into the battery compartment. Make sure that you match the + and symbols on the batteries with the + and symbols in the battery compartment.
- 3 Replace the cover.

## Caution

- Batteries (battery pack or batteries installed) should not be exposed to excessive heat, such as sunshine, heater registers, or fire.
- Battery chemicals can cause a rash. If the batteries leak, clean the battery compartment with a cloth. If chemicals touch your skin, wash immediately.
- Make sure that batteries are disposed of correctly. Do not burn or incinerate.

#### Notes

- Do not mix batteries of different types.
- · Do not mix old and new batteries.
- Remove batteries when the charge is depleted.
- If the remote control is not going to be used for an extended period of time, remove the batteries.



## Connecting your TV to a power outlet

## To connect your TV to a power outlet:

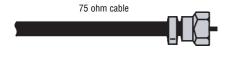
• Plug the power cord into a power outlet.

#### Notes

- Make sure that you use the correct type of power. See the label on your TV.
- If you do not intend to use your TV for an extended period of time, unplug the power cord from the power outlet.

## Connecting an outside antenna

Antenna cables come in two types: 75 ohm and 300 ohm.







- If your antenna cable has a 75 ohm connector, connect the cable to the coaxial jack on the back of your TV.
- If your antenna cable has a 300 ohm connector, connect the cable to a 300-75 ohm adapter (not included), connect the adapter to a 75 ohm cable, then connect the other end of the 75 ohm connector to the coaxial jack on the back of your TV.

## Connecting cable TV

Your TV has a 75 ohm jack for connecting cable TV

Some cable TV providers scramble the signals for "premium" (pay) channels. To view these channels, you need a converter/descrambler box.

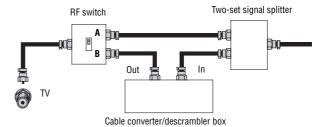
If you do not have a converter/descrambler box, you can connect your cable TV directly to your TV. If you have a converter/descrambler box, you can connect your cable TV using an RF switch (not supplied). For more information about connecting a converter/descrambler box, contact your cable TV provider.

## To connect cable TV without a converter/descrambler box:

- 1 Connect one end of a 75 ohm cable to the coaxial jack on the back of your TV.
- 2 Connect the other end of the cable to the cable TV wall outlet.

## To connect cable TV with a converter/descrambler box:

 Use the following illustration to connect a converter/descrambler box. (The RF switch and the signal splitter are not provided.) Set the RF switch to the A position to watch unscrambled channels controlled by your TV remote control. Set the RF switch to the B position to watch scrambled channels controlled by the converter/descrambler controls.



## Connecting to an external signal source

You can connect a DVD, VCD, VCR, or STB using a variety of methods, including composite cables, component cables, an S-Video cable, or an HDMI cable. The S-Video cable does not carry sound. If you use an S-Video cable, you need to use audio cables to connect the audio output.

#### Warning

Make sure that you turn off and unplug your TV before connecting devices.

## Note

For better video, use the S-Video jack if your source has an S-Video connection. For best video, use the HDMI jack if your source has an HDMI connection.

#### To connect an external signal source:

- 1 For composite video—Plug the audio/video cable into the AUDIO L, AUDIO R, and VIDEO in jacks on the back of your TV.
  - OR -

For S-Video—Plug in the audio cables as described above, then plug one end of an S-Video cable into the S-Video jack on the back of your TV and the other end into the S-Video jack on the external signal source.

- OR

For component video—Plug the Y, Pb, and Pr video cables and the Audio L and Audio R cables into the component input jacks.

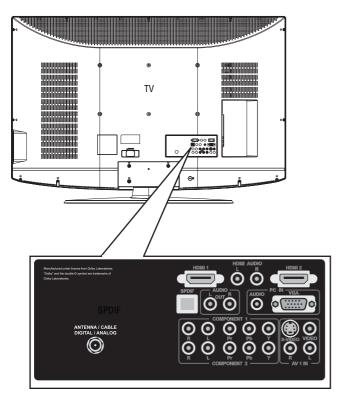
- OR -

**For HDMI**—Plug one end of an HDMI cable into the back of the TV and the other end into the external signal source.

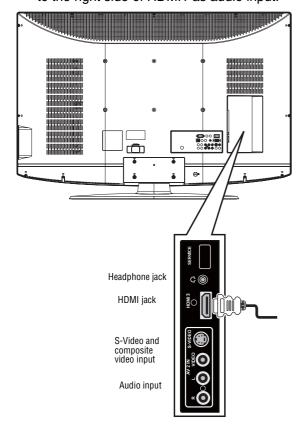
- 2 Turn on your TV.
- 3 Turn on the external signal source.
- 4 Press the **INPUT** button repeatedly to select the external signal source you want to watch.



For information on operating the external signal source, refer to the user guide for that device.



When using an HDMI-DVI adapter to pass the DVI signal to HDMI input, use the L/R connector to the right side of HDMI1 as audio input.



## Connecting a computer

#### Warning

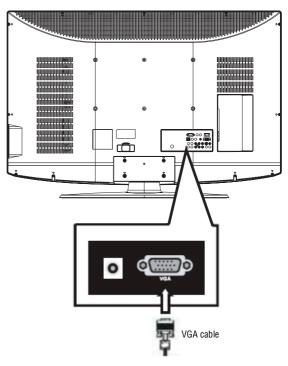
Make sure that you turn off and unplug your TV before installing devices.

#### Note

Many newer computers have HDMI output.

## To connect a computer using VGA:

- 1 Plug a VGA cable from your computer into the VGA jack on the back of your TV.
- 2 Plug an audio cable from your computer's audio out jack into the AUDIO jack on the back of your TV.
- 3 Plug in and turn on your TV.
- 4 Press the **INPUT** button repeatedly to select the **VGA** input source.



#### Note

When the computer goes into standby mode, your TV turns off. If your TV does not turn on when you "wake" your computer, press the **POWER** button on your TV or remote control.

## **Using your TV**

## Turning your TV on and off

## To turn your TV on and off:

- Make sure that the power cord is connected to your TV and a power outlet.
- 2 Press the button to turn on your TV. The power indicator LED turns blue.
- 3 Press the button again to return your TV to standby. The power indicator LED turns red.



## Selecting the TV signal source

## To select the TV signal source:

- With the TV on, press the INPUT button on either the TV or the remote to choose from:
  - TV
  - Composite rear (Video 1)
  - Composite side (Video 2)
  - S-Video rear (Video 3)
  - S-Video side (Video 4)
  - Component 1 (Video 5)
  - Component 2 (Video 6)
  - VGA (Video 7)
  - HDMI1 (Video 8)
  - HDMI2 (Video 9)
  - HDMI3 (Video 10)

You can also press **VIDEO** to choose between Composite rear, Composite side, S-Video rear, and S-Video side (Video 1~4), press **COMP** to choose between Component1 and Component2 (Video 5~6), or press **HDMI** to choose between HDMI1, HDMI2, and HDMI3 (Video 8~10).

#### Note

HDMI, the HDMI logo, and High-Definition
Multimedia Interface are trademarks or registered
trademarks of HDMI Licensing LLC.

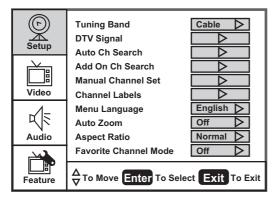
## Setting up the channel list

After you select your TV source, if you selected antenna or cable you need to set up the channel list. When you set up your channel list, your TV searches for all available channels in your area and stores a list of these channels. When you press the CH ▼ or ▲ buttons, your TV skips the channels that do not have a signal.

## Automatically setting up channels

#### To automatically set up the channel list:

1 Press the MENU button. The Main on-screen display menu opens with Setup highlighted.



- 2 Press ▶ to enter the sub-menu, then press ▼ or ▲ to highlight Auto Ch Search.
- 3 Press **OK/ENTER** or ▶ to start the search.

Note
You can press the EXIT button to stop the search.

## Manually adding or deleting channels from the channel list

After you create a channel list using the Auto Ch Search option, you can manually add or delete channels from the channel list.

#### To add or delete channels:

- Press MENU. The Main OSD (On-Screen Display) menu opens with Setup highlighted.
- 2 Press ▶ to enter the sub-menu, then press ▼ or ▲ to highlight Manual Channel Set. The Channel Setup Table opens.
- 3 Press ▼ or ▲ to select a channel, then press **OK/ENTER** to toggle between viewable and not viewable.
- 4 Press MENU or EXIT to close the menu.

## Changing channels

### To change channels:

- Press CH ✓ or △ on the remote control to go to the next lower or higher channel.
  - OR -

Press the number buttons to directly select a channel (for example, if you want channel 83, press **8**, then press **3**).

- OR -

Press **RECALL** to go to the last viewed channel.

## Selecting a digital sub-channel

Most digital TV channels have more than one channel. The main channel carries the signal for the main TV program. The sub-channels carry signals for additional or alternate programming, such as a radio or news broadcast.

For example, if the main channel number is 8, the sub-channel number might be 8-1, 8-2, or 8-3

#### To select a sub-channel:

- 1 Press the number buttons for the main channel (for example 8).
- 2 Press –, then press the sub-channel button (for example 1).

## Adjusting the volume

## To adjust the volume:

- Press VOL or VOL + to decrease or increase the volume.
- Press MUTE to turn off the sound. Press MUTE again to turn the sound back on.

## Displaying status information

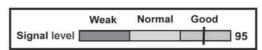
## To display status information:

 Press INFO. Your TV displays status information, such as the channel number or signal source.

## Checking the DTV signal strength

## To check the DTV signal strength:

- 1 Press **MENU**. The Main OSD (On-Screen Display) menu opens with **Setup** highlighted.
- 2 Press ▶ to enter the sub-menu, then press ▼ or ▲ to highlight DTV Signal. The DTV Signal meter opens.



3 Press MENU or EXIT to close the menu.



## Set up your Favorite Channel List

## To set up your Favorite channel list:

- Press MENU. The Main OSD (On-Screen Display) menu opens with Setup highlighted.
- 2 Press ▶ to enter the sub-menu, then press ▼ or ▲ to highlight Favorite Channel.
- 3 Press ▶ to activate Favorite Channel Mode. With Favorite Channel Mode **ON**, "Manual Channel Set" becomes "Favorite Channel Set."
- 4 Press ▼ or ▲ to highlight Favorite Channel Set.
- 5 Press > to open the channel list.
- 6 Press OK/ENTER to set your Favorite Channel.
- 7 Press EXIT to close the setting.

When Favorite Channel Mode is **ON**, pressing **CH** ▼ or ▲ will only go through your Favorite Channels.

## Adding a channel label

#### To add a label to a channel:

- 1 Press **MENU**. The Main OSD (On-Screen Display) menu opens with **Setup** highlighted.
- 2 Press ▶ to enter the sub-menu, then press ▼ or ▲ to highlight Channel Labels. The Channel Label menu opens.
- 3 Press ◀or ▶ to move the cursor to the channel field or label field, then press ▼ or ▲ to select a channel while the cursor is in the channel field, or press ▼ or ▲ to select the character while the cursor is in the label field.
- 4 Press OK/ENTER to return to the previous menu.

## Freezing the picture

You can freeze (still) the screen image.

### Caution

To protect your TV, do not freeze the screen image for long periods of time.

## To freeze or unfreeze the picture:

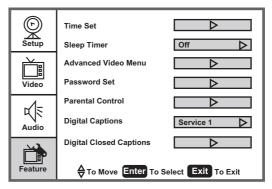
Press FREEZE.

## Setting the clock

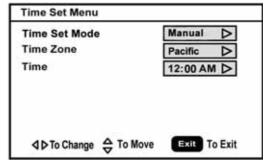
### To set the clock:

1 Press **MENU**. The Main OSD (On-Screen Display) menu opens with **Setup** highlighted.

2 Press ▼ or ▲ repeatedly to highlight Feature. The Feature menu opens.



3 Press ▶ to enter the sub-menu, then press ▼ or ▲ to highlight Time Set. The Time Set menu opens.



- 4 Press o or to move to the different fields, then press or to change the settings.
- 5 Press MENU or EXIT to close the menu.

## Setting the sleep timer

The sleep timer lets you select the amount of time before your TV turns off automatically.

### To set the sleep timer:

- 1 Press **MENU**. The Main OSD (On-Screen Display) menu opens with **Setup** highlighted.
- 2 Press ▼ or ▲ repeatedly to highlight Feature. The Feature menu opens.
- 3 Press ▶ to enter the sub-menu, then press ▼ or ▲ to highlight Sleep Timer.
- 4 Press ◀ or ▶ to select the amount of time (Off, 5 min, 10 min, 15 min, 30 min, 45 min, 60 min, 90 min, 120 min, 180 min, or 240 min). To turn off the timer, select Off.

#### Vote

You can also press the **SLEEP** button to set the sleep timer.

## Viewing closed captions

#### Note

To select or customize digital closed captions, use the *Digital Captions* or *Digital Closed Caption* sub-menus in the *Feature* menu.

## To view closed captions:

- Press the CCD button repeatedly to select a closed caption option. You can select:
  - On
  - Off
  - On When Mute

## INSIĞNIA

## **Setting parental controls**

Your TV has a V-chip that lets you control the type of programs your children can watch. Parental controls include two ratings: MPAA (based on age) and TV Parental Guidelines (based on content and age). A TV program may have an MPAA or TV Parental Guidelines rating, so you should set controls for both ratings. Before you can select ratings, you need to set up a parental controls password.

### To set up a password:

- 1 Press **MENU**. The Main OSD (On-Screen Display) menu opens with **Setup** highlighted.
- 2 Press ▼ or ▲ repeatedly to highlight Feature. The Feature menu opens.
- 3 Press ▶ to enter the sub-menu, then press ▼ or ▲ to highlight Password Set.
- 4 Press the number buttons to enter the old password. If you have not set a password, enter 0000. Press OK/ENTER to continue.

Enter	Old Password

5 Press the number buttons to enter a new password. Press **OK/ENTER** to continue.

Enter	New	Passy	word

6 Press the number buttons to enter the new password again, to confirm. Press OK/ENTER to continue.



Caution	
Write down your password and save it for use.	future

### Note

If you forget your password, enter 3448 for the old password, then enter a new password. This password always remains valid for resetting your password.

#### Setting the Parental Control level

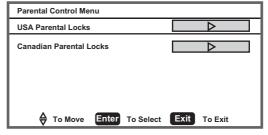
## To set the Parental Control level:

- Press MENU. The Main OSD (On-Screen Display) menu opens with Setup highlighted.
- 2 Press ▼ or ▲ repeatedly to highlight Feature. The Feature menu opens.
- 3 Press ▶ to enter the sub-menu, then press ▼ or ▲ to highlight Parental Control. The Password screen opens.

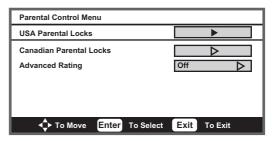


4 Press the number buttons to enter the password. Press **OK/ENTER** to continue. The *Parental Control Menu* opens.

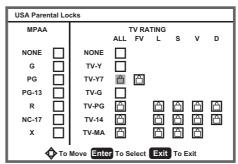
For analog channels



For digital channels



5 Press ▼ or ▲ to select USA Parental Locks, Canadian Parental Locks, or Advanced Rating (for digital channels only), then press OK/ENTER. The Controls Menu that you have selected opens.



- 6 Press ◀, ▶, ▼, or ▲ to move to a rating, then press **OK/ENTER** to select the rating.
- 7 When you block a rating, that rating and all higher ratings are blocked.
- 8 Press **MENU** or **EXIT** button to close the menu.

#### American MPAA ratings

Rating	Description
NONE	Not rated.
G	General audiences.
PG	Parental guidance suggested. Some material may not be suitable for children.
PG-13	Parental guidance strongly suggested. Some material may not be suitable for children under 13 years of age.
R	Restricted. Not suitable for children under 17 years of age unless accompanied by a parent or guardian.
NC-17	Not suitable for children under 17 years of age.
Χ	Adults only.



## Canadian English Ratings

Rating	Description
E	Exempt programming
С	Children
C8+	Children over 8 years old
G	General audience
PG	Parental guidance
14+	Over 14 years old
18+	Adult programming

## Canadian French Ratings

Rating	Description
E	Exempt programming
G	General audience
8ans+	Over 8 years old
13ans+	Over 13 years old
16ans+	Over 16 years old
18ans+	Over 18 years, only for adult viewing

## TV Parental Guidelines ratings

Rating	Description
NONE	Not rated.
TV-Y	All children.
TV-Y7	Children over seven years of age.
TV-G	General audiences.
TV-PG	Parental guidance suggested.
TV-14	Parents strongly cautioned.
TV-MA	Mature audiences only.

Some of the age-based TV Parental Guidelines ratings also have content-based ratings.

Rating	Description
FV	Fantasy violence.
L	Adult language.
S	Sexual situations.
V	Violence.
D	Sexually suggestive dialog.

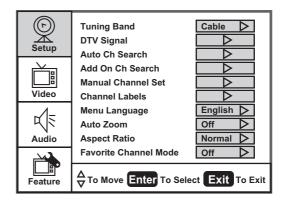
## Using the on-screen menu

Your TV has an on-screen menu that lets you adjust TV settings, such as video and audio settings.

## To use the on-screen menu:

- 1 Press **MENU**. The Main OSD (On-Screen Display) menu opens with **Setup** highlighted.
- 2 Press ▼ or ▲ repeatedly to select a menu item.

3 Press ◀or ▶ to enter a sub-menu.



- 4 Press **OK/ENTER** or ▶ to confirm an adjustment or toggle a setting.
- 5 Press **MENU** or **EXIT** to close the on-screen menu.

## **On-screen menus**

On-screen	
menu	Options
Setup (Options may vary in different modes)	Tuning Band—Selects the TV antenna source (Air or Cable).  DTV Signal—Displays the digital TV signal strength. For more information, see "Checking the DTV signal strength" on page 11.  Auto Ch Search—Automatically sets up a list of the channels available in your area. For more information, see "Automatically setting up channels" on page 11.  Add On Ch Search—Lets you add new channels without going through the entire list of available channels.  Manual Channel Set—Lets you add or delete channels from the channel list. For more information, see "Manually adding or deleting
	channels from the channel list" on page 11.  Channel Labels—Lets you add a label to a channel. For more information, see "Adding a channel label" on page 12.  Menu Language—Selects the language for the on-screen menu. You can select English, French, or Spanish.
	Auto Zoom-Select On (default) or Off. When Auto Zoom is On there is an "Auto" option under "Aspect Ratio." If you choose "Auto," your TV selects the proper aspect ratio automatically. This feature is only available in TV mode.
	Aspect Ratio—Selects the screen aspect ratio: Normal, Wide, Zoom, Cinema, or Auto (only available in TV mode with Auto Zoom set to On). You can also press the <b>ZOOM</b> button to select the aspect ratio.
	<b>Favorite Channel mode</b> —Lets you edit your favorite channel list. Use the <b>FAV</b> button on the remote to toggle this mode on or off.



On-screen menu	Options
Video (Options may vary in different modes.)	Contrast-Increases the picture level to adjust the white areas of the picture. Decreases the picture level to adjust the black areas of the picture. (0~100)  Brightness-Increases the brightness to add more light to dark areas of the picture.  Decreases the brightness to add more dark to light areas of the picture. (0~100)  Sharpness-Increases the sharpness for a cleaner and clearer image. Decreases the sharpness for a smoother picture. (-50~50)  Color-Adjusts the overall color of the picture. (0~100)  Tint-Increases the color level to add more green to skin tones. Decreases the color level to add more purple to skin tones. (R50~G50)  Backlight-Adjusts the backlight level (0~10).  Settings-Restores the settings to factory default.
Audio (Options may vary in different modes.)	Audio Language—Selects an alternate language if the program has more than one language available. Only available in ATSC TV mode.  Bass—Adjusts the low sounds (bass).  Treble—Adjusts the high sounds (treble).  Balance—Adjusts the right and left speaker volumes.  Digital Audio Output—Selects the audio mode for the digital audio optical jack.  RAW: AC-3 in - AC-3 out/PCM in - PCM out.  PCM: AC-3 in - PCM out/PCM in - PCM out.  TV Speaker—Turns the internal TV speaker On (default) or Off. It will not affect the digital audio output, the headphone output, and the composite audio output.  Settings—Restores the settings to factory default.

	-
On-screen menu	Options
Feature (Options may vary in different modes)	Time Set–Sets the clock. For more information, see "Setting the clock" on page 12.
	<b>Sleep Timer</b> —Sets the sleep timer. For more information, see "Setting the sleep timer" on page 12.
	Advanced Video Set-
	Noise Reduction—Select from Low, Mid, High, and Off
	Color Temperature—Select from Normal, Warm, and Cool
	3D Y/C filter-Choose from On (default) or Off
	Dynamic Contrast—Choose from On or Off
	Setting-Restores the settings to factory default
	Password Set—Lets you set the password for Parental Control options. The default password is 0000. See "Setting parental controls" on page 13.
	Parental Control—Accesses V-chip controls. For more information, see "Setting parental controls" on page 13.
	<b>Digital Caption</b> —Sets the digital caption type. Choose from Service 1-6, Text 1-4, and CC 1-4.
	Closed Caption Options—Customizes closed captions for digital broadcasting systems. You can adjust Size, Font, Text Color, Text Opacity, Background Color, Background Opacity, Edge Effect, and Edge Color.
	Component Set—Only available in component mode. Lets you set Horizontal Position $(0 \sim 100)$ , Vertical Position $(0 \sim 100)$ , Clock $(0 \sim 100)$ , and Phase $(0 \sim 100)$ . The Settings option restores the settings to factory default.
	<b>VGA Set</b> —Only available in VGA mode. Lets you set <b>Horizontal Position</b> (0 $\sim$ 100), <b>Vertical Position</b> (0 $\sim$ 100), and <b>Phase</b> (0 $\sim$ 100). You can also select <b>Auto Adjust</b> to automatically adjust the settings. The <b>Settings</b> option restores the settings to factory default.
	Audio Only—Lets you turn off the picture. When Audio Only is turned on, the screen is turned off and only audio is available. This feature is available only in TV mode.
	Input Label–Lets you change the Input label that displays on the screen. You can use "Preset" to reset to the default setting.

## Maintaining

- Do not use your TV in areas that are too hot or too cold, because the cabinet may warp or the screen may malfunction.
  - Storage temperatures are 32° to 122°F (0° to 50°C).
  - Working temperatures are 41° to 104°F (5° to 40°C).
- Do not place your TV in direct sunlight or near a heat source.

## **Cleaning your TV**

Clean the screen and cabinet with a soft, lint-free cloth. If the screen or cabinet is especially dirty, moisten a soft, lint-free cloth in a weak detergent solution, squeeze the excess



moisture from the cloth, then wipe the screen or cabinet with the cloth. Use a clean cloth to dry the screen or cabinet.

#### Caution

Avoid the following, because it may cause damage to your TV:

- Cleaning your TV with volatile substances, such as insect sprays, solvents, and thinners.
- Leaving items made from rubber or PVC in contact with your TV for long periods.
  Letting liquids drip into the cabinet

## **Troubleshooting**

## Warning

Do not try to repair your TV yourself. Refer all service to a qualified service technician.

Symptom	Possible solution
No power	<ul> <li>Make sure that the power cord is correctly connected to your TV and a power outlet.</li> <li>Unplug the power cord, wait 60 seconds, then plug the cord back in and turn on your TV.</li> </ul>
No picture	<ul> <li>Make sure that the video cables are connected securely to the back of your TV.</li> <li>Adjust the contrast and brightness.</li> <li>Make sure that the correct video mode is selected.</li> <li>Make sure that the incoming signal is compatible.</li> <li>Make sure the antenna is connected correctly.</li> <li>Check the closed caption settings. Some TEXT modes can block the screen.</li> </ul>
Good picture but no sound	<ul> <li>Increase the volume.</li> <li>Make sure that the sound is not muted.</li> <li>Make sure that the correct audio mode is selected.</li> <li>Make sure that the TV Speaker option is set to On in the Audio menu.</li> </ul>
Good sound but poor color	<ul> <li>Adjust the contrast, color, and brightness settings.</li> </ul>
Poor picture	<ul> <li>Make sure that the room is not too bright. Light reflecting off the screen can make the picture difficult to see.</li> <li>If an S-VHS camera or a camcorder is connected while another connected device is turned on, the picture may be poor. Turn off one or more devices.</li> </ul>
Horizontal dotted line	<ul> <li>Your TV may be too close to another electrical device, such as a hair dryer or neon light. Turn off the device or move your TV.</li> </ul>
"Ghost" or double image	<ul> <li>This may be caused by obstructions to the antenna, such as high-rise buildings or hills. Use of a highly directional antenna may improve the picture quality.</li> </ul>
Remote control does not work	<ul> <li>Press the TV button.</li> <li>Replace the batteries. Make sure that the + and - symbols on the batteries align with the + and - symbols in the battery compartment.</li> <li>Clean the remote sensor on the front of your TV.</li> <li>Bright or fluorescent lighting may interfere with the remote control signal. Turn off the light or move your TV.</li> </ul>

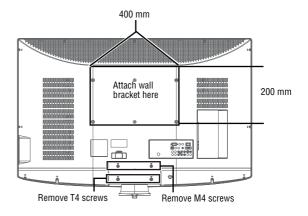
Symptom	Possible solution
Snowy picture or noise	<ul> <li>Make sure that the A/V and antenna cables are connected correctly and securely.</li> </ul>
VGA picture is not stable or synchronized	Make sure that you have selected the correct VGA mode on your computer.
No output from one of the speakers	Adjust the balance in the <i>Sound</i> menu.
Control buttons do not work	Unplug the power cord, wait a few seconds, then plug the cord back in and turn on your TV.
After images appear	<ul> <li>Do not display a still image, such as a logo, game, or computer image, for an extended period of time. This can cause a permanent after image to be burned into the screen. This type of damage is not covered by your warranty.</li> </ul>
Picture has a few bright or dark dots	<ul> <li>A few bright or dark dots on an LCD screen is normal. It does not affect the operation of this TV.</li> </ul>

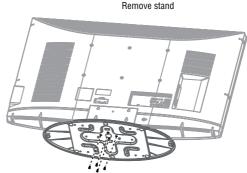
## **Appendix A**

## Attaching a wall mount bracket to your TV

To attach a wall mount bracket to your TV:

- 1 Remove the four M4 and two T4 screws holding your TV to the stand.
- 2 Secure the wall mount bracket to the back of your TV using six M6 screws, as indicated in the illustration.





This apparatus is intended to be supported by UL Listed wall mount bracket.



## Appendix B

## Programming your remote control

To program your remote to control home theater devices, follow these steps.

Before proceeding, find the codes for the devices you want to program in "Manufacturer's codes" and write them down or highlight them.

### To program your remote control:

- 1 Turn on the device (for example, a DVD player) and, if needed, load media such as a DVD.
- 2 Press the device key on the remote for the device that you want to program (TV, DVD, STB, or AUX).
- 3 Press and hold SET until the red LED blinks twice, then release.
- 4 Enter the first five-digit code for the device and brand that you wish to program. The LED blinks once as each digit is entered. If the code is valid, the LED blinks twice.

#### Note

If the LED does not blink twice, repeat steps 2 to 4 and try entering the code again.

- 5 Aim the remote at the device and press  $\circlearrowleft$ (power). The device should turn off. If it does not, repeat Steps 3-5, trying each code for your brand until you find one that works. If you cannot find a code that works, see "Searching for your code" below.
- 6 Repeat Steps 1 to 5 for the other devices you want to control. For future reference, write down each working device code.

## Searching for your code

If your device does not respond to the remote control after trying all codes listed for your brand, or if your brand is not listed, try searching for your code.

#### To search for your code:

- 1 Turn on the device you want to control.
- 2 Press the desired device key (TV, DVD, STB, or AUX) once.
- 3 Press and hold SET until the red LED blinks twice, then release.
- 4 Enter 9 9 1. The LED blinks twice.
- **5** Press the device group number for your device type (see table below).
  - 0—Cable (cable converters, video accessories, satellite receivers)
  - **1**—TV (TVs)
  - **2**—VCR (VCRs, DVD players)
  - 3—Audio (audio amplifiers, audio amps/tuners, CD players)
- 6 Aim the remote at the device and press  $\circlearrowleft$ (power). The remote sends IR codes from its library to the selected device, starting with the most popular code first. If the device responds, go to Step 8.

7 If the device does not respond, press CH A and the remote tests the next code for that device type. Continue to press CH ▲ until the device turns off.

Note Press CH ▼ to try the previous code.

- 8 Now that you have found the correct code, press SET to save the code that worked for your device. The LED blinks twice to indicate that the code has been saved.
- To search for other device codes, repeat Steps 1 to 8.

## Checking the codes

If you have set up the remote using the procedure in "Searching for your code", you may need to find out which five-digit code is operating your equipment.

## To find out which code is assigned to your TV (for example):

- Press TV once.
- 2 Press and hold SET until the red LED blinks twice, then release.
- 3 Enter 9 9 0. The LED blinks twice.
- **4** To view the code for the first digit, press **1**. Count the red LED blinks (for example, three blinks = 3), then write down the number in the appropriate code listing at the top of this column.

#### Note

If the LED does not blink, the code digit is 0.

- 5 Repeat Step 4 for the four remaining digits, using 2 for the second digit, 3 for the third digit, 4 for the fourth digit, and 5 for the fifth digit.
- 6 To check for other device codes, repeat Steps 1 through 5, substituting the device key for the device you would like to check.

#### Using learning

This universal remote control includes a learning feature (some models may not include this) so you can add functions that are unique to your home entertainment devices (such as VCR Tracking Up or Down). However, there are some considerations to keep in mind.

## **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, SET, or Record (•).
- Learning capacity is approximately 42 to 75 keys, depending on the code being learned.
- Certain device functions are not learnable, including multi-frequency types, some high frequency functions, 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

#### To program a learned key:

- 1 Place your Insignia remote control head-to-head (about 2" apart) from your original remote control (the one that came with the device). Also, locate the key (on your original remote control) that you want the Insignia remote control to learn. Press the mode key you wish to learn functions on.
- 2 Press and hold SET until the LED blinks twice, then release.
- 3 Enter 9 7 5. The LED blinks twice.

#### Notes

If more than 10 seconds pass between key presses, the remote exits programming. If the LED displays one long flash instead, either your batteries are low, or the Insignia remote control has a memory fault. In either case, the remote cannot learn a new key.

- 4 Press the key on the remote you wish to program. The feedback LED stays lit for three seconds, indicating that the remote is ready to learn.
- 5 On the original remote, press and hold the key to be learned. Continue holding the key on the original remote until the Insignia's LED blinks twice.

#### Note

If the red 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 **SET** to exit programming and review the Precautions" above. If needed, also see "Troubleshooting remote control programming" on page 20. After reviewing, start programming again at Step 1.

6 Repeat Steps 4 and 5 to program another key. Once you have completed programming all the keys you want, press and hold SET until the LED blinks twice to save all data learned.

### 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" above).

#### Notes

If more than 10 seconds pass between key presses, the remote exits programming.

If the LED displays one long flash instead, either your batteries are low, or the Insignia remote control has a memory fault. In either case, the remote cannot learn a new key.

## To delete a single learned key:

- 1 Press the mode key that you wish to remove the learned key from.
- 2 Press and hold SET until the LED blinks twice, then release.

- 3 Enter 9 7 6. The LED blinks twice.
- 4 Press the key containing the learned function to be deleted, twice. The LED blinks twice and programming ends.

## Deleting all learned keys in a specific mode

#### Notes

If more than 10 seconds pass between key presses, the remote exits programming. If the LED displays one long flash instead, either your batteries are low, or the Insignia remote control has a memory fault. In either case, the remote cannot learn a new key.

## To delete all learned keys in a specific mode:

- 1 Press and hold **SET** until the LED blinks twice, then release.
- 2 Press 9 7 6. The LED blinks twice.
- 3 Press a mode key twice (for example, TV, DVD, STB, or AUX) to clear all the learned keys for that mode. The LED blinks twice and programming ends.

### Changing volume lock

The Insignia universal remote control comes preset to allow independent volume control of each selected device (global volume unlock). However, you may change the volume lock setting to global volume lock so that one device's volume controls volume in all other modes. After that, you can perform Individual volume unlock on a selected device to set its volume control for independent operation or global volume unlock to remove all volume locking.

## To lock volume control to one mode (global volume lock):

- Press and hold SET until the red LED blinks twice, then release.
- 2 Enter 9 9 3, the LED blinks twice.
- **3** Press the mode key for the device you want to control (for example, TV).
- The LED blinks twice. Now when you press VOL+, VOL-, or Mute, the selected device controls the volume regardless of the current mode.

## To unlock all volume control (restoring global unlock):

- Press and hold SET until the red LED blinks twice, then release.
- 2 Enter 9 9 3, the LED blinks twice.
- 3 Press VOL+. The LED blinks four times. Volume is independently controlled for all programmed devices.

### To unlock a single device's volume control:

- 1 Press the desired device mode key (TV, DVD, STB, or AUX).
- 2 Press and hold SET until the red LED blinks twice, then release.
- 3 Enter 9 9 3. The LED blinks twice.
- 4 Press VOL-. The red LED blinks four times. Volume is independently controlled for the selected devices.



### Programming channel lock

Channel control can be locked so that the Insignia remote controls a single device's channel-changing functions, regardless of operating mode. This is often enabled by users who watch all broadcast TV through one device (for example, a cable set-top box). The affected keys are 1 through 0, CH ▲, CH ▼, and RECALL.

#### To lock all channel controls to one device:

- 1 Press the mode key that relates to the device that you use for channel changing control.
- 2 Press and hold SET until the mode LED blinks twice, then release.
- 3 Enter 9 7 3. The mode LED blinks twice.
- 4 Press CH ▲ once. The mode LED blinks twice.

Now, regardless of what mode you select, the channel keys will only change channels on the assigned device.

## To unlock channel locks:

- 1 Press and hold **SET** until the mode LED blinks twice, then release.
- 2 Enter 9 7 3. The mode LED blinks twice.
- 3 Press CH ▼ once. The mode LED blinks four times.

Now the channel functions will correlate to the active mode (for example, press **CH** ▲ in TV mode and the TV changes channel accordingly).

### Using keymover

Your Insignia universal remote control includes a keymover feature that lets you map (or copy) keys from one mode (such as source mode) to another mode (such as destination mode) or to a different key in the same mode.

### Note

Do not use any of the Device Keys,  $\circlearrowleft$  (power), **RECORD**, or **SET** as a source or destination key.

### To move keys in the same device mode:

- Press the desired device key (TV, DVD, STB, or AUX).
- 2 Press and hold SET until the LED blinks twice, then release.
- 3 Press 9 9 4. The LED blinks twice.
- 4 Press the key you want to move.
- 5 Press the new key that should perform the function. The LED blinks twice.
- 6 Repeat Steps 1-5 to move additional keys.

## To move keys to a different device mode:

- Press and hold SET until the LED blinks twice, then release.
- 2 Press 9 9 4. The LED blinks twice.
- 3 Press the device key that contains the function you want to move (for example, DVD).
- 4 Press the key you want to move (such as **Play**).

- 5 Press the device key that you want to move the function to. (such as TV).
- 6 Press the key in the new mode that should perform the function (for example, Play). The LED blinks twice.
- 7 Repeat Steps 1-6 to move additional keys.

## To restore all keymoved data in a specific mode:

- Press and hold SET until the LED blinks twice, then release.
- 2 Press 9 9 4. The LED blinks twice.
- 3 Press the device key you wish to remove all keymoved data from twice. The LED blinks twice.
- 4 Repeat for each device you want to restore.

### To restore original key function:

- 1 Press the device key for which you wish to remove the keymoved data from a specific key.
- 2 Press and hold SET until the LED blinks twice, then release.
- 3 Enter 9 9 4. The LED blinks twice.
- 4 Press the key you wish to remove the keymoved data from twice. The LED blinks twice.
- 5 Repeat Steps 1-4 for additional keys you wish to remove.

### Programming macros

Your Insignia universal remote control includes the ability to program any key (other than the **SET** key) with a macro function. Each one can be set up to perform a pre-programmed set of sequential key presses with the press of a single key. A macro can be used to control a home theater operation, to set a favorite channel, or for other functions you would like to control with one key press. Each macro key can hold up to 15 key presses, total.

#### Note

Programming a new macro over an existing one erases the original macro.

## To program a mode-independent macro:

- Press and hold SET until the red LED blinks twice, then release.
- 2 Press 9 9 5. The LED blinks twice.
- **3** Press the key you want to assign to a macro.
- 4 Enter the series of commands you want the macro to execute (up to 15 commands).
- 5 Press and hold **SET** until the red LED blinks twice, then release.

Now, when you press the preset macro key, the remote sends the series of commands you have entered, regardless of what mode you are in. For example, you could program a macro key to turn on both your TV and cable box and select a particular channel.

6 To clear the macro, repeat Steps 1-5, but do not enter a series of commands at Step 4.



#### To program a mode-dependent macro:

- 1 Press the device mode key (TV, DVD, STB, or AUX).
- 2 Press and hold SET until the LED blinks twice, then release.
- 3 Press 9 7 8. The LED blinks twice.
- 4 Press the key you wish to assign to a macro.
- 5 Enter the series of commands you want the macro to execute (up to 15 commands).
- **6** Press and hold **SET** until the red LED blinks twice, then release.

Now, when you press the macro key, the remote sends the series of commands you have entered, but only if you are in the mode you selected in Step 1. For example, you could program the macro key to turn on both your TV and cable box and select a particular channel, but only if you are in TV mode. If you are in DVD mode, this key does not execute the macro you set up in TV mode.

7 To clear the macro, repeat Steps 1-6, but do not enter a series of commands at Step 5.

## Troubleshooting remote control programming

**Problem**: The LED does not blink when you press a key.

**Solution**: Try pressing different keys. Replace the batteries with two new AA batteries.

**Problem**: The LED blinks when you press a key, but the device does not respond.

**Solution**: Make sure that the remote control is aimed at your device and is not more than 40 feet away.

**Problem**: The LED blinks one long blink while in SET mode.

**Solution**: An entry error has occurred (for example, wrong key). Try entering the sequence again.

**Problem**: The remote control does not control devices or commands are not working properly. **Solution**: Try all listed codes for the device. Make sure the device operates with an infrared remote control.

**Problem**: No volume on a device.

**Solution**: See "Changing volume lock" on page 18, and make sure that the volume is not locked to a different mode already.

**Problem**: Channels do not change correctly when directly entering digits to change channels. **Solution**: If the original remote control required you to press **Enter** to change channels, press **Enter** on this remote after entering the channel number.



## Manufacturer's codes

## **Setup Codes for Audio Amplifiers**

Adcom	30577, 31100
Anthem	32220
Bose	30674
Carver	30892
Durabrand	31561
Elan	30647
GE	30078
Harman/Kardon	30892
NC	30331
Left Coast	30892
Lenaxx	31561
Marantz	30892
McI ntosh	30251
Modulaire	30395
NEC	30264
Optimus	30395, 30823
Philips	30892
Pioneer	30823
Polk Audio	30892
RadioShack	30395
RCA	30823
Realistic	30395
Shure	30264
Sony	30689, 30815
Soundesign	30078
Victor	30331
Wards	30078
Yamaha	30354, 30133

## **Setup Codes for Audio Accessories**

Accurian	31106
Altec Lansing	30607, 31056
Apple	31115
Creative	30872
DLO	31155
GPX	32113
Griffin	31891
iDeck	31106
iHome	32152
iLive	32113
Imerge	31491
iPort	31917
Klipsch	31339
Marantz	31491
Memorex	32119
Monitor Audio	31106
Motorola	31464
Omnifi	31605
Roku	31828
Sonance	31917
Yamaha	31809, 31810, 32021

## Setup Codes for Audio Receivers

ADC	30531
Adcom	30616
Aiwa	31405, 30189, 30121, 31089, 31388, 31641
Akai	30244, 31512
Alco	31390
AMC	31077
Amphion Media Works	31563
AMW	31563
Anam	31609, 31074
Anthem	31185
Apex Digital	31257, 31430, 31774
Arcam	31189
Audiotronic	31189
Audiovox	31390
B & K	30702, 30820, 30840
BK	30702
Bose	31229, 30639, 31253, 31629, 31841, 31933
Cairn	30189
Cambridge Soundworks	31370
Capetronic	30531
Carver	31189, 30189, 30121, 31089, 31289
Coby	31389
Curtis Mathes	30014
Daewoo	31250
Denon	31360, 30121, 31104, 31142, 31306, 32857
Emerson	30531
Fisher	31801
Garrard	30463
Grundig	30189
Harman/Kardon	30110, 30189, 30891, 31289, 31304, 31306, 32241
Hitachi	31273, 31801
iLive	32013
Inkel	30491
Insignia	31030, 31077, 31893, 32169, 32175
Integra	30135, 30842, 31298, 31320, 31805
iSymphony	32258
JBL	30110, 31306
NC	31058, 30074, 31374, 31495, 31871, 32239
Kawasaki	31390
Kenwood	31313, 31570, 30077, 30186, 31027
KLH	31390, 31412, 31428
Koss	31366, 31497
Lexicon	31076
LG	31293, 32197
Linn	30189
Liquid Video	31497
Magnavox	31189, 31269, 30189, 30391, 30531, 31089, 31266,
	31514
Marantz	31189, 31269, 30189, 30891, 31089, 31289
McIntosh	31289
Micromega	31189, 30189



## Setup Codes for Audio Receivers (continued)

Mitsubishi	31393
Musicmagic	31089
Myryad	31189
Nakamichi	31313, 30097, 31555
Norcent	31389
Nova	31389
Onkyo	30135, 30842, 31298, 31320, 31531, 31805, 31905
Optimus	31023, 30074, 30014, 30121, 30186, 30531, 31074
Oritron	31366, 31497
Outlaw	30391
Panasonic	31308, 31518, 30367, 31275, 31288, 31316, 31548, 31633, 31763, 31764
Philips	31189, 31269, 30189, 30391, 30891, 31089, 31266
Pioneer	31023, 30014, 30150, 30244, 30531, 30630, 31123, 31384, 31935
Polaroid	31508
Polk Audio	30189, 31289
Proscan	31254
RadioShack	31609
RCA	31023, 31609, 31254, 30531, 31074, 31123, 31390 31511
Realistic	31609, 30121, 30186
Revox	30189
Rio	31869
Samsung	31295, 31304, 31500
Sangean	32165
Sansui	31189, 30189, 31089
Sanyo	31251, 31469, 31801
Sharp	30186, 31286
Sharper I mage	31556
Sherwood	30491, 31077, 31653, 31905, 32169
Sherwood Newcastle	32169
Sonic Blue	31869
Sonic Frontiers	31185
Sony	31058, 31441, 31258, 31759, 31622, 30474, 31158 31406, 31558, 31658, 31758, 31822, 31858
Stereophonics	31023
Sunfire	31313
Teac	30463, 31074, 31390, 31528
Technics	31308, 31518, 31633
Thorens	31189
Toshiba	30135, 30842, 31123, 31788
Venturer	31390
Victor	30074
Wards	30189, 30014
XM	31406
Yamaha	31023, 30176, 30186, 30376, 31176, 31276, 31331 31375, 31376, 31476, 31815, 32061
Zenith	30857, 31293

## Setup Codes for Cable Converters A-Mark

A-Mark	00008, 00144
ABC	00237, 00003, 00008
Accuphase	00003
Acorn	00237
Action	00237
Active	00237
ADB	02586
Americast	00899
Amino	01602, 01822
Archer	00237
BCC	00276
Bell South	00899
British Telecom Century	00003
Cisco	01877, 00877, 01982
Clearmaster	00883
ClearMax	00883
Cool Box	00883
Coolmax	00883
Digeo	01187, 02187
Director	00476
Fosgate	00276
GE	00144
General Instrument	00476, 00810, 00276, 00003
Gibralter	00003
GMI	00883
GoldStar	00144
Hamlin	00009, 00273
Hitachi	00003, 00008, 00009
i3 Micro	01602
Insight	00476, 00810
Jerrold	00476, 00810, 00276, 00003
Memorex Mitsubishi	00000
Motorola	01376, 00476, 00810, 00276, 01187, 01106, 01982
Multitech	00883
Myrio	01602, 01822
Nova Vision	00008
Novaplex	00008
Pace	01877, 00877, 00237, 00008, 01982
Panasonic	00000, 00008, 00144, 00107, 01982
Paragon	00000, 00008, 00525
Penney	00000
Philips	01305, 00317
Pioneer	01877, 00877, 00144, 00533
Pulsar	00000
Quasar Partic Charle	00000
RCA RCA	00883
Regal	00276, 00279, 00273
Runco	00000
Samsung	00003, 00144, 01982
Scientific Atlanta	01877, 00877, 00477, 00237, 00003, 00000, 00008,
	01982
Sejin	01602
Sony	01006
Sprucer	00144
Starcom	00003
Supercable Supermax	00276
Supermax Thomson	00883 01256
Torx	00003
Toshiba	00000
Tristar	00883
United Cable	00276, 00003
US Electronics	00276, 00003, 00008
V2	00883
Videoway	00000
Viewmaster	00883
Vision	00883
Vortex View	00883
Zenith	00000, 00525, 00899



## Setup Codes for Cable/PVR Combos

Americast	00899
Amino	01822
Cisco	01877, 01982
Digeo	01187, 02187
General Instrument	00810
Jerrold	00810
Motorola	01376, 00810, 01187, 01106, 01982
Myrio	01822
Pace	01877, 00237, 01982
Pioneer	01877
RCA	01256
Scientific Atlanta	01877, 01982
Sony	01006
Supercable	00276
Thomson	01256
Zenith	00899

Acoustic Research	30420
Aiwa	30157
Arcam	30157
Audio Research	30157
Burmester	30420
Cairn	30157
California Audio Labs	30029
Cambridge Soundworks	30157
Carver	30157
Curtis Mathes	30032
Denon	30034
DKK	30000
DMX Electronics	30157
Fisher	30000
Garrard	30393, 30420
Genexxa	30032
Grundig	30157
Hafler	
Harrier Harman/Kardon	30173
Harman/Kardon Hitachi	30100, 30157, 30173
	30032
nkel	30157, 30180
ntegra	30101
NC .	30032, 30072
Kenwood	30626, 30000, 30029, 30028, 30190
KLH	31318, 31711
Krell	30157
Linn	30157
Vlagnavox	30157, 30038, 30274
Vlarantz	30626, 30029, 30157, 30038, 30180, 30435
Vlatsui	30157
VIcI ntosh	30256, 30290, 30660
MCS	30029
Memorex	30000, 30032, 30420
Micromega	30157
Miro	30000
Mission	30157
Modulaire	30000, 30032, 30087, 30180, 30420
MTC	30420
Vlyryad	30157
NSM	30157
Onkyo	31327, 30101
Optimus	30000, 30032, 30087, 30393, 30420
Panasonic	30029, 30388, 30752
Parasound	30420
Penney	30029
Philips	30626, 30157, 30274
Pioneer	31062, 30032, 31087
Polk Audio	30157
Proceed	30420
Proton	30157
QED	30157
Quad	30157
Quasar	30029
RadioShack	30000, 30032, 30180, 30420
RCA	31062, 30032, 30053, 30420

## Setup Codes for CD Players (continued)

Realistic	30000, 30032, 30087, 30180, 30420
Revox	30157
Roksan	30435
Rotel	30157, 30420
SAE	30157
Sansui	30000, 30157
Sanyo	30000, 30087
Sharp	30180
Sherwood	30180
Sonic Frontiers	30157
Sony	30490, 30000, 30100, 31364, 30185
Sugden	30157
Sylvania	30157
Symphonic	30180
TAG McLaren	30157
Tandy	30032
Tascam	30393, 30420
Teac	30490, 30180, 30393, 30420
Technics	30029
Thule Audio	30157
Victor	30072
Wards	30032, 30157, 30053, 30087
Yamaha	30490, 30036, 31292
Yorx	30000

#### Setup Codes for DVD Players

Setup Codes for DVD Players	
3D LAB	20503, 20539
Accurian	20675, 21072, 21416
Advent	21016
Afreey	20698
Aiwa	20641
Akai	20695, 20705, 20770, 20899, 21089
Alba	20672, 20717
Alco	20790
Allegro	20869
Amphion Media Works	20872
AMW	20872
Apex Digital	20533, 20672, 20717, 20755, 20794, 20796, 20797, 20830, 21004, 21020, 21056, 21061, 21100
Arrgo	21023
Aspire Digital	21168, 21407
Astar	21489
Audiovax	20717, 20790, 21041, 21071, 21072, 21121, 21122
Axion	21071, 21072
B & K	20655, 20662
BBK	21224
Bel Canto Design	21571
Blaupunkt	20717
Blue Parade	20571
Blue Sky	20695
Bose	21895, 22023
Brandt	20651
Broksonic	20695, 20868
California Audio Labs	20490
Celestial	21020
Centrex	20672, 21004
Cinea	20831
CineVision	20876, 20833, 20869
Citizen	21003, 20695, 21277
Clairtone	20571
Coby	20778, 21077, 21086, 21107, 21177
Craig	20831
Creative	20503, 20539
Curtis Mathes	21087
CyberHome	20816, 20874, 21023, 21024, 21117, 21129, 21502, 21537
Cytron	20705
Daewoo	20784, 20705, 20770, 20833, 20869, 21169, 21172, 21234, 21242
Dansai	20770
Daytek	20872
Decca	20770
Denon	20490, 20634, 22258



## Setup Codes for DVD Players (continued)

Setup Codes for DVD Pla	ayers (continued)
Denver	20778
Desay	21407
DigitalMax	21738
Digitrex	20672
Disney	20675, 21270
DiViDo	20705
Dual	20675, 21068, 21085
Durabrand	21127
DVD2000	20521
Electrohome	21003
Emerson	20591, 20675, 20821, 21268
Enterprise	20591
Entivo	20503, 20539
Enzer	20770
ESA	20821, 21268
Firstline	20651
Fisher	20670
Funai	20675, 21268, 21334
Gateway	21073, 21077, 21158
GE	20522, 20815, 20717
Go Video	20573, 20744, 20717, 20715, 20741, 20783, 20833,
	20869, 21044, 21075, 21099, 21158, 21304, 21730
Go Vision	21071, 21072
GoldStar	20741, 20869
Goodmans	20790
Gradiente	20490, 20651
Greenhill	20717
Grundig	20539, 20705
Harman/Kardon	20582, 20702
Hello Kitty	20831
Hitachi	20573, 20664, 21247
Hiteker	20672
Humax	21500, 21588
iLo	21348
Initial	20717
Insignia	21268
Integra	20571, 20627, 21769
IRT	20783
JBL	20702
Jensen	21016
JMB	20695
JVC	20558, 20623, 20867, 21164, 21275, 21550
Kawasaki	20790
Kenwood	20490, 20534
KLH	20717, 20790, 21020, 21149
Kloss	20533
Koss	20651, 21061
Lasonic	20627, 20798
Lecson	21533
Lenaxx	21127
LG	20591, 20741, 20869
LiteOn	21058, 21158, 21416, 21440, 21656, 21738
Loewe	20511, 20741
Logix	20783
Magnasonic	20651, 20675
Magnavox	20503, 20539, 20646, 20675, 20821, 21268, 21354,
gi iuvon	20505, 20539, 20646, 20673, 20621, 21266, 21354, 21506
Marantz	20503, 20539, 20675
McIntosh	21533, 21273
Medion	20651
Memorex	20695, 20831, 21270
Microsoft	20522, 22083
Minato	20752
Mintek	20839, 20717
Mitsubishi	21521, 20521
NAD	20741
Naiko	20770
NEC	20785, 20869
Nesa	20717
NexxTech	21402
Norcent	
	21003, 20872, 21107, 21265
Onkyo	20503, 20627, 21769
Орро	20575, 21224
Optimus	20571

## Setup Codes for DVD Players (continued)

•	
Oritron	20651
Palsonic	20672
Panasonic	20503, 20490, 20571, 20632, 20703, 21362, 21462, 21490, 21641, 21762
Philco	20675
Philips	20503, 20539, 20646, 20675, 20854, 21260, 21267, 21340, 21354, 22056, 22084
PianoDisc	21024
Pioneer	20525, 20571, 20142, 20631, 20632, 21460, 21512, 21571
Polaroid	21020, 21061, 21086
Palk Audio	20539
Portland	20770
Presidian	20675, 21072, 21738
Prima	21016
Proceed Proscan	20672 20522
ProVision	20778
Qwestar	20651
Radionette	20741
RadioShack	20571
RCA	20522, 20571, 20717, 20790, 20822, 21022, 21132, 21769
Realistic	20571
Reoc	20752
Rio	20869
Rotel	20623, 21178
Rowa	20823, 21004
Samo	20651 20698, 20752
Sampo Samsung	20698, 20752 20490, 20573, 20744, 20199, 20820, 20899, 21044,
Sansang	21075
Sansui	20695
Sanyo	20670, 20675, 20695, 20873, 21334
Schneider	20783
Schwaiger	20752
Sensory Science	21158
Sharp	20630, 20675, 20752, 21256, 22250 21117
Sharper I mage Sherwood	20770, 21043, 21077
Sherwood Newcastle	21077
Shinsonic	20533, 20839
Slim Art	20784
Sonic Blue	20573, 20715, 20783, 20869, 21099
Sony	20533, 21533, 20864, 21033, 21070, 21431, 21516
Sova	21122
Superscan	20821
SVA 6. h ===i=	20717
Sylvania Symphonic	20675, 20821, 21268 20675, 20821, 21268, 21334
Tatung	20075, 20821, 21208, 21334
Teac	20571, 20717, 20790
Technics	20490, 20703
Technika	20770
Terapin	21031
Tevion	20651
Theta Digital	20571
Thomson	20522, 20511
Tivo	21503, 21512, 21588
Toshiba	20503, 20573, 20539, 20695, 21045, 21154, 21503, 21510, 21588, 21769
Unimax	20770
Universum	20591
Urban Concepts	20503, 20539
US Logic V	20839 21064, 21226
Venturer	20790
Vizio	21064, 21226
Xbox	20522, 22083
Xbox Yamaha	20522, 22083 20490, 20539, 20545
Yamaha	20490, 20539, 20545
Yamaha Yamakawa	20490, 20539, 20545 20872



## Setup Codes for DVD Players (Blu Ray and HD-DVD)

Denon	22258	
Integra	21769	
LG	20741	
Microsoft	22083	
Onkyo	21769	
Panasonic	21641	
Philips	22084	
Pioneer	20142	
RCA	21769	
Samsung	20199	
Sharp	22250	
Sony	21516	
Toshiba	21769	
Xbox	22083	

## Setup Codes for DVD/PVR Combos Controlled by the DVD

Go Video	21730
Humax	21500, 21588
LG	20741
Panasonic	20490
Philips	21340
Pioneer	20631, 21512
RCA	20522
Sharp	21256
Sony	21033, 21070
Sylvania	20675
Tivo	21512
Toshiba	21503, 21510, 21588

## **Setup Codes for Home Automation**

Accutek	31215
Amana	31716
Bionaire	30846, 31215, 31861
Da-Lite	31794
Draper	32190
Frigidaire	31333
GE	30240
GoldStar	31537
Holmes	31215
Kenmore	31537
Lasko	30846, 31890
LG	31537
Lightolier	30184
Lutron	30597, 30318, 31239, 31597
Marmitek	30167
One For All	30167
PCS	30184
RadioShack	30240
Screen Research	32097
Security System	30167
Sharper I mage	30846
SmartLinc	30184
Universal	30167
Universal X10	30167
Whirlpool	31332
Windmere	31215
X10	30167

## Satellite Receivers and DVR/PVR Systems Setup Codes for Satellite Receivers

AlphaStar Bell ExpressVu	00772
	00775, 01170
Chaparral	
Coolsat	01806
Crossdigital	01109
DirecTV	01377, 00392, 00566, 00639, 01639, 01142, 00247, 00749, 01749, 00819, 01856, 01076, 01108, 000 01109, 01392, 01414, 01442, 01443, 01444, 016
Dish Network System	01505, 00775, 01170, 01775
Dishpro	01505, 00775, 01775
Echostar	01505, 00775, 01170, 01775
Expressvu	00775, 01775
Fortec Star	01821
Funai	01377
GE	00392, 00566
General Instrument	00869
GOI	00775, 01775
Hitachi	00749, 00819
Houston	00775
HTS	00775, 01775
Hughes Network Systems	01142, 00749, 01749, 01442, 01443, 01444
Humax	01790
Innova	00099
Jerrold	00869
JVC	
	00775, 01170, 01775
LG	01226, 01414
Magnavox	00722
McIntosh	00869
Mitsubishi	00749
Motorola	00869
Netsat	00099
Next Level	00869
Panasonic	00247, 00701
Pansat	01807
Philips	01142, 00749, 01749, 00775, 00819, 01076, 00722, 00099, 01442
Primestar	00869
Proscan	00392, 00566
RadioShack	00566, 00775, 00869
RCA	00392, 00566, 01142, 00775, 00855, 00143, 01392, 01442
Samsung	01377, 01142, 01276, 01108, 01109, 01442, 01609
SKY	00099
Sony	00639, 01639, 01640
Star Choice	00869
Star Trak	00772, 00869
Thomson	00392, 00566
Tivo	01142, 01442, 01443, 01444
Toshiba	00749, 01749, 00790, 01285
UltimateTV	01392, 01640
Ultrasat	01806
Uniden	00722
Voom	00869
Zenith	01856
Zunut	01000



## **Setup Codes for TVs**

Setup Codes for TVs	
A-Mark	10047, 10054
Accurian	11803
Accuscan	10047
Action	10030, 10873
Admiral Advent	10047, 10054, 10017, 10051, 10093, 10463, 10180
	10761, 10783, 10815, 10817, 10842
Adventuri	10000
Agna Aiko	10092
Akai	
	10060, 10812, 10702, 10030, 10145, 10056, 10672, 11675, 11676, 11935
Albatron Alfide	10700, 10843
Alleron	10672
Ambassador	10150, 10177
America Action	10130, 10177
American High	10000, 10060
Ampro	10751
Amstrad	10171, 10177
Amtron	10000, 10180
Anam	10180
AOC	10180, 10030, 11365
Aomni	11623
Apex Digital	10156, 10748, 10879, 10765, 10767, 10890, 11217
Astar	11531, 11738
Audinac	10180
Audiovox	10451, 10180, 10092, 10623, 10802, 10846, 10875, 11937,
Aventura	11951, 11952
Axion	11937
Baysonic	10180
Beaumark	10017, 10178, 10030
Belcor	10030
Bell & Howell	10054, 10154, 10093
BenQ	11032, 11212, 11315
Boxlight	10893
Bradford	10180
Brockwood	10178, 10030, 10056
Broksonic	10236, 10463, 10180, 10177, 11935
Byd:sign	11309
Candle	10030, 10056
Capehart	10017, 10178, 10030, 10092
Carnivale	10030
Carver	10054
Celebrity	10000
Celera	10765
Changhong	10156, 10765, 10767, 10783
Cineral	10451, 10092
Citek	10047
Citizen	10054, 10000, 10451, 10463, 10180, 10060, 10030, 10171,
	10092, 10056, 11935
Clarion	10180
Classic	10030, 10092, 10056
Colortyme	10047, 10054, 10017, 10060, 10178, 10030
Commercial Solutions	11447, 10047
Concerto	10056
Conic	10178
Contec	10180
Craig	10180, 10171
Crosley	10054, 10000, 10180, 10030, 10171
Crown	10093, 10180, 10056, 10672
Crown Mustang	10672
Curtis Mathes	10047, 10054, 10154, 10000, 10051, 10451, 10093, 10180, 10060, 10702, 10178, 10030, 10145, 10166, 10056, 10466,
CXC	11147, 11347
Cytron Daewoo	11326 10451, 10178, 10092, 11661, 11756, 10623, 10661, 10672,
Posterio	11755
Dayton	10092
Daytron	10178, 10030, 10092, 10056
Dell	11080, 11178, 11264, 11403, 11863
Denon District Life	10145
Digital Life	10872
Dream Vision	11164
Dumont	10017, 10180, 10178
Durabrand	10463, 10180, 10178, 10171, 11034
Dwin	10093, 10720, 10774
Dynex	11463, 11780, 11785, 11810
Eaton	10060

## Setup Codes for TVs (continued)

Electroband	10000
Electrograph	11623, 11755
Electrohome	10154, 10000, 10463, 10150, 10178, 10030, 10056
Emerald	10178, 10177
Emerson	10047, 10154, 10451, 10236, 10463, 10180, 10150, 10178, 10171, 10177, 10623, 11394, 11963
Emprex	11422
Envision	10030, 10813, 11365
Epson	10833, 10840
ESA	10812, 10171, 11963
Fisher	10054, 10154, 10000
Fortress	10093
Fujitsu	10683, 10809, 10853
Funai	10000, 10180, 10171, 11271, 11963
Futuretech	10180
Gateway	11756, 11755
GE	11447, 10047, 10000, 10051, 10451, 10060, 10178, 10030,
	11147, 11347
Gemini	10047
Gibralter	10017, 10000, 10030
Go Video	10886
Go Vision	11937
GoldStar	10047, 10054, 10178, 10030, 10056, 11154
Gradiente	10053, 10056
Grundig	10706, 10672, 10683
Grundy	10180
Grunpy	10180
Haier	11034
Hallmark	10236, 10180, 10178
Hannspree	11348, 11351, 11745
Harley Davidson	10000, 10180, 10060, 10178, 10030
Harman/Kardon	10054
Harvard	10180
Havermy	10093
Heathkit	10017
Helios	10865
HelloKitty	10451
Hewlett Packard	11494, 11502, 11642
Hisense	10748
Hitachi	10047, 10054, 10017, 10000, 10051, 11145, 10145, 10056, 11445, 11643
HP	11494, 11502, 11642
	10849, 10865, 11219, 11294
Lo	11286, 11603, 11684, 11990
ma	10236, 10180, 10178
nfinity	10054
nFocus	11164
nitial	11603, 11990
	·
nsignia	10171, 11204, 11326, 11517, 11564, 11641, 11710, 11780, 11963, 12002
nteq	10017, 10145
BL	10054
ICB	10000
lensen	10761, 10815, 10817
lL .	10030
lutan VC	10030
	10054, 10053, 10030, 10650, 10731, 11253, 11774
Kamp	10017, 10180
Kawasho	10030
/FC	
	10180, 10060
Kenwood	10180, 10030
Kenwood KLH	10180, 10030 10156, 10180, 10765, 10767
Kenwood KLH Kloss	10180, 10030 10156, 10180, 10765, 10767 10030
Kenwood KLH Kloss Konka	10180, 10030 10156, 10180, 10765, 10767 10030 10180, 10720
Kenwood KLH Kloss Konka KTV	10180, 10030 10156, 10180, 10765, 10767 10030 10180, 10720 10463, 10180, 10030
Kenwood KLH Kloss Konka KTV	10180, 10030 10156, 10180, 10765, 10767 10030 10180, 10720 10463, 10180, 10030 10154
Kenwood KLH Kloss Konka KTV	10180, 10030 10156, 10180, 10765, 10767 10030 10180, 10720 10463, 10180, 10030 10154 10054, 11265, 10060, 10178, 10030, 10056, 10700, 10856,
Kenwood KLH Kloss Konka KTV Lark	10180, 10030 10156, 10180, 10765, 10767 10030 10180, 10720 10463, 10180, 10030 10154 10054, 11265, 10060, 10178, 10030, 10056, 10700, 10856, 11154, 11178, 11423, 11993
Kenwood KLH Kloss Konka KTV Lark LG	10180, 10030 10156, 10180, 10765, 10767 10030 10180, 10720 10463, 10180, 10030 10154 10054, 11265, 10060, 10178, 10030, 10056, 10700, 10856, 11154, 11178, 11423, 11993 10236, 10180, 10030, 10056
Kenwood KLH Kloss Konka KTV Lark LG Lloyd's	10180, 10030 10156, 10180, 10765, 10767 10030 10180, 10720 10463, 10180, 10030 10154 10054, 11265, 10060, 10178, 10030, 10056, 10700, 10856, 11154, 11178, 11423, 11993 10236, 10180, 10030, 10056
Kenwood KLH Kloss Konka KTV Lark Logfs Llojd's Luxman	10180, 10030 10156, 10180, 10765, 10767 10030 10180, 10720 10463, 10180, 10030 10154 10054, 11265, 10060, 10178, 10030, 10056, 10700, 10856, 11154, 11178, 11423, 11993 10236, 10180, 10030, 10056 10236, 10180, 10056
Kenwood KLH Kloss Konka KTV Lark Logfs Llojd's Luxman	10180, 10030 10156, 10180, 10765, 10767 10030 10180, 10720 10463, 10180, 10030 10154 10054, 11265, 10060, 10178, 10030, 10056, 10700, 10856, 11154, 11178, 11423, 11993 10236, 10180, 10030, 10056 10236, 10180, 10056 10056 10047, 10054, 10017, 10154, 10000, 10156, 10051, 10093,
Kenwood KLH Kloss Konka KTV aarkG Lloyd's Loyd's Luxman	10180, 10030  10156, 10180, 10765, 10767  10030  10180, 10720  10463, 10180, 10030  10154  10054, 11265, 10060, 10178, 10030, 10056, 10700, 10856, 11154, 11178, 11423, 11993  10236, 10180, 10030, 10056  10236, 10180, 10056  10047, 10054, 10017, 10154, 10000, 10156, 10051, 10093, 10060, 10053, 10171, 10166, 10056
KEC Kenwood KLH KKH KKloss Konka KTV Lark LG Lloyds Logik Luxman LXI Magnasonic Magnavox	10180, 10030 10156, 10180, 10765, 10767 10030 10180, 10720 10463, 10180, 10030 10154 10054, 11265, 10060, 10178, 10030, 10056, 10700, 10856, 11154, 11178, 11423, 11993 10236, 10180, 10030, 10056 10236, 10180, 10056



## Setup Codes for TVs (continued)

Marantz	10017
	11454, 10054, 10030, 10704, 10855, 11154, 11398
Vlatsui	10056, 10177
Vlatsushita	10250, 10051, 10650
Vlaxent	11756, 10762, 11211, 11714, 11755, 11757
Vlegapower	10700
Megatron	10047, 10178, 10145, 10056
Memorex	10154, 10463, 10180, 10150, 10178, 10030, 10056
MGA	10150, 10178, 10030
MGN Technology	10178
Vicro Genius	10150
Midland	10047, 10017, 10051, 10056
/lintek	
	11603, 11990
/litsubishi	10154, 10093, 11250, 10150, 10178, 10030, 10836, 10868, 11392
Monivision	10700, 10843
Votorola	10054, 10051, 10093, 10150
MTC	
	10180, 10060, 10030, 10092, 10056
Multitech	10180
VAD	10156, 10178, 10166, 10056, 10866, 11156
NEC	10047, 10178, 10030, 10056, 10497, 10704, 10882, 11398,
LaT\/	11704
NetTV	10762, 11755
NewTech	10056
likko	10178, 10030, 10092
li kkodo	10178, 10030, 10092
lishi	10030
Vorcent	10748, 10824, 11365
lorwood Micro	11286
ITC	10092
lyon	10000
Nevia	
	11144, 11240, 11331, 11610
Onwa	10180
Optimus	10154, 10250, 10093, 10180, 10150, 10178, 10030, 10166, 10056, 10650
Data	11348
Optoma	
Optonica	10093
Orion	10017, 10236, 10463, 10180, 10178, 11463, 10177
Pace	10092
Panasonic	10054, 10000, 10156, 10250, 10051, 10236, 10030, 10650,
	11291, 11310, 11410, 11480, 11941
Panda	10706
Paxonic	10060, 10030
CE	10156, 10060
Penney	10047, 10000, 10156, 10250, 10051, 10060, 10178, 10030,
	10056, 11347
Petters	11523
Philco	10054, 10463, 10030, 10145
Philips	11454, 10054, 10030, 10171, 10056, 10690, 11154, 11254,
	11744, 11867
Pilot	10051, 10060, 10178, 10030, 10056
	10051, 10060, 10178, 10030, 10056 10166, 10679, 10866, 11260, 11398, 11457
Pioneer	
Pioneer Planar	10166, 10679, 10866, 11260, 11398, 11457 11496
Pioneer Planar	10166, 10679, 10866, 11260, 11398, 11457
Pioneer Planar Polarcid	10166, 10679, 10866, 11260, 11398, 11457 11496 10765, 10865, 11276, 11314, 11326, 11328, 11341, 11523,
Pioneer Planar Polaroid Portland	10166, 10679, 10866, 11260, 11398, 11457 11496 10765, 10865, 11276, 11314, 11326, 11328, 11341, 11523, 11766, 12002 10451, 10092
rioneer Irlanar Polaroid Portland Precision	10166, 10679, 10866, 11260, 11398, 11457 11496 10765, 10865, 11276, 11314, 11326, 11328, 11341, 11523, 11766, 12002 10451, 10092 10236, 10180, 10177
Pioneer Polarar Polaroid Portland Precision Prima	10166, 10679, 10866, 11260, 11398, 11457 11496 10765, 10865, 11276, 11314, 11326, 11328, 11341, 11523, 11766, 12002 10451, 10092 10236, 10180, 10177 10761, 10783, 10815, 10817, 11785
Pioneer Planar Portland Precision Prima	10166, 10679, 10866, 11260, 11398, 11457 11496 10765, 10865, 11276, 11314, 11326, 11328, 11341, 11523, 11766, 12002 10451, 10092 10236, 10180, 10177 10761, 10783, 10815, 10817, 11785 10700, 10717
Pioneer Planar Portland Precision Prima Princeton	10166, 10679, 10866, 11260, 11398, 11457 11496 10765, 10865, 11276, 11314, 11326, 11328, 11341, 11523, 11766, 12002 10451, 10092 10236, 10180, 10177 10761, 10783, 10815, 10817, 11785 10700, 10717 10250, 10051
Pianer Planar Polaroid Portland Precision Prima Princeton	10166, 10679, 10866, 11260, 11398, 11457 11496 10765, 10865, 11276, 11314, 11326, 11328, 11341, 11523, 11766, 12002 10451, 10092 10236, 10180, 10177 10761, 10783, 10815, 10817, 11785 10700, 10717
Pianer Planar Polaroid Portland Precision Prima Prima Prissm	10166, 10679, 10866, 11260, 11398, 11457 11496 10765, 10865, 11276, 11314, 11326, 11328, 11341, 11523, 11766, 12002 10451, 10092 10236, 10180, 10177 10761, 10783, 10815, 10817, 11785 10700, 10717 10250, 10051
Planar Potarcid Portland Precision Prima Princeton Prism Proscan	10166, 10679, 10866, 11260, 11398, 11457  11496  10765, 10865, 11276, 11314, 11326, 11328, 11341, 11523, 11766, 12002  10451, 10092  10236, 10180, 10177  10761, 10783, 10815, 10817, 11785  10700, 10717  10250, 10051  11447, 10047, 10466, 11347
Pioneer Polariar Polarid Portland Portland Prinse Prinse Prinsecton Prism Proscan Proton	10166, 10679, 10866, 11260, 11398, 11457  11496  10765, 10865, 11276, 11314, 11326, 11328, 11341, 11523, 11766, 12002  10451, 10092  10236, 10180, 10177  10761, 10783, 10815, 10817, 11785  10700, 10717  10250, 10051  11447, 10047, 10466, 11347  10178, 10466
Picineer Polariar Polarcid Portland Portland Prinise Prinise Princeton Prism Proscan Proton	10166, 10679, 10866, 11260, 11398, 11457  11496  10765, 10865, 11276, 11314, 11326, 11328, 11341, 11523, 11766, 12002  10451, 10092  10236, 10180, 10177  10761, 10783, 10815, 10817, 11785  10700, 10717  10250, 10051  11447, 10047, 10466, 11347  10178, 10466  10017, 10092  10178, 10092
Planar Polarcid Portland Portland Portision Prima Princeton Priss Proscan Poton Pulsar Pulsar	10166, 10679, 10866, 11260, 11398, 11457  11496  10765, 10865, 11276, 11314, 11326, 11328, 11341, 11523, 11766, 12002  10451, 10092  10236, 10180, 10177  10700, 10717  10250, 10051  11447, 10047, 10466, 11347  10178, 10466  10017, 10092  10138, 10092  10150, 10178
Pioneer Pilanar Polarcid Portland Portland Portland Princeton Prism Proscan Porton Pulsar Pulsar Questr	10166, 10679, 10866, 11260, 11398, 11457  11496  10765, 10865, 11276, 11314, 11326, 11328, 11341, 11523, 11766, 12002  10451, 10092  10236, 10180, 10177  10761, 10783, 10815, 10817, 11785  10700, 10717  10250, 10051  11447, 10047, 10466, 11347  10178, 10466  10017, 10092  10178, 10092  10150, 10178  10250, 10051, 10650
Pioneer Polariar Polarid Portland Precision Prima Princeton Prism Proscan Proton Pulsar Pulser Quartz Quasar	10166, 10679, 10866, 11260, 11398, 11457  11496  10765, 10865, 11276, 11314, 11326, 11328, 11341, 11523, 11766, 12002  10451, 10092  10236, 10180, 10177  10700, 10717  10250, 10051  11447, 10047, 10466, 11347  10178, 10466  10017, 10092  10138, 10092  10150, 10178
Pioneer Polariar Polarid Portland Precision Prima Princeton Prism Proscan Proton Pulsar Pulser Quartz Quasar	10166, 10679, 10866, 11260, 11398, 11457  11496  10765, 10865, 11276, 11314, 11326, 11328, 11341, 11523, 11766, 12002  10451, 10092  10236, 10180, 10177  10761, 10783, 10815, 10817, 11785  10700, 10717  10250, 10051  11447, 10047, 10466, 11347  10178, 10466  10017, 10092  10178, 10092  10150, 10178  10250, 10051, 10650
Planar Planar Portland Precision Prima Princeton Priss Proton Proton Pulsar Questr Questr Rabbit RadioShack	10166, 10679, 10866, 11260, 11398, 11457  11496  10765, 10865, 11276, 11314, 11326, 11328, 11341, 11523, 11766, 12002  10451, 10092  10236, 10180, 10177  10761, 10783, 10815, 10817, 11785  10700, 10717  10250, 10051  11447, 10047, 10466, 11347  10178, 10466  10017, 10092  10178, 10092  10178, 10092  10178, 10092  10178, 10095  10047  10047, 10154, 10180, 10150, 10178, 10030, 10056  11447, 10047, 10054, 10004, 100051, 10093, 10178, 12002,
Pioneer Polariar Polaroid Portland Presision Prima Princeton Prism Proscan Proton Pulsar Pulsar Pulsar RadioShack	10166, 10679, 10866, 11260, 11398, 11457  11496  10765, 10865, 11276, 11314, 11326, 11328, 11341, 11523, 11766, 12002  10451, 10092  10236, 10180, 10177  10761, 10783, 10815, 10817, 11785  10700, 10717  10250, 10051  11447, 10047, 10466, 11347  10178, 10466  10017, 10092  10178, 10092  10178, 10092  10178, 10095  10047  10047, 10154, 10180, 10150, 10178, 10030, 10056  11447, 10047, 10047, 10054, 10000, 10051, 10093, 10178, 12002, 11958, 11781, 11547, 11347, 11047, 11
Polarian Polarian Portland Portland Portland Princeton Prism Proscan Proton Pulsar Pulsar Quartz Quasar Rabbit RadioShack	10166, 10679, 10866, 11260, 11398, 11457  11496  10765, 10865, 11276, 11314, 11326, 11328, 11341, 11523, 11766, 12002  10451, 10092  10236, 10180, 10177  10761, 10783, 10815, 10817, 11785  10700, 10717  10250, 10051  11447, 10047, 10466, 11347  10178, 10466  10017, 10092  10178, 10092  10178, 10092  10178, 10051  10447  10047, 10154, 10180, 10150, 10178, 10030, 10056  11447, 10047, 10054, 10000, 10051, 10093, 10178, 12002, 11958, 11781, 11547, 11347, 11247, 11147, 11047, 10679, 10090
Polarian Polarian Portland Portland Portland Princeton Prism Proscan Proton Pulsar Pulsar Quartz Quasar Rabbit RadioShack	10166, 10679, 10866, 11260, 11398, 11457  11496  10765, 10865, 11276, 11314, 11326, 11328, 11341, 11523, 11766, 12002  10451, 10092  10236, 10180, 10177  10761, 10783, 10815, 10817, 11785  10700, 10717  10250, 10051  11447, 10047, 10466, 11347  10178, 10466  10017, 10092  10178, 10092  10178, 10092  10178, 10095  10047  10047, 10154, 10180, 10150, 10178, 10030, 10056  11447, 10047, 10047, 10054, 10000, 10051, 10093, 10178, 12002, 11958, 11781, 11547, 11347, 11047, 11
Picneer Planar Polaroid Portland Presision Prima Princeton Prism Procon Procon Polar Polar Polar Rabist RadioShack RCA	10166, 10679, 10866, 11260, 11398, 11457  11496  10765, 10865, 11276, 11314, 11326, 11328, 11341, 11523, 11766, 12002  10451, 10092  10236, 10180, 10177  10761, 10783, 10815, 10817, 11785  10700, 10717  10250, 10051  11447, 10047, 10466, 11347  10178, 10466  10017, 10092  10178, 10092  10178, 10092  10178, 10051  10447  10047, 10154, 10180, 10150, 10178, 10030, 10056  11447, 10047, 10047, 10054, 10000, 10051, 10093, 10178, 12002, 11958, 11781, 11547, 11347, 11247, 11147, 11047, 10679, 10090
Planar Polaroid Portland Precision Prima Princeton Prissm Procsan Proton Pulsar Pulsar Rabiot RadioShack RACA Realistic RevolutionHD	10166, 10679, 10866, 11260, 11398, 11457  11496  10765, 10865, 11276, 11314, 11326, 11328, 11341, 11523, 11766, 12002  10451, 10092  10236, 10180, 10177  10761, 10783, 10815, 10817, 11785  10700, 10717  10250, 10051  11447, 10047, 10466, 11347  10178, 10466  10017, 10092  10178, 10092  10178, 10092  10150, 10178  10250, 10051, 10650  10047  10047, 10154, 10180, 10150, 10178, 10030, 10056  11447, 10047, 10054, 10000, 10051, 10093, 10178, 12002, 11958, 11781, 11547, 11347, 11247, 11147, 11047, 10679, 10090  10047, 10154, 10180, 10150, 10178, 10030, 10056
Pilot Pioneer Pioneer Pioneer Pioneer Pioneer Pioneer Polaraid Percision Percision Perina Perinae Perinae Percision	10166, 10679, 10866, 11260, 11398, 11457  11496  10765, 10865, 11276, 11314, 11326, 11328, 11341, 11523, 11766, 12002  10451, 10092  10236, 10180, 10177  10761, 10783, 10815, 10817, 11785  10700, 10717  10250, 10051  11447, 10047, 10466, 11347  10178, 10466  10017, 10092  10178, 10092  10150, 10178  10250, 10051, 10650  10047  10047, 10154, 10180, 10150, 10178, 10030, 10056  11447, 10047, 10054, 10000, 10051, 10093, 10178, 12002, 11958, 11781, 11547, 11347, 11247, 11147, 11047, 10679, 10090  10047, 10154, 10180, 10150, 10178, 10030, 10056  11623  10017, 10060, 10030, 10497, 10603, 11292, 11398, 11629
Planar Planar Polaroid Portland Portland Princeton Prism Proscan Protoco Pulsar RadioShack RCA Realistic RevolutionHD Runco Ranpo	10166, 10679, 10866, 11260, 11398, 11457  11496  10765, 10865, 11276, 11314, 11326, 11328, 11341, 11523, 11766, 12002  10451, 10092  10236, 10180, 10177  10761, 10783, 10815, 10817, 11785  10700, 10717  10250, 10051  11447, 10047, 10466, 11347  10178, 10466  10017, 10092  10150, 10178  10250, 10051, 10650  10047, 10154, 10180, 10150, 10178, 10030, 10056  11447, 10047, 10054, 10000, 10051, 10093, 10178, 12002, 11958, 11781, 11547, 11347, 11247, 11147, 11047, 10679, 10090  10047, 10154, 10180, 10150, 10178, 10030, 10056  11623  10017, 10060, 10030, 10497, 10603, 11292, 11398, 11629  10047, 10030, 11756, 10762, 11755
Planar Planar Polaroid Portland Portland Princeton Prism Proscan Protoco Pulsar RadioShack RCA Realistic RevolutionHD Runco Ranpo	10166, 10679, 10866, 11260, 11398, 11457  11496  10765, 10865, 11276, 11314, 11326, 11328, 11341, 11523, 11766, 12002  10451, 10092  10236, 10180, 10177  10761, 10783, 10815, 10817, 11785  10700, 10717  10250, 10051  11447, 10047, 10466, 11347  10178, 10466  10017, 10092  10178, 10092  10150, 10178  10250, 10051, 10650  10047  10047, 10154, 10180, 10150, 10178, 10030, 10056  11447, 10047, 10054, 10000, 10051, 10093, 10178, 12002, 11958, 11781, 11547, 11347, 11247, 11147, 11047, 10679, 10090  10047, 10154, 10180, 10150, 10178, 10030, 10056  11623  10017, 10050, 10030, 10497, 10603, 11292, 11398, 11629  10047, 10030, 11756, 10762, 11755  10047, 10034, 1007, 10154, 10060, 10812, 10702, 10178, 10007, 10054, 10071, 10154, 10180, 10150, 10178, 10030, 10056
Planer Planer Planer Polaroid Portland Presision Prima Prima Princeton Procean Proton Pulsar Pulsar Rabbit RadioShack RCA Realistic RevolutionHD Runco Sampoo	10166, 10679, 10866, 11260, 11398, 11457  11496  10765, 10865, 11276, 11314, 11326, 11328, 11341, 11523, 11766, 12002  10451, 10092  10236, 10180, 10177  10761, 10783, 10815, 10817, 11785  10700, 10717  10250, 10051  11447, 10047, 10466, 11347  10178, 10466  10017, 10092  10178, 10092  10178, 10092  10178, 10092  10150, 10178  10250, 10051, 10650  10047  10047, 10154, 10180, 10150, 10178, 10030, 10056  11447, 10047, 1054, 10100, 10178, 10293, 10178, 12002, 11958, 11781, 11547, 11347, 11247, 11147, 11047, 10679, 10090  10047, 10154, 10180, 10150, 10178, 10030, 10056  11623  10017, 10060, 10030, 10497, 10603, 11292, 11398, 11629  10047, 10034, 10017, 10154, 10760, 101812, 10702, 10178, 10047, 10030, 11756, 10762, 11755  10047, 10034, 10017, 10154, 10160, 101812, 10702, 10178, 10030, 10056, 10587, 10766, 10814, 11060, 11575
Planar Planar Polaroid Portland Precision Prima Princeton Prissm Procean Proton Pulsar Auliser Quartz Quartz Quasar Rabbit RadioShack RCA Realistic RevolutionHD	10166, 10679, 10866, 11260, 11398, 11457  11496  10765, 10865, 11276, 11314, 11326, 11328, 11341, 11523, 11766, 12002  10451, 10092  10236, 10180, 10177  10761, 10783, 10815, 10817, 11785  10700, 10717  10250, 10051  11447, 10047, 10466, 11347  10178, 10466  10017, 10092  10178, 10092  10150, 10178  10250, 10051, 10650  10047  10047, 10154, 10180, 10150, 10178, 10030, 10056  11447, 10047, 10054, 10000, 10051, 10093, 10178, 12002, 11958, 11781, 11547, 11347, 11247, 11147, 11047, 10679, 10090  10047, 10154, 10180, 10150, 10178, 10030, 10056  11623  10017, 10050, 10030, 10497, 10503, 11292, 11398, 11629  10047, 10054, 10030, 10497, 10603, 11292, 11398, 11629  10047, 10030, 11756, 10762, 11755  10047, 10054, 10017, 10154, 10080, 10812, 10702, 10178, 10047, 10054, 1007, 10154, 10080, 10812, 10702, 10718, 10047, 10054, 1007, 10154, 10080, 10812, 10702, 10718, 10047, 10054, 10017, 10154, 10080, 10812, 10702, 10718, 10047, 10054, 10017, 10154, 10080, 10812, 10702, 10718, 10047, 10054, 10017, 10154, 10080, 10812, 10702, 10718, 10047, 10054, 10017, 10154, 10080, 10812, 10702, 10718, 10047, 10054, 10017, 10154, 10080, 10812, 10702, 10718, 10047, 10054, 10017, 10154, 10080, 10812, 10702, 10718, 10047, 10054, 10017, 10154, 10080, 10812, 10702, 10718, 10047, 10054, 10017, 10154, 10080, 10812, 10702, 10718, 10047, 10054, 10017, 10154, 10080, 10812, 10702, 10718, 10047, 10054, 10017, 10154, 10080, 10812, 10702, 10718, 10047, 10054, 10017, 10154, 10080, 10812, 10702, 10718, 10047, 10054, 10017, 10154, 10080, 10812, 10702, 10718, 10047, 10054, 10017, 10154, 10080, 10812, 10702, 10718, 10047, 10054, 10017, 10154, 10080, 10812, 10702, 10718, 10047, 10054, 10017, 10154, 10080, 10812, 10702, 10718, 10047, 10054, 10017, 10154, 10080, 10812, 10702, 10718, 10047, 10054, 10017, 10154, 10080, 10812, 10702, 10718, 10047, 10054, 10017, 10154, 10080, 10812, 10702, 10718, 10047, 10054, 10047, 10054, 10047, 10054, 10047, 10054, 10047, 10054, 10047, 10054, 10047, 10054, 10047, 10054, 10047, 10054, 10047, 10054, 10047, 10054, 10047, 10054, 1004

#### Setup Codes for TVs (continued)

Setup Codes for TVs (continued)	
Saville	10060
Sceptre	10878, 11217, 11360, 11599
Scotch	10178
Scott	10236, 10180, 10178, 10030, 10177, 11711
Sears	10047, 10054, 10017, 10154, 10000, 10156, 10051, 10093,
61	10060, 10053, 10178, 10030, 10171, 10166, 10056
Seleco	11351
Sharp	10054, 10093, 10180, 10491, 10688, 10689, 10818, 10851, 11602
Sheng Chia	10093
Shivaki	10178
Siemens	10145
Signature	10047, 10093, 10030
Simpson	10178, 10030
Singer	10060, 10092
Solar Drape	10000
Sole	10813, 11623
Sony	10017, 10154, 11100, 10000, 10150, 10053, 10834, 11685
Soundesign	10180, 10178, 10056
Sova	11952
Soyo	11520, 11826
Spectravision	10156, 10178
Squareview	10171
SR2000	10154, 10171
SSS	10180
Starlite	10236, 10180
Studio Experience	10843
Superscan	10093, 10864
Supreme	10000
SV2000	10054
SVA	10748, 10587, 10865, 10870, 10871, 10872
Sylvania	10047, 10054, 10154, 10000, 10051, 10178, 10030, 10171,
	10092, 10056, 11271, 11314, 11394, 11864, 11963
Symphonic =	10000, 10180, 10178, 10171
Syntax	11144, 11240, 11331, 11610
Tandy	10093
Tatung =	10000, 10051, 11756, 11286
Teac	10154, 10706, 10689
Technics	10054, 10250, 10051
Technovax	10030
Techview	10847, 12004
Techwood	10250, 10051, 10060, 10056
Teco	11040
Teknika	10054, 10463, 10180, 10150, 10060, 10178, 10092, 10056
Telecolor	10017
Telefunken	10702, 10056
Thomas	10047, 10178, 10056
Therese	
	11447, 10047
TMK	10236, 10180, 10178, 10056, 10177
TMK TNG	10236, 10180, 10178, 10056, 10177 10017
TMK TNCi Tocom	10236, 10180, 10178, 10056, 10177 10017 10156
TMK TNCI Tocom Toshiba	10236, 10180, 10178, 10056, 10177 10017 10156 10154, 11256, 10156, 10150, 11265, 10060, 11145, 10145, 10166, 12006, 11935, 11704, 11656, 11635, 11524, 1135 11164, 11156, 10845, 10832, 10822, 10650
TMK TNCI Tocom Toshiba	10236, 10180, 10178, 10056, 10177 10017 10156 10154, 11256, 10156, 10150, 11265, 10060, 11145, 10145, 10166, 12006, 11935, 11704, 11656, 11635, 11524, 1135 11164, 11156, 10845, 10832, 10822, 10650 10051
TMK TNCI Tocom Toshiba Totevision Toyomenka	10236, 10180, 10178, 10056, 10177 10017 10156 10154, 11256, 10156, 10150, 11265, 10060, 11145, 10145, 10166, 12006, 11935, 11704, 11656, 11635, 11524, 1135 11164, 11156, 10845, 10832, 10822, 10650 10051 10178
TMK TNCi Tocom Toshiba Totevision Toyomenka Truetone	10236, 10180, 10178, 10056, 10177 10017 10156 10154, 11256, 10156, 10150, 11265, 10060, 11145, 10145, 10166, 12006, 11935, 11704, 11656, 11635, 11524, 1135 11164, 11156, 10845, 10832, 10822, 10650 10051
TMK TNCI Tocom Toshiba  Totevision Toyomenka Truetone TruTech	10236, 10180, 10178, 10056, 10177 10017 10156 10154, 11256, 10156, 10150, 11265, 10060, 11145, 10145, 10166, 12006, 11935, 11704, 11656, 11635, 11524, 1135 11164, 11156, 10845, 10832, 10822, 10650 10051 10178 10250, 10051
TMK TNCI Tocom Toshiba  Totevision Toyomenka Truetone TruTech TVS	10236, 10180, 10178, 10056, 10177 10017 10156 10154, 11256, 10156, 10150, 11265, 10060, 11145, 10145, 10166, 12006, 11935, 11704, 11656, 11635, 11524, 1135 11164, 11156, 10845, 10832, 10822, 10650 10051 10178
TMK TNCI Tocom Toshiba  Totevision Toyomenka Truetone TruTech TVS Ultra	10236, 10180, 10178, 10056, 10177 10017 10156 10154, 11256, 10156, 10150, 11265, 10060, 11145, 10145, 10166, 12006, 11935, 11704, 11656, 11635, 11524, 1135 11164, 11156, 10845, 10832, 10822, 10650 10051 10178 10250, 10051 11723 10463
TMK TNCI Tocom Toshiba  Totevision Toyomenka Truetone TruTech TVS	10236, 10180, 10178, 10056, 10177  10017  10156  10154, 11256, 10150, 10150, 11265, 10060, 11145, 10145, 10166, 12006, 11935, 11704, 11656, 11635, 11524, 1135, 11164, 11156, 10845, 10832, 10822, 10650  10051  10178  10250, 10051  11723  10463
TMK TNCI Tocom Toshiba  Totevision Toyomenka Truetone TruTech TVS Ultra Universal	10236, 10180, 10178, 10056, 10177 10017 10156 10154, 11256, 10156, 10150, 11265, 10060, 11145, 10145, 10166, 12006, 11935, 11704, 11656, 11635, 11524, 1135 11164, 11156, 10845, 10832, 10822, 10650 10051 10178 10250, 10051 11723 10463
TMK TNCi Tocom Toshiba  Totevision Toyomenka Truetone TruTech TVS Ultra Universal Universum US Logic	10236, 10180, 10178, 10056, 10177  10017  10156  10154, 11256, 10156, 10150, 11265, 10060, 11145, 10145, 10166, 12006, 11935, 11704, 11656, 11635, 11524, 1135  11164, 11156, 10845, 10832, 10822, 10650  10051  10178  10250, 10051  11723  10463  10092  10047  10177
TMK TNCI Tocom Toshiba  Totevision Toyomenka Truetone TruTech TVS Ultra Universal Universum US Logic V	10236, 10180, 10178, 10056, 10177  10017  10156  10154, 11256, 10156, 10150, 11265, 10060, 11145, 10145, 10166, 12006, 11935, 11704, 11656, 11635, 11524, 1135, 11164, 11156, 10845, 10832, 10822, 10650  10051  10178  10250, 10051  11723  10463  10092  10047  10177  11286  11756, 10864, 10885, 11755
TMK TNCI Tocom Toshiba  Totevision Toyomenka Truetone TruTech TVS Ultra Universal Universum US Logic V Vector Research	10236, 10180, 10178, 10056, 10177  10017  10156  10154, 11256, 10156, 10150, 11265, 10060, 11145, 10145, 10166, 12006, 11935, 11704, 11656, 11635, 11524, 1135, 11164, 11156, 10845, 10832, 10822, 10650  10051  10178  10250, 10051  11723  10463  10092  10047  10177  11286  11756, 10864, 10885, 11755  10030
TMIK TNCI Tocom Toshiba  Totevision Toyomenka Truetone TruTech TVS Ultra Universal Universum US Logic V Vector Research	10236, 10180, 10178, 10056, 10177 10017 10156 10154, 11256, 10156, 10150, 11265, 10060, 11145, 10145, 10166, 12006, 11935, 11704, 11656, 11635, 11524, 1135 11164, 11156, 10845, 10832, 10822, 10650 10051 10178 10250, 10051 11723 10463 10092 10047 10177 11286 11756, 10864, 10885, 11755 10030 10053
TMK TNCi Tocom Toshiba  Totevision Toyomenka Truetone TruTech TVS Ultra Universal Universum US Logic V Vector Research Victor	10236, 10180, 10178, 10056, 10177  10017  10156  10154, 11256, 10156, 10150, 11265, 10060, 11145, 10145, 10166, 12006, 11935, 11704, 11656, 11635, 11524, 1135, 11164, 11156, 10845, 10832, 10822, 10650  10051  10178  10250, 10051  11723  10463  10092  10047  10177  11286  11756, 10864, 10885, 11755  10030  10053  10054, 11292, 11398, 11629
TMIK TNG Tocom Toshiba  Totevision Toyomenka Trutetone TruTech TVS Ultra Universal Universum US Logic V Vector Research	10236, 10180, 10178, 10056, 10177 10017 10017 10156 10154, 11256, 10156, 10150, 11265, 10060, 11145, 10145, 10166, 12006, 11935, 11704, 11656, 11635, 11524, 1135 11164, 11156, 10845, 10832, 10822, 10650 10051 10178 10250, 10051 11723 10463 10092 10047 10177 11286 11756, 10864, 10885, 11755 10030 10054, 11292, 11398, 11629 10178 10857, 10864, 10885, 11330, 11578, 11627, 11640, 11755,
TMIK TNG Tocom Toshiba  Totevision Toyomenka Trutetone TruTech TVS Ultra Universul Us Logic V Vector Research Victor Vidikron Videch Viewsonic	10236, 10180, 10178, 10056, 10177 10017 10156 10154, 11256, 10156, 10150, 11265, 10060, 11145, 10145, 10166, 12006, 11935, 11704, 11656, 11635, 11524, 1135 11164, 11156, 10845, 10832, 10822, 10650 10051 10178 10250, 10051 11723 10463 10092 10047 10177 11286 11756, 10864, 10885, 11755 10030 10053 10053 10054 10059, 11292, 11398, 11629 10178 10857, 10864, 10885, 11330, 11578, 11627, 11640, 11755, 12014
TMIK TNG Tocom Toshiba  Totevision Toyomenka Truetone TruTech TVS Ultra Universul Universul Us Logic V Vector Research Victor Vidikron Videsch Viewsonic	10236, 10180, 10178, 10056, 10177 10017 10017 10156 10154, 11256, 10156, 10150, 11265, 10060, 11145, 10145, 10166, 12006, 11935, 11704, 11656, 11635, 11524, 1135 11164, 11156, 10845, 10832, 10822, 10650 10051 10178 10250, 10051 11723 10463 10092 10047 10177 11286 11756, 10864, 10885, 11755 10030 10053 10054, 11292, 11398, 11629 10178 10857, 10864, 10885, 11330, 11578, 11627, 11640, 11755, 12014
TMIK TNCI Tocom Toshiba  Totevision Toyomenka Truetone TruTech TVS Ultra Universal Universal Universum US Logic V Vector Research Victor Vidikron Videch Viewsonic Viking Viore	10236, 10180, 10178, 10056, 10177 10017 10017 10156 10154, 11256, 10156, 10150, 11265, 10060, 11145, 10145, 10166, 12006, 11935, 11704, 11656, 11635, 11524, 1135, 11164, 11156, 10845, 10832, 10822, 10650 10051 10178 10250, 10051 11723 10463 10092 10047 10177 11286 11756, 10864, 10885, 11755 10030 10053 10054, 11292, 11398, 11629 10178 10857, 10864, 10885, 11330, 11578, 11627, 11640, 11755, 12014
Tocom Toshiba  Totevision Toyomenka Truetone TruTech TVS Ultra Universal Universum US Logic V Vector Research Victor Vidikron Videch Viewsonic Viking Viore	10236, 10180, 10178, 10056, 10177 10017 10156 10154, 11256, 10156, 10150, 11265, 10060, 11145, 10145, 10166, 12006, 11935, 11704, 11656, 11635, 11524, 1135, 11164, 11156, 10845, 10832, 10822, 10650 10051 10178 10250, 10051 11723 10463 10092 10047 10177 11286 11756, 10864, 10885, 11755 10030 10053 10054, 11292, 11398, 11629 10178 10857, 10864, 10885, 11330, 11578, 11627, 11640, 11755, 12014 10060 11684 11756, 11758, 10864, 10885, 11755
TMIK TNCI Tocom Toshiba  Totevision Toyomenka Truetone TruTech TVS Ultra Universal Universal Universum US Logic V Vector Research Victor Vidikron Videch Viewsonic Viking Viore	10236, 10180, 10178, 10056, 10177 10017 10156 10154, 11256, 10156, 10150, 11265, 10060, 11145, 10145, 10166, 12006, 11935, 11704, 11656, 11635, 11524, 1135 11164, 11156, 10845, 10832, 10822, 10650 10051 10178 10250, 10051 11723 10463 10092 10047 10177 11286 11756, 10864, 10885, 11755 10030 10054, 11292, 11398, 11629 10178 10857, 10864, 10885, 11330, 11578, 11627, 11640, 11755, 12014 10060 11684 11756, 11758, 10864, 10885, 11755 10047, 10054, 10758, 10864, 10885, 11755
TMIK TNCI Tocom Toshiba  Totevision Totroeinin Toyomenka Truetone TruTech TVS Ultra Universal Universal Universum US Logic V Vector Research Victor Vidikron Vidikron Vidikech Viewsonic Viking Viore Vizzo Viore Vizzo Wards	10236, 10180, 10178, 10056, 10177 10017 10017 10156 10154, 11256, 10156, 10150, 11265, 10060, 11145, 10145, 10166, 12006, 11935, 11704, 11656, 11635, 11524, 1135 11164, 11156, 10845, 10832, 10822, 10650 10051 10178 10250, 10051 11723 10463 10092 10047 10177 11286 11756, 10864, 10885, 11755 10030 10053 10053 10054 11292, 11398, 11629 10178 10857, 10864, 10885, 11330, 11578, 11627, 11640, 11755, 12014 10060 11684 11756, 11758, 10864, 10885, 11755 10047, 10054, 10071, 10154, 10000, 10051, 10093, 10236, 10178, 10030, 10166, 10056, 10866, 11156
TMIK TNCI Tocom Toshiba  Totevision Topomenka Truetone TruTech TVS Ultra Universal Universal Universal Victor Victor Victor Vidikron Vidikron Viking Viore Vizio Wards	10236, 10180, 10178, 10056, 10177 10017 10017 10156 10154, 11256, 10156, 10150, 11265, 10060, 11145, 10145, 10166, 12006, 11935, 11704, 11656, 11635, 11524, 1135 11164, 11156, 10845, 10832, 10822, 10650 10051 10178 10250, 10051 11723 10463 10092 10047 10177 11286 11756, 10864, 10885, 11755 10030 10053 10053 10054 1178 10857, 10864, 10885, 11330, 11578, 11627, 11640, 11755, 12014 10060 11684 11756, 11758, 10864, 10885, 11755 10047, 10054, 10017, 10154, 10000, 10051, 10093, 10236, 10178, 10030, 10166, 10056, 10866, 11156
TMIK TNCI Tocom Toshiba  Totevision Toyonenka Trutone TruTech TVS Ultra Universal Universum US Logic V Vector Research Victor Vidikron Vidikron Vidikron Visiting Viore Vizio Wards Wards Waycon Welton	10236, 10180, 10178, 10056, 10177 10017 10017 10156 10154, 11256, 10156, 10150, 11265, 10060, 11145, 10145, 10166, 12006, 11935, 11704, 11656, 11635, 11524, 1135 11164, 11156, 10845, 10832, 10822, 10650 10051 10178 10250, 10051 11723 10463 10092 10047 10177 11286 11756, 10864, 10885, 11755 10030 10053 10053 10054, 11292, 11398, 11629 10178 10857, 10864, 10885, 11330, 11578, 11627, 11640, 11755, 12014 10060 11684 11756, 11758, 10864, 10885, 11755 10047, 10050, 11758, 10664, 10886, 11755 10047, 10050, 11758, 10664, 10886, 11755 10077, 10054, 10017, 10154, 10000, 10051, 10093, 10236, 10178, 10030, 10166, 10056, 10866, 11156
TMIK TNCI Tocom Toshiba  Totevision Topomenka Truetone TruTech TVS Ultra Universal Universal Universal Victor Victor Victor Vidikron Vidikron Viking Viore Vizio Wards	10236, 10180, 10178, 10056, 10177 10017 10017 10156 10154, 11256, 10156, 10150, 11265, 10060, 11145, 10145, 10166, 12006, 11935, 11704, 11656, 11635, 11524, 1135 11164, 11156, 10845, 10832, 10822, 10650 10051 10178 10250, 10051 11723 10463 10092 10047 10177 11286 11756, 10864, 10885, 11755 10030 10053 10053 10054 1178 10857, 10864, 10885, 11330, 11578, 11627, 11640, 11755, 12014 10060 11684 11756, 11758, 10864, 10885, 11755 10047, 10054, 10017, 10154, 10000, 10051, 10093, 10236, 10178, 10030, 10166, 10056, 10866, 11156



## Setup Codes for TVs (continued)

World	10451, 10236, 10463, 10180
Wyse	11365
XR-1000	10154, 10180, 10171
Yamaha	10030, 10769, 10833, 10839, 11526
Yorx	10030
Zenith	10047, 10017, 10000, 10093, 10463, 11265, 10812, 10178, 10030, 11145, 10145, 10171, 10092

## Setup Codes for TV/DVD Combination Controlled by the DVD

oona onou by ano bib	
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

## Controlled by the TV

Accurian	11803
Akai	11675, 11935
Audiovox	11937, 11951, 11952
Axion	11937
Broksonic	11935
Citizen	11935
Dynex	11810
Emerson	11394, 11963
ESA	11963
Funai	11963
iLo	11990
Initial	11990
Insignia	11963, 12002
LG	11993
Magnavox	11866, 11963, 11990
Maxent	11714
Mintek	11990
Panasonic	11941
Polaroid	11523, 11766, 12002
RCA	11958, 12002
Sansui	11935
Sova	11952
Sylvania	11394, 11864, 11963
Techview	12004
Toshiba	11524, 11635, 11935, 12006

## Setup Codes for TV/VCR Combination Controlled by the TV

America Action	10180
Audiovax	10180
Emerson	10236
Controlled by the VCR	
Broksonic	20479, 21479
Citizen	21278
Curtis Mathes	21035
Daewoo	21278
Emerson	20479, 20593, 21278, 21479
Funai	20000
GE	20807, 21035, 21060
GoldStar	21237
Harley Davidson	20000
Hitachi	20000
LG	21037
Lloyd's	20000
Magnasonic	20593, 21278
Magnavox	20000, 20593, 21781
Memorex	20162, 21037, 21162, 21237, 21262
Mitsubishi	20807
Optimus	20162, 20593, 21162, 21262
Orion	20479, 21479
Panasonic	20162, 21035, 21162, 21262
Penney	21035, 21237
Quasar	20162, 21035, 21162
RadioShack	20000, 21037
RCA	20807, 21035, 21060
Samsung	21014
Sansui	20000, 20479, 21479
Sears	20000, 21237
Sony	20000, 21232
Sylvania	21781
Symphonic	20000, 20593
Thomas	20000
Toshiba	20845, 21145

## Setup Codes for TV/VCR/DVD Combination Controlled by the DVD

Akai	20899
Broksonic	20868
Emerson	20821
ESA	20821
Funai	21334
Magnavox	20821
Panasonic	21362, 21462
RCA	21132
Sharp	20630
Superscan	20821
Sylvania	20821
Symphonic	20821
Toshiba	21045

20000, 20479, 21479

## Controlled by the VCR

Zenith

controlled by the volt	
Sharn	20807



## Setup Codes for VCRs

Setup Codes for VCRs	20077 20000 20046
A-Mark ABS	20037, 20000, 20046
Accurian	21972
Admiral	20060, 20048, 20039, 20209, 20479
Adventura	2000, 20048, 20039, 20209, 20479
Aiwa	20037, 20000
Alba	20209
Alienware	21972
Allegro	20039
American High	20035, 20081
Amstrad	20000
Astra	20035
Audiovox	20037, 20038
Avis	20000
Bell & Howell	20035, 20048, 20039, 20000, 20046, 20479
Broksonic	20184, 20121, 20209, 20479, 21479
Calix	20037
Candle	20037, 20038
Canon	20035
Carver	20035, 20081
Citizen	20035, 20061
Classic	20037 20060, 20035, 20045
Colortyme	
Colt	20000
Craig	20037
Criterion	20000
Crosley	20035, 20081, 20000, 20149
Curtis Mathes	20060, 20035, 20162, 20000, 21035
Cyber Power	21972
Daewoo	20037, 20045, 20046, 21278
Daytron	20037
Dell	21972
Denon	20081, 20042
DirecTV	20739
Dual	20000
Durabrand	20039, 20038
Dynatech	20000
Electrohome	20060, 20037, 20000, 20043, 20209
Electrophonic	20037
Emerald	20184, 20121
Emerex	20032
Emerson	20037, 20184, 20000, 20121, 20043, 20209, 20479, 20593, 21278, 21479, 21593
Fisher	20393, 21276, 21479, 21393
Fuji	* * *
	20035, 20033
Funai	
	20037, 20000, 20593, 21593
Garrard	20000
GE Gateway	21972
GE	20060, 20035, 20048, 20000, 20149, 20807, 21035, 21060
Gemini	20060
Genexa	20000
Go Video	20614
GoldStar	20035, 20037, 20039, 20000, 20038, 21237
Goodmans	20037, 20081, 20000
Gradiente	20000
Granada	20000
Grundig	20081, 20042
Harley Davidson Harman/Kardon	20000 20081, 20038
Headquarter	
i reauqual tel	20046
Haudott Dackard	21072
Hewlett Packard	21972
HI-Q	20035, 20000
HI-Q Hitachi	20035, 20000 20035, 20037, 20045, 20000, 20042, 20089
HI-Q Hitachi Howard Computers	20035, 20000 20035, 20037, 20045, 20000, 20042, 20089 21972
HI-Q Hitachi Howard Computers HP	20035, 20000 20035, 20037, 20045, 20000, 20042, 20089 21972 21972
HI-Q Hitachi Howard Computers HP Hughes Network Systems	20035, 20000 20035, 20037, 20045, 20000, 20042, 20089 21972 21972 20042, 20739
HI-Q Hitachi Howard Computers HP Hughes Network Systems Humax	20035, 20000 20035, 20037, 20045, 20000, 20042, 20089 21972 21972 20042, 20739
HI-Q Hitachi Howard Computers HP Hughes Network Systems Humax Hush	20035, 20000 20035, 20037, 20045, 20000, 20042, 20089 21972 21972 20042, 20739 20739 21972
HI-Q Hitachi Howard Computers HP Hughes Network Systems Humax Hush Hytek	20035, 20000 20035, 20037, 20045, 20000, 20042, 20089 21972 21972 20042, 20739 20739 21972 20000
HI-Q Hitachi Howard Computers HP Hughes Network Systems Humax Hush	20035, 20000 20035, 20037, 20045, 20000, 20042, 20089 21972 21972 20042, 20739 20739 21972

## **Setup Codes for VCRs (continued)**

Setup Codes for VCRs (continued)	
Jensen	20067
JVC	20067, 21162
KEC	20037
Kenwood	20067, 20038, 20046
Kodak	20035, 20037
KTV	20000
LG	20037, 20038, 21037
Linksys	21972
Lloyd's	20000, 20038
Loewe	20081
Logik	20000
Luxor	20046
LXI	20037, 20000, 20042, 20067
Magnasonic	20037, 20000, 20593, 21278
Magnavox	20035, 20037, 20048, 20039, 20081, 20000, 20149, 20563, 20593, 20618, 21593, 21781
Marantz	20035, 20081, 20038
Marta	20037
Matsui	20037, 20209
Matsushita	
	20035, 20162, 20081, 21162
Media Center PC	21972
MEI	20035
Memorex	20035, 20162, 20037, 20048, 20039, 20000, 20209, 20046, 20479, 21037, 21162, 21237, 21262
Metz	20037
MGA	20060, 20043
Microsoft	21972
Mind	21972
Minolta	20042
Mitsubishi	20060, 20048, 20000, 20042, 20067, 20043, 20807
Motorola	20035, 20048
MTC	20000
MTX	20000
Multitech	20039, 20000
NEC	20067, 20038
Nikko	20037
Nikkodo	20037
Niveus Media	21972
Northgate	21972
Olympus	20035, 20162
Optimus	21062, 20035, 20162, 20037, 20048, 20000, 20593,
	21162, 21262
Orion	20184, 20000, 20121, 20209, 20479, 21479
Panama	20035
Panasonic	21062, 20035, 20162, 20000, 20225, 20614, 20616,
	21035, 21162, 21262
Penney	20035, 20162, 20037, 20081, 20000, 20042, 20067,
	20038, 21035, 21237
Pentax	20042
Philco	20035, 20081, 20000, 20209, 20479
Philips	20035, 20162, 20048, 20081, 20045, 20000, 20209,
PIL :	20616, 20618, 20739, 21081, 21181
Pilot	20037
Pioneer	20162, 20081, 20042, 20067
Polk Audio	20081
Presidian	21593
Proscan	20060, 21060
Protec	20000
Pulsar	20039
Quarter	20046
Quartz	20035, 20046
Quasar	20035, 20162, 21035, 21162
RadioShack	20035, 20162, 20037, 20048, 20000, 20046, 21037,
	21162
Radix	20037
Randex	20037
RCA	20060, 20035, 20048, 20045, 20000, 20042, 20149,
D. P. C.	20807, 20880, 21035, 21060
Realistic	20035, 20162, 20037, 20048, 20000, 20121, 20046,
Develop TV	21162
ReplayTV	20614, 20616
Ricavision	21972
Runco	20039
Samsung	20060, 20045, 20000, 20038, 20739, 21014
Sanky	20048, 20039
Sansui	20000, 20067, 20209, 20479, 21479



## Setup Codes for VCRs (continued)

Sanyo	20000, 20046, 20479
Scott	20184, 20045, 20121, 20043
Sears	20060, 20035, 20162, 20037, 20048, 20039, 20033, 20045, 20000, 20042, 20067, 20043, 20209, 20044, 21237
Sharp	20048, 20032, 20000, 20807, 20848
Shintom	20039, 20000
Siemens	20037
Signature	20060, 20035, 20037, 20048, 20000, 20149, 20046, 20479
Singer	20037
Sonic Blue	20614, 20616
Sonographe	20046
Sony	20035, 20032, 20033, 20000, 20067, 20046, 20636, 21032, 21232, 21972
Soundmaster	20000
Stack 9	21972
STS	20042
SV2000	20000
SVA	20000
Sylvania	20035, 20081, 20000, 20043, 20593, 21593, 21781
Symphonic	20000, 20593, 21593
Systemax	21972
Tagar Systems	21972
Tandy	20000
Tashiko	20037
Tatung	20048, 20081, 20000, 20067
Теас	20000, 20067
Technics	20035, 20162, 20037, 20000
Teknika	20035, 20037, 20000
Tevion	20479
Thomas	20000
Thomson	20060
Tivo	20618, 20636, 20739, 21996
TMK	20000
TNIX	20037
Toshiba	20045, 20000, 20043, 20209, 20845, 21008, 21145, 21972, 21996
Totevision	20037
Touch	21972
Trix	20037
Ultra	20045
Vector	20045
Vector Research	20184, 20038
Victor	20067
Video Concepts	20045
Videomagic	20037
Videosonic	20000
Viewsonic	21972
Villain	20000
Voodoo	21972
Wards	20060, 20035, 20037, 20048, 20081, 20033, 20045, 20000, 20042, 20043, 20038, 20149, 20046, 2047
Wharfedale	20593
White Westinghouse	20000, 20209, 20479
World	20209, 20479
XR-1000	20035, 20000
Yamaha	20038
Zenith	20037, 20039, 20033, 20000, 20209, 20479, 21479
ZT Group	21972

## **Setup Codes for Video Accessories**

2Wire	02045
ABS	01272
Access HD	02185
Accurian	01653
Alienware	01272
Amino	01481
AT&T	00858, 02045
Buffalo	01739
CASTi	02305
CyberPower	01272
D-Link	01554, 01731, 02186
Digital Stream	02303
Epson	01563
Gateway	01272
Hewlett Packard	01272, 01267
Howard Computers	01272
HP	01272, 01267
Hush	01272
ibuypower	01272
Insignia	01415
KoolConnect	01481
LG	01415
Linksys	01272, 01365
Media Center PC	01272
Microsoft	01272, 02049
Mind	01272
Motorola	00858, 01363, 01998
Netgear	02036
Niveus Media	01272
Northgate	01272
Panasonic	01120
Pioneer	01010
Ricavision	01272
Roku	01486
Samsung	01190, 01490
Scientific Atlanta	00858
Sensory Science	01126
Sharp	01010
SMC	01456
Sony	01272, 01324, 01364
Stack 9	01272
SureWest	01481
Sylvania	01563
Systemax	01272
Tagar Systems	01272
Toshiba	01272
Touch	01272
Viewsonic	01272, 01329
Vizio	
	01126
Voodoo VUDU	01272
Xbox	02298
ALX IX	02049
Zenith ZT Group	01415 01272



## **Specifications**

Design and specifications are subject to change without notice.

Analog standard	NTSC
Digital standard	ATSC, 8-VSB, Clear-QAM
Screen	52-inch
Channel coverage	VHF: 2-13 UHF: 14-69 CATV: Mid band - A-8 ~ A-1, A ~ I Super band - J ~ W Hyper band - AA ~ ZZ, AAA, BBB Ultra band - 65 ~ 94, 100 ~ 135
Power source	AC 100-240 V ~ 50-60 Hz, 4.0 A
Power consumption	<350 W with TV on <1 W in standby mode
Audio power	10 W + 10 W internal speaker
S-Video input	Y:1 V (p-p), 75 ohm, negative sync C:0.286 V (p-p) (burst signal), 75 ohm
Video/audio input	Video:1 V (p-p), 75 ohm, negative sync Audio:500 mV (rms)
Component input	Y:1 V (p-p), 75 ohm, including sync Pr/Cr:±0.35 V (p-p), 75 ohm Pb/Cb:±0.35 V (p-p), 75 ohm Audio:500 mV (rms) Suggested resolutions:1080i, 720p, 480p, 480i
HDMI input	3 HDMI input terminals HDCP compliant E-EDID compliant Suggested scan rates:1080p, 1080i, 720p, 480p, 480i
VGA input	D-Sub 15-pin terminal E-EDID compliant Suggested scan rates:640×480 /60 Hz, 800×600 /60 Hz, 1024×768 /60 Hz, 1920×1080 /60 Hz Audio input: Headphone mini-jack for stereo
Accessories	Power cord User guide Quick start guide Remote control VGA cable PC audio cable Batteries (2 AA)

## Legal notices

### FCC Part 15

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

This equipment has been tested and found to comply within 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 technician for help.

#### **Modifications**

The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by Insignia may void the user's authority to operate the equipment.

#### Cables

Connections to this device must be made with shielded cables with metallic RF/EMI connector hoods to maintain compliance with FCC Rules and Regulations.

#### Canadian notice

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

#### Avis Canadian

Cat apparel numerous de la classed B respected toutes les exigencies du règlement sur le materiel brouilleur du Canada

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## Dolby



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## **One-Year Limited Warranty**

Insignia Products ("Insignia") warrants to you, the original purchaser of this new **NS-LCD52HD-09** ("Product"), that the Product shall be free of defects in the original manufacture of the material or workmanship for a period of one (1) year from the date of your for a period of one (1) year from the date of your purchase of the Product ("Warranty Period"). This Product must be purchased from an authorized dealer of Insignia brand products and packaged with this warranty statement. This warranty does not cover refurbished Product. If you notify Insignia during the Warranty Period of a defect covered by this warranty that requires service, terms of this warranty apply.

## How long does the coverage last?

The Warranty Period lasts for 1 year (365 days) from the date you purchased the Product. The purchase date is printed on the receipt you received with the Product.

## What does this warranty cover?

During the Warranty Period, if the original manufacture of the material or workmanship of the Product is determined to be defective by an authorized Insignia repair center or store personnel, Insignia will (at its sole option): (1) repair the Product with new or rebuilt parts; or (2) replace the Product at no charge with new or rebuilt comparable products or parts. Products and parts replaced under this warranty become the property of rebuilt comparable products or parts. Products and parts replaced under this warranty become the property of Insignia and are not returned to you. If service of Products or parts are required after the Warranty Period expires, you must pay all labor and parts charges. This warranty lasts as long as you own your Insignia Product during the Warranty Period. Warranty coverage terminates if you sell or otherwise transfer the Product.

## How to obtain warranty service?

If you purchased the Product at a retail store location, take your original receipt and the Product to the store you purchased it from. Make sure that you place the Product in its original packaging or packaging that provides the same amount of protection as the original packaging. If you purchased the Product from an online web site, mail your original receipt and the Product to the address listed on the web site. Make sure that you put the Product in its original packaging or packaging that provides the same amount of protection as the original

To obtain in-home warranty service for a television with a screen 25 inches or larger, call 1-888-BESTBUY. Call agents will diagnose and correct the issue over the phone or will have an Insignia-approved repair person dispatched to your home.

## Where is the warranty valid?

This warranty is valid only to the original purchaser of the product in the United States, Canada, and Mexico.

## What does the warranty not cover?

This warranty does not cover:

- Customer instruction
- Installation
- Set up adjustments
- Cosmetic damage
- Damage due to acts of God, such as lightning
- Accident
- Misuse
- Abuse
- Negligence
- Commercial use
- Modification of any part of the Product, including
- Plasma display panel damaged by static (non-moving) images applied for lengthy periods

This warranty also does not cover:

- Damage due to incorrect operation or maintenance
- Connection to an incorrect voltage supply
- Attempted repair by anyone other than a facility authorized by Insignia to service the Product

- Products sold as is or with all faults
- Consumables, such as fuses or batteries
- Products where the factory applied serial number has been altered or removed

REPAIR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS YOUR EXCLUSIVE REMEDY. INSIGNIA SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR THE BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON THIS PRODUCT, INCLUDING, BUT NOT LIMITED TO, LOST DATA, LOSS OF USE OF YOUR PRODUCT, LOST BUSINESS OR LOST PROFITS. INSIGNIA PRODUCTS MAKES NO OTHER EXPRESS WARRANTIES WITH RESPECT TO THE PRODUCT, ALL EXPRESS AND IMPLIED WARRANTIES FOR THE PRODUCT, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF AND CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE WARRANTY PERIOD SET FORTH ABOVE AND NO WARRANTIES, WHETHER EXPRESS OR IMPLIED, WILL APPLY AFTER THE WARRANTY PERIOD. SOME STATES, PROVINCES AND JURISDICTIONS DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS, WHICH VARY FROM STATE TO STATE OR PROVINCE TO PROVINCE. TO STATE OR PROVINCE TO PROVINCE.

#### Contact Insignia:

For customer service please call 1-877-467-4289 www.insignia-products.com

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