TOSHIBA

OWNER'S MANUAL

Projection Television

COLORSTREAM® SRS™ by SRS®

Owner's Record

The model number and serial number are on the back of your TV. Record these numbers in the spaces below. Refer to these numbers whenever you communicate with your Toshiba dealer about this TV.

Model number:	50H71
Serial number:	

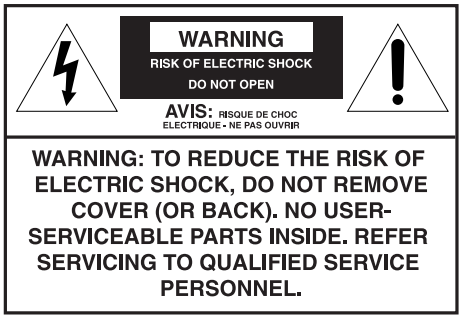
50H71

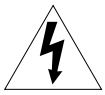
© 2001 TOSHIBA CORPORATION
All Rights Reserved

Important Information

WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.





The lightning symbol in the triangle tells you that the voltage inside this product may be strong enough to cause an electric shock. DO NOT TRY TO SERVICE THIS PRODUCT YOURSELF.

The exclamation mark in the triangle tells you that important operating and maintenance instructions follow this symbol.

CAUTION

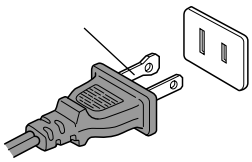
TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS POLARIZED PLUG WITH AN EXTENSION CORD RECEPTACLE OR OTHER OUTLET UNLESS THE PRONGS CAN BE FULLY INSERTED INTO THE OUTLET TO PREVENT ANY EXPOSURE OF THE PRONGS ON THE POLARIZED PLUG.

ATTENTION

POUR PRÉVENIR LES CHOCS ÉLECTRIQUES NE PAS UTILISER CETTE FICHE POLARISÉE AVEC UN PROLONGATEUR, UNE PRISE DE COURANT OU UNE AUTRE SORTIE DE COURANT, SAUF SI LES LAMES PEUVENT ÊTRE INSÉRÉS À FOND SANS EN LAISSER AUCUNE PARTIE À DÉCOUVERT.

CAUTION

The plug has one prong wider than the other and will fit only one way into a standard electrical outlet (120 volt AC, 60 Hz). If the plug does not fit into the outlet, try turning it around. If the plug still does not fit, the outlet is probably non-standard and must be replaced by a qualified electrician. Do not tamper with the plug or try to force it into a non-standard outlet.



Note to CATV system installers in the USA

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

Precautions

Installing your TV

- Place the TV on the floor or on a sturdy platform. The mounting surface should be flat and steady. If you install the TV on a soft floor, make sure that the floor is not damaged by the weight of the TV.
- Place the TV far enough away from the walls to allow proper ventilation. This will prevent the TV from overheating and avoid possible damage to the TV. Avoid dusty areas too.
- Damage may occur if you leave the TV in direct sunlight or near a heater. Avoid areas subject to extremely high temperatures or humidity, and temperatures of 41˚F(5˚C) or lower.

Using your TV

- Do not stand or climb on the TV.
- Do not put any heavy object on top of the TV.
- Do not place containers with liquids such as drinks or cosmetics on the TV. If any foreign material or water leaks into the TV, unplug the AC cord and contact your dealer.
- If the room temperature suddenly rises, condensation may occur on the lenses resulting in picture distortion or color fading. In such a case, simply wait a while (with the power on) and the condensation will evaporate.
- Avoid displaying stationary images on your TV screen for extended periods of time. Stationary patterns generated by a PIP/double-window display, computer displays, video games, stock market reports, etc., can become permanently engrained on the picture tube. This damage is not protected by your warranty because it is the result of misuse. If you wish to use your TV to display still images, reduce brightness and contrast settings. Never leave a PIP/double-window, computer, or video game display unattended.
- Sit approximately 10-25 feet away from the TV. Sitting too far to the left or right of the screen will cause the picture to appear dull as will direct sunlight and room lights. Turn the TV off to check for reflections on the screen. Then remove the source of any reflections while viewing.

Cleaning your TV

- Clean the TV with a soft, dry cloth. Never use strong solvents such as thinner or benzine which might damage the finish of the cabinet. If the cabinet is very dirty, use a damp cloth to wipe the cabinet clean, then finish with a dry cloth.

NOTICE OF POSSIBLE ADVERSE EFFECTS ON TV PICTURE TUBE

Extensive viewing of fixed (non-moving) images or patterns can cause uneven aging of the picture tube, and leave a subtle but permanent ghost image in the picture. This type of damage is **NOT COVERED BY YOUR WARRANTY**. Never leave the TV on and unattended for long periods of time while the following formats or images are displayed:

– **Fixed images**, such as PIP/POP windows, stock tickers, video game patterns, TV station logos, and websites.
– **Special formats** that do not use the entire screen. For example, viewing letterbox style (16:9) media on a normal (4:3) display (bars at top and bottom of screen), or viewing normal (4:3) media on a widescreen (16:9) display (bars on left and right sides of screen).

Introduction **4**
Welcome to Toshiba 4
Exploring your new TV 4

Connecting your TV **5**
Connecting a VCR 5
Connecting a cable converter box 6
Connecting a cable converter box and VCR 6
Connecting a DVD player or satellite receiver and a VCR 7
Connecting a DVD player with component video and a VCR 8
Connecting a DTV receiver/set-top box with component video and a VCR 9
Connecting two VCRs 10
Connecting a camcorder 10
Connecting an audio system 11
Connecting an A/V receiver 11

Using the remote control **12**
Preparing the remote control for use 12
Installing the remote control batteries 12
Using the remote control with a Toshiba VCR or cable TV converter 12
Programming the remote control for use with a non-Toshiba VCR or cable TV converter 13
VCR code table 14
Cable TV converter code table 15
Learning about the remote control 16

Setting up your TV **17**
Learning about the menu system 17
Changing the on-screen display language 18
Selecting the antenna input 18
Adding channels to the TV's memory 19
Programming channels automatically 19
Adding and erasing channels manually 19
Changing channels 20
Adjusting the color convergence 21

Using the TV's features **22**
Adjusting the channel settings 22
Switching between two channels 22
Programming your favorite channels 22
Labeling channels 23
Viewing the wide-screen picture formats 25
Selecting the image shape 25
Watching PIP/double-window 26
Switching the main and sub-pictures 27
Changing the position of the small picture 27
Freezing the sub-picture 27
Using the multi-window feature 28
Using the favorite function 28
Using the strobe function 28
Using the LOCKS menu 29
Entering the PIN code 29
Using the V-CHIP menu 30
ENABLE BLOCKING 30
TV RATING (Independent rating system for broadcasters) 30
MPAA RATING (Independent rating system for movies) 31
BLOCKING OPTION 31
Unlocking programs temporarily 32
Locking channels 32
Locking video inputs 33
Using the front panel lock feature 34
Changing the PIN code 34
Adjusting the picture 35
Selecting the picture mode 35
Adjusting the picture quality 35
Saving new preference 36
Using the flesh tone feature 36
Using the Digital Noise Reduction (DNR) feature ... 36
Selecting the cinema mode 37
Selecting the color temperature 37
Resetting picture adjustments 37
Selecting the video input source 38
Labeling the video input sources 38
Using the closed caption feature 39
Setting the sleep timer 40
Setting the clock 40
Adjusting the sound 41
Muting the sound 41
Selecting stereo/SAP broadcasts 41
Using the SRS 3D surround sound feature 42
Adjusting the sound quality 42
Resetting audio adjustments 43
Using the sub-bass system (SBS) 43
Turning off the built-in speakers 44
Selecting the Audio OUT sound 44
Using the StableSound™ feature 45
Selecting the background of the menu display 45
Displaying on-screen information 45
Viewing the demonstration mode 46
Understanding the auto power off feature 46
Understanding the last mode memory feature 46

Appendix **47**
Specifications 47
Troubleshooting 48
Limited United States Warranty 49

Index **50**

Introduction

Welcome to Toshiba

Congratulations! You have purchased one of the finest projection TVs on the market. The goal of this manual is to guide you through setting up and operating your Toshiba TV as quickly as possible.

Instructions in this manual are based on using the remote control. You can also use the controls on the TV if they have the same name as those on the remote control.

Please read all the safety and operating instructions carefully, and keep the manual for future reference.

Exploring your new TV

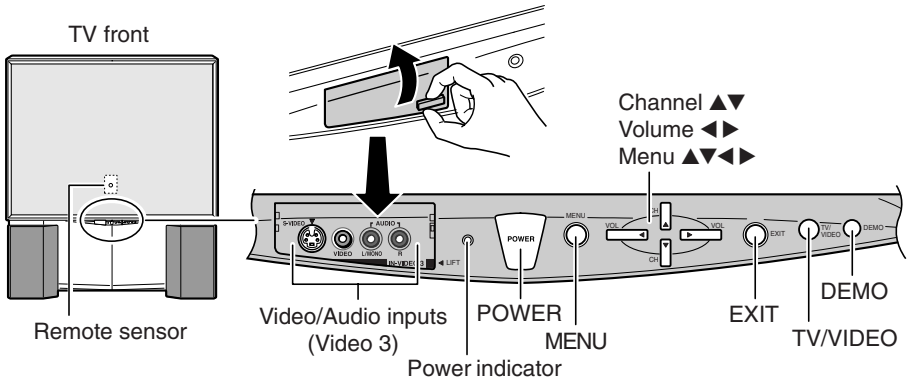
You can operate your TV by using the buttons on the front panel or the remote control. The back panel and front panel (behind the door) provide all the terminal connections you will need to connect other equipment to your TV. See "Connecting your TV" on page 5.

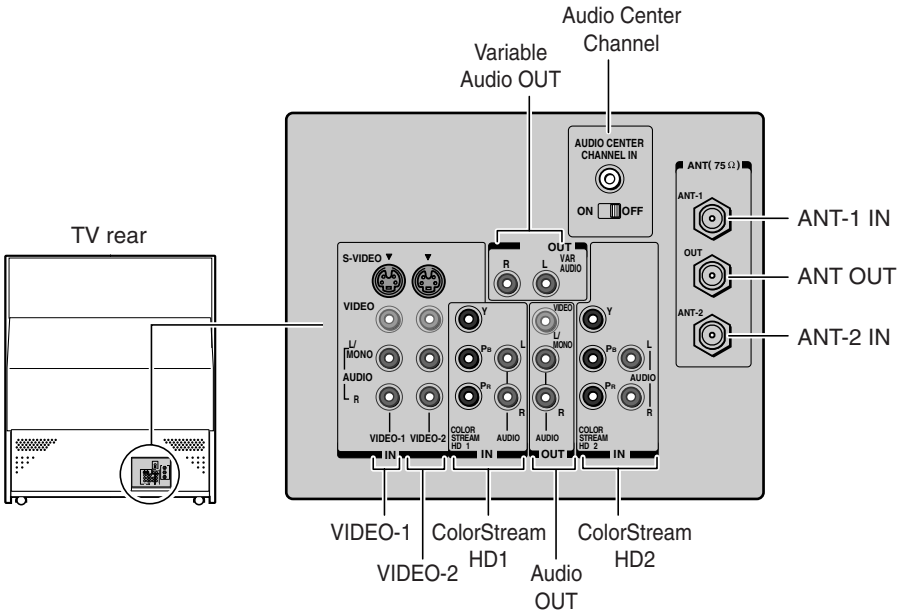
Please Note

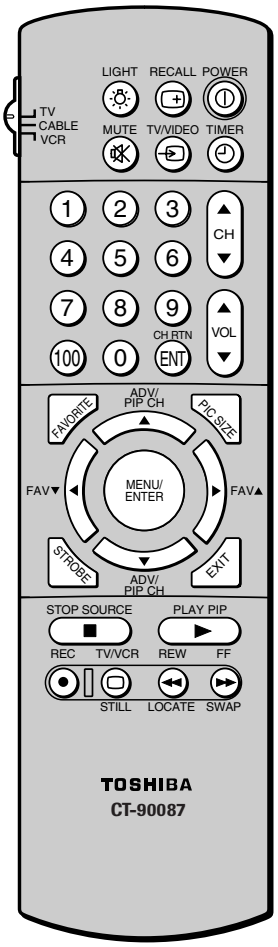
On some models, the SET UP menu automatically appears on-screen the first time the TV is turned on.

To change the menu settings, see "Setting Up Your TV" on page 17 for details.

To close the menu, either press EXIT or turn the TV off.



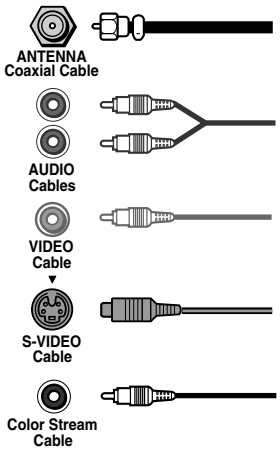




Connecting your TV

If you have not connected electronic equipment before, or you have been frustrated in the past, you may wish to read this section. (Cables are not supplied.)

- A coaxial cable is the standard cable that comes in from your antenna or cable converter box. Coaxial cables use “F” connectors.
- Audio and video cables are usually color-coded according to use: yellow for video and red and white for audio. The red audio cable is for the stereo right channel, and the white audio cable is for the stereo (or mono) left channel. If you look at the rear panel of the TV, you will see that the terminals are color-coded in the same manner as the cables.
- S-video cables provide better picture performance. S-video cables can only be used with S-video compatible components.
- ColorStream® (component video) cables come in sets of three and provide the best picture performance. ColorStream cables can only be used with ColorStream compatible components.



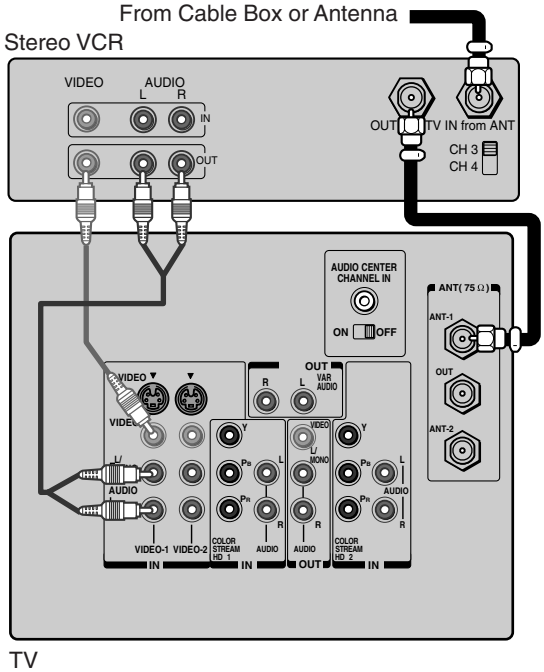
Caution:
Do not plug the TV in until you have finished connecting all of your equipment.

Connecting a VCR

This connection allows you to watch local channels and video programs, play or record on the VCR while watching TV, and record from one channel while watching another channel.

You will need:

- one coaxial cable
- one pair of audio cables (one single audio cable for a mono VCR)
- one video cable (one S-video cable for an S-VHS VCR)



Note:
If you have a mono VCR, connect L/Mono to VCR Audio OUT using only one audio cable.

If you have an S-VHS VCR, use an S-video cable (in the S-video jacks) instead of the regular video cable.

Do not connect a regular video cable and an S-video cable to Video-1 (or Video-2) at the same time.

Connecting a cable converter box

This connection allows you to watch basic and premium cable channels.

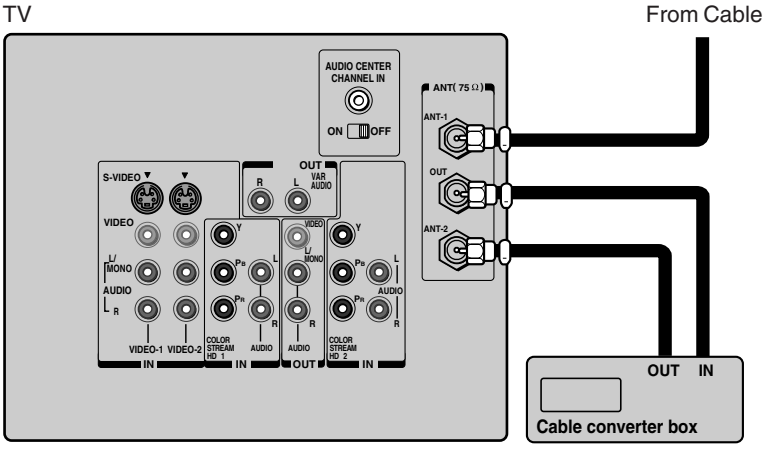
To use the TV's features, select ANT-1. To view premium channels, select ANT-2, tune the TV to channel 3 or 4 (whichever channel is vacant in your area), and use the converter box to change channels.

You will need:

- two coaxial cables

Note:

When you use a converter box with your TV, the remote control will not operate some features,such as programming your favorite channels, labeling channels, and locking channels.



Connecting a cable converter box and VCR

This connection allows you to watch and record basic and premium cable channels, watch videotapes, and record one channel while watching another channel. To use the TV's features, select ANT-1. To view premium channels or record with the VCR, select ANT-2, tune the TV to channel 3 or 4 (whichever channel is vacant in your area), and use the converter box to change channels.

You will need:

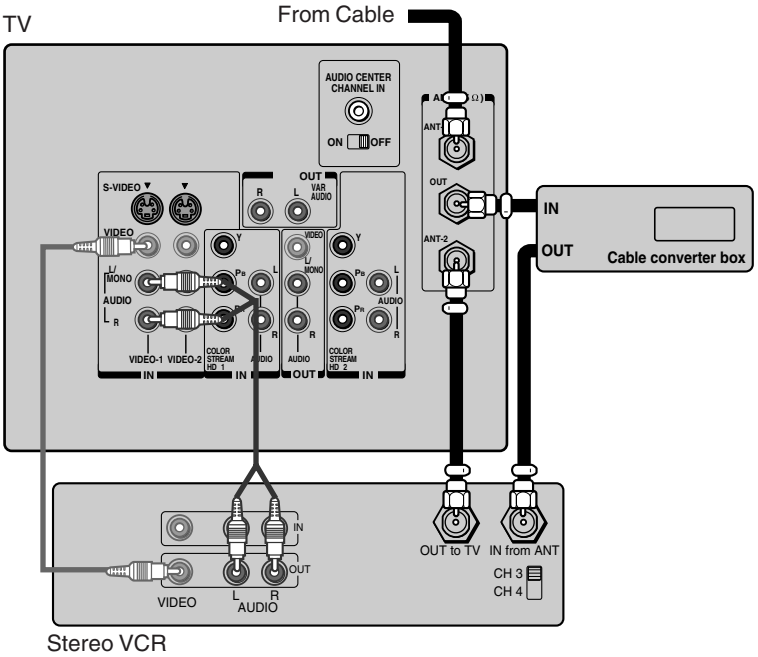
- three coaxial cables
- one pair of audio cables (one single audio cable for a mono VCR)
- one video cable (one S-video cable for an S-VHS VCR)

Note:

If you have a mono VCR, connect L/Mono to VCR Audio OUT using only one audio cable.

If you have an S-VHS VCR, use an S-video cable (in the S-video jacks) instead of a regular video cable. Do not connect a regular video cable and an S-video cable to Video-1 (or Video-2) at the same time.

When you use a converter box with your TV, the remote control will not operate some features, such as programming your favorite channels, labeling channels, and locking channels.

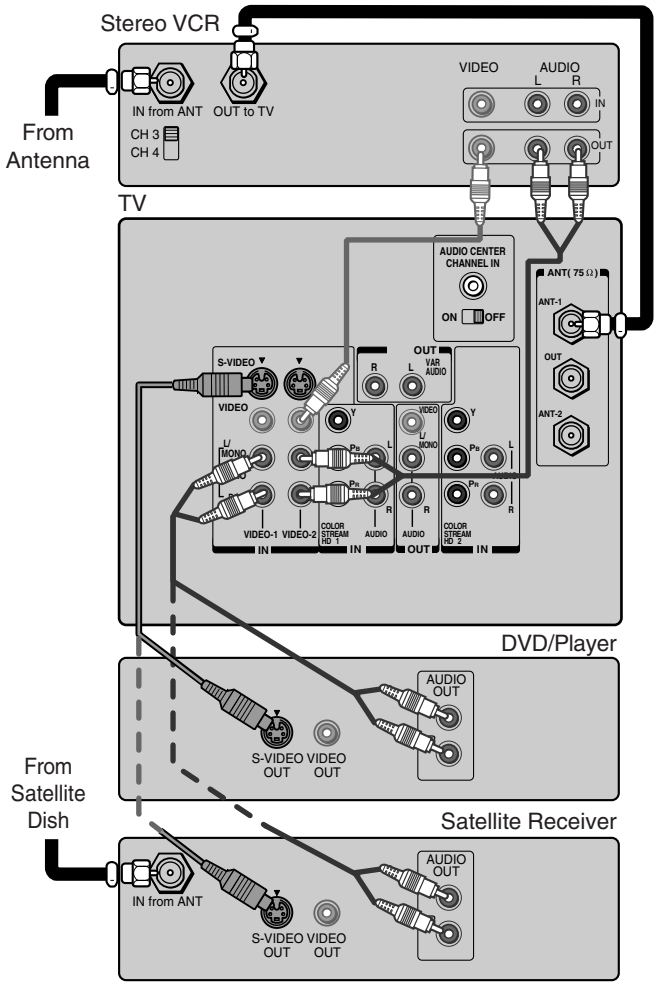


Connecting a DVD player or satellite receiver and a VCR

This connection allows you to watch DVD/satellite, VCR, and TV programs, and record one TV channel while watching another channel.

You will need:

- one coaxial cable
- two pairs of audio cables (one single and one pair of audio cables for a mono VCR)
- one video cable (between the TV and VCR)
- one S-video cable (between the TV and DVD player/satellite receiver)



Note:

For the highest possible picture quality from a non-ColorStream DVD player/satellite receiver, you must use an S-video cable between the TV and DVD player/satellite receiver. (If your DVD player or satellite receiver is ColorStream-compatible, see page 8).

Do not connect both an S-video cable and a regular video cable between the TV and DVD player/satellite receiver at the same time. Doing so will distort the picture.

Do not connect the DVD player/satellite receiver and VCR to the same video channel on the TV. (See the illustrations, which show the DVD player/satellite receiver connected to Video-1 on the TV and the VCR connected to Video-2 on the TV.)

Caution:

The unauthorized recording of television programs, videotapes, and other materials may infringe upon the provisions of copyright laws.

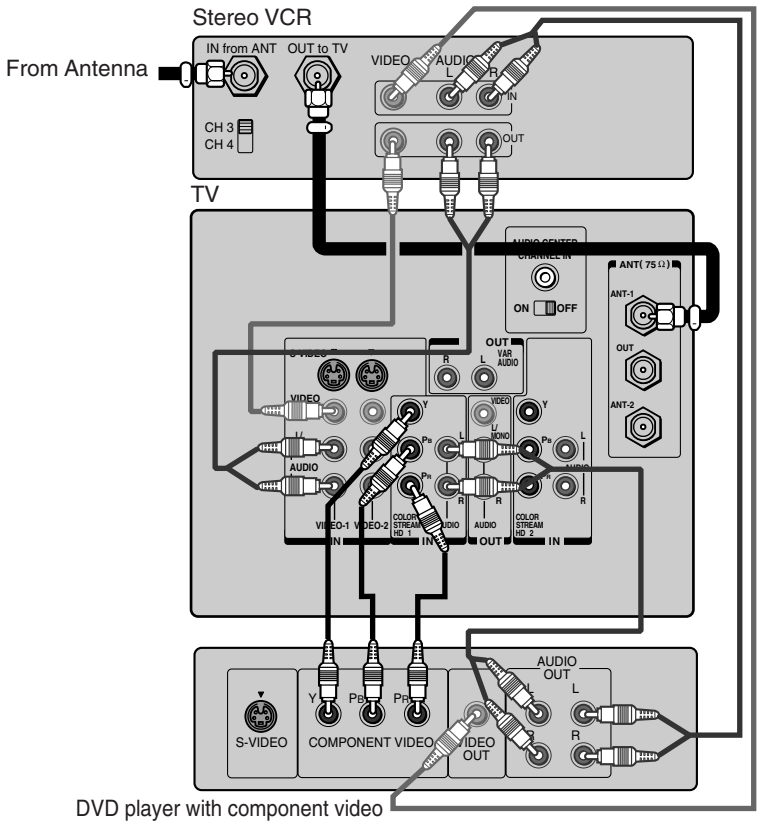
Connecting a DVD player with component video and a VCR

This connection allows you to watch DVD, VCR, and TV programs, and record DVD and TV programs. You can record from one source while watching a program from another source.

Your TV has ColorStream component video inputs. Connecting your TV to a ColorStream-compatible DVD player (such as a Toshiba ColorStream-equipped DVD player) can greatly enhance picture quality and realism.

You will need:

- one coaxial cable
- three pairs of audio cables (two single and one pair of audio cables for a mono VCR)
- two video cables
- one set of ColorStream (component video) cables (one S-video cable for DVD player without component video; see note at right)



Note:

For the highest possible picture quality, you must use ColorStream video cables between the TV and DVD player. You can connect the ColorStream cables from the DVD player to either ColorStream jack on the TV (HD1 or HD2).

The ColorStream HD1 and HD2 jacks can be used with Progressive (480p) and Interlace (480i,1080i) scan systems.

If your DVD player is not ColorStream-compatible, use the S-video connections (both audio and video) instead of the ColorStream connections. Do not connect both S-Video and ColorStream cables between the TV and DVD player at the same time.

To record from the DVD player, set the VCR to Line IN. To monitor recording from the DVD player, set the VCR to Line IN, and set the TV to Video-1.

Caution:

The unauthorized recording of television programs, videotapes, and other materials may infringe upon the provisions of copyright laws.

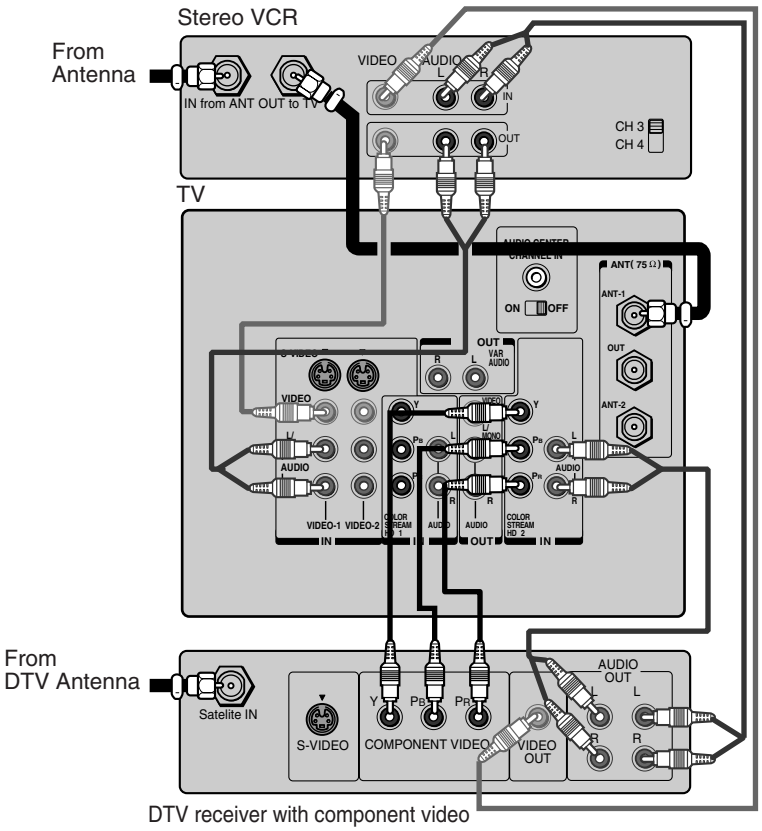
Connecting a DTV receiver/set-top box with component video and a VCR

This connection allows you to watch DTV (digital TV broadcast), VCR, and TV programs, and record DTV and TV programs. You can record from one source while watching a program from another source.

Your TV has ColorStream component video inputs. Connecting your TV to a ColorStream-compatible DTV receiver can greatly enhance picture quality and realism.

You will need:

- one coaxial cable
- three pairs of audio cables (two single and one pair of audio cables for a mono VCR)
- two video cables
- one set of ColorStream (component video) cables (one S-video cable for a DTV receiver without component video; see notes at right)



Note:

For the highest possible picture quality, you must use ColorStream video cables between the TV and DTV receiver. You can connect the ColorStream cables from the DTV receiver to either ColorStream jack on the TV (HD1 or HD2).

The ColorStream HD1 and HD2 jacks can be used with Progressive (480p) and Interlace (480i,1080i) scan systems.

If your DTV receiver is not ColorStream-compatible, use the S-video connections (both audio and video) instead of the ColorStream connections. Do not connect both S-Video and ColorStream cables between the TV and DTV receiver at the same time.

To record from the DTV receiver, set the VCR to Line IN. To monitor recording from the DTV receiver, set the VCR to Line IN, and set the TV to Video-1.

Caution:

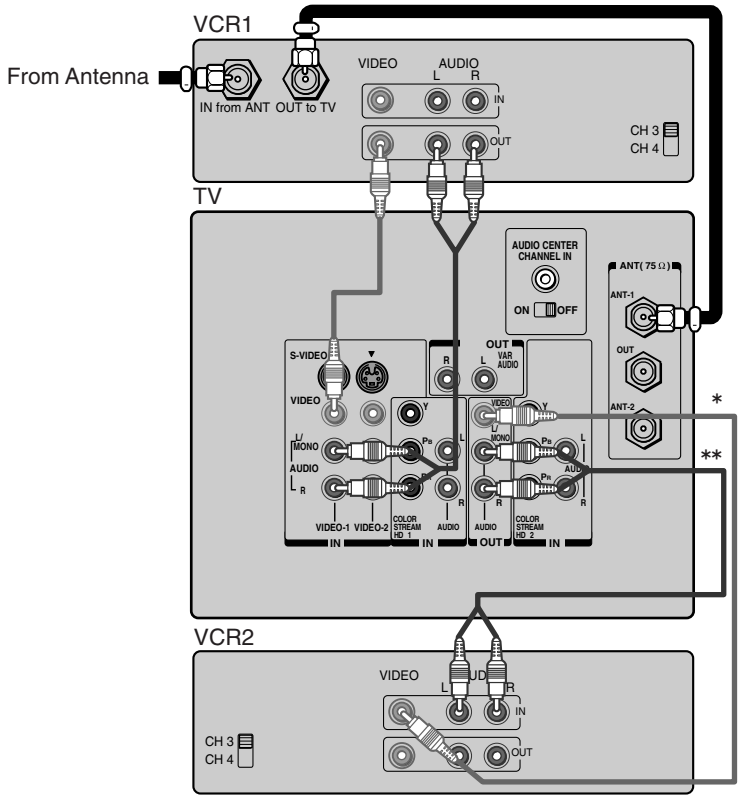
The unauthorized recording of television programs, videotapes, and other materials may infringe upon the provisions of copyright laws.

Connecting two VCRs

This connection allows you to record (dub/edit) from one VCR to another VCR while watching a videotape. You can also record from one TV channel while watching another TV channel.

You will need:

- one coaxial cable
- two pairs of audio cables (two single audio cables for mono VCRs)
- two video cables (two S-video cables for S-VHS VCRs)



Caution:

The unauthorized recording of television programs, videotapes, and other materials may infringe upon the provisions of copyright laws.

Note:

If you have S-VHS VCRs, use S-video cables instead of regular video cables. Do not connect both a regular video cable and an S-video cable to Video-1 (or Video-2) at the same time.

Do not connect the same VCR to the output and input jacks on the TV at the same time.

To dub or edit, VCR 2 must select Line IN, and the TV must select Video-1.

* *The Video OUT jack does not output the PIP picture.*

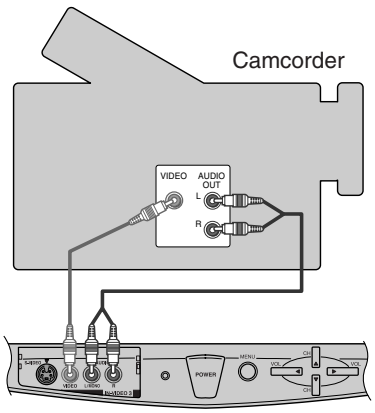
** *The Audio OUT jacks can output the sound of either the Main or PIP picture (see "Selecting the Audio OUT sound" on page 44).*

Connecting a camcorder

This connection allows you to watch video materials recorded on a camcorder.

You will need:

- one pair of audio cables
- one video cable (one S-video cable for an S-VHS camcorder)



Video-3 (front panel)

Caution:

If you have an S-VHS camcorder, use an S-video cable between the S-video jacks on the camcorder and TV. Do not connect both a regular video cable and an S-video cable at the same time.

Connecting an audio system

This connection allows you to use an audio amplifier to adjust the audio level. This also allows you to use external speakers.

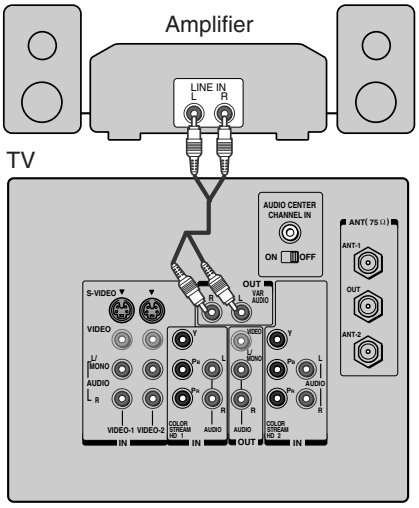
To control the audio, turn on the TV and the stereo amplifier, and turn off the built-in speakers (see "Turning off the built-in speakers" on page 44).

You will need:

- one pair of audio cables

Note:

To hear sound when using an external audio amplifier, the volume of both the TV and the amplifier must be set above 0 (zero).



Caution:

To avoid damaging the speakers, turn the TV off before connecting or disconnecting the Audio Center Channel audio cable.

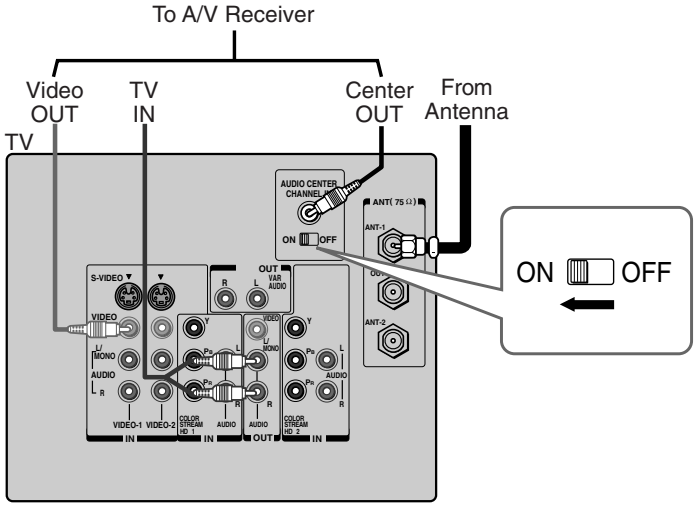
Connecting an A/V receiver

This connection allows you to use an audio/video (A/V) receiver to enhance your TV's sound.

If you have a system with Dolby Pro Logic® surround sound, you can add to the realism of the sound by using the TV's internal speakers as center channel speakers.

You will need:

- one pair of audio cables
- one single audio cable for the audio center channel
- one video cable



Note:

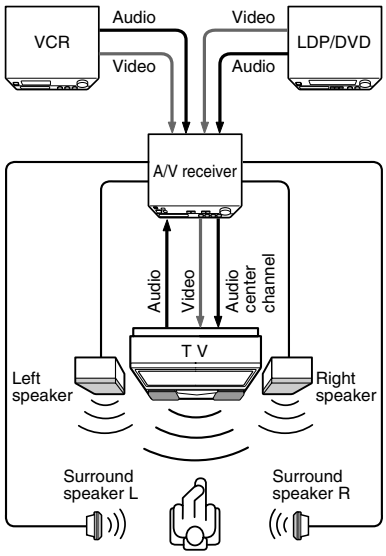
Refer to the instructions provided with your A/V receiver for details about your surround sound system.

When the Audio Center Channel ON/OFF switch is in the ON position, the TV speakers will function only as center channel speakers.

Adjust the volume for the center channel speakers using the center level control on the A/V receiver.

To use the TV speakers as normal speakers, set the Audio Center Channel ON/OFF switch to the OFF position.

Dolby Pro Logic* surround sound system connection example



* Dolby Pro Logic is a registered trademark of Dolby Laboratories Licensing Corporation.

Using the remote control

Preparing the remote control for use

With the remote control, you can operate your TV, most VCR models, and cable TV converters together, even if they are different brands. If you will be using your TV with a Toshiba VCR, your remote control is already programmed and ready to use. If you own different brands of VCRs and/or converters, you first have to program your remote control. (See "Programming the remote control for use with a VCR or a cable TV converter" on page 13.)

Note:

Your TV's remote control may not operate certain features on your VCR, cable TV converter, or other electronic device.

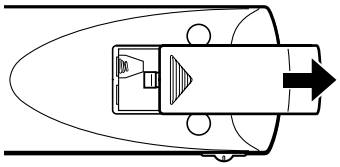
Refer to the owner's manuals for your other devices to determine their available features.

If your TV's remote control does not operate a specific feature on a device, use the remote control that came with the device.

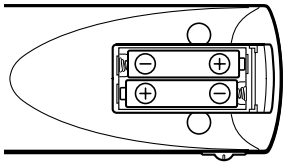
Installing the remote control batteries

To install the batteries:

1. Slide the battery cover off the back of the remote control.



2. Install two "AA" size alkaline batteries. Match the + and - signs on the batteries to the signs on the battery compartment.



3. Slide the battery cover back on to the remote control until the lock snaps.

Caution:

- *Dispose of batteries in a designated disposal area. Do not throw batteries into a fire.*
- *Do not mix battery types or combine used batteries with new ones.*
- *If the batteries are dead or if you will not use the remote control for a long time, remove the batteries to prevent battery acid from leaking into the battery compartment.*

Note:

Battery life expectancy is about one year with normal use.

Using the remote control with a Toshiba VCR or cable TV converter

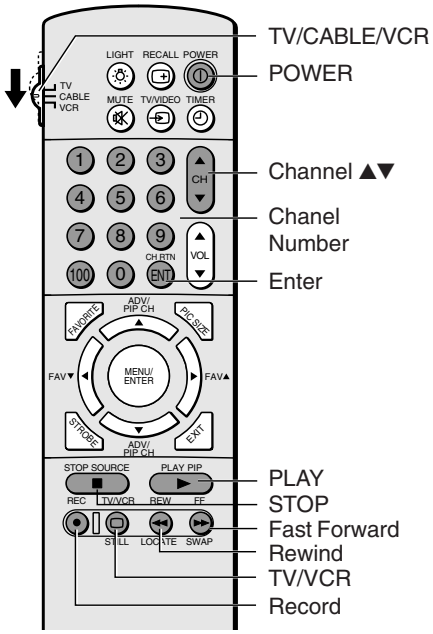
To control a Toshiba VCR:

Set the TV/CABLE/VCR switch to the VCR position. The buttons shown at right will then control the VCR. The unshaded buttons will operate the TV as usual.

To control a cable TV converter:

Set the TV/CABLE/VCR switch to the CABLE position. The shaded buttons in the top half of the illustration at right will control the cable TV converter. The other buttons will operate the TV as usual.

If you own a non-Toshbia VCR or cable TV converter, you may be able to program the TV remote control to control it. See "Programming the remote control for use with a non-Toshiba VCR or cable TV converter" on page 13.



Programming the remote control for use with a non-Toshiba VCR or cable TV converter

The remote control is pre-programmed to operate Toshiba VCRs. To use the remote control to operate a non-Toshiba VCR or cable converter, follow the steps below to program the remote control.

1. Refer to the "VCR code table" or "Cable TV converter code table" on pages 14-15 to find the corresponding code for your VCR or cable TV converter brand.

   If more than one code is listed, try each one separately until you find the one that works.
2. If you are reprogramming the remote control to operate your:
   - **VCR:** Set the TV/CABLE/VCR switch on the remote control to VCR.
   - **Cable converter:** Set the TV/CABLE/VCR switch on the remote control to CABLE.
3. While holding down the RECALL button, press the Number buttons (0-9) to enter the three-digit code for your VCR or cable TV converter.
4. Point the remote control at the VCR or converter and press POWER to test the code.

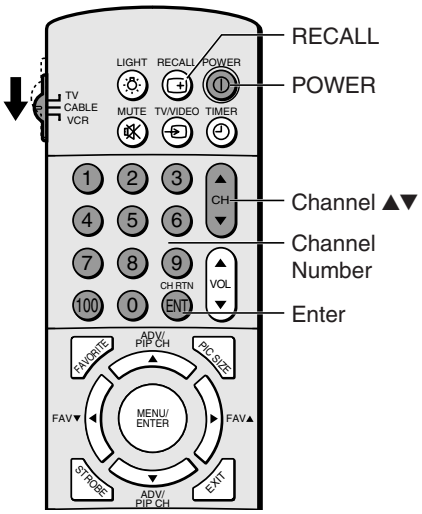
   If the VCR or converter responds, you have entered the correct code.

   If the VCR or converter does not respond, you may have entered the wrong code. Repeat steps 1-4 using another code.
5. Reset the TV/CABLE/VCR switch to TV to control the TV.

For future reference, write down the code(s) you used:

VCR code _____

Cable TV converter code _____



Note:

- *Each time you replace the batteries, you must reprogram the remote control.*
- *Some newer VCRs are capable of working on either of two remote codes. These VCRs have a switch labeled "VCR1/VCR2."*

  If your VCR has this kind of switch, it may not respond to any of the code numbers for your VCR brand name. In this case, set the switch to the other position (VCR1 or VCR2) and reprogram the remote control.

VCR code table

Brand name	Code number
Adventura	019
Aiko	297
Aiwa	019
Akai	060,068,080,125,261
American High	054
Asha	259
Audiovox	056
Beaumark	259
Bell & Howell	123
Brandt	206
Broksonic	140,203,230,314,380
Calix	056
Canon	054
Capehart	039
Carver	100
CCE	091,297
Citizen	056,297
Colt	091
Craig	056,066,091,259
Curtis Mathes	054,060,079
Cybernex	259
Daewoo	039,064,297
Daytron	039
Dynatech	019
Electrohome	056
Electrophonic	056
Emerex	051
Emerson	019,021,056,062,080,087,140,203,227,228,230,231,297,313,314,380,498
Fisher	066,073,085,123
Fuji	052,054
Funai	019,344
Garrard	019,344
GE	054,079,084,221
Go Video	251,298
Goldstar	037,056,057
Gradiente	019
Harley Davidson	019
Harman/Kardon	057,094
Harwood	087,091
Headquarter	065
HI-Q	066
Hitachi	060,061,084,124,254
Jensen	060
JVC	027,060,086
Kenwood	057,060,086
KLH	091
Kodak	054,056
Lloyd	019
Lloyd's	227
Logik	091
LXI	056
Magnavox	054,058,100,129,168
Magnin	259
Marantz	054,100
Marta	056
Masushita	054
MEI	054
Memorex	019,054,056,058,065,066,067,123,259
MGA	062,080
MGN Technology	259
Minolta	061,124
Mitsubishi	062,080,086,094,192,233,261
Motorola	054,067
MTC	019,259
Multitech	019,091
Nad	077
NEC	057,059,060,069,086
Nikko	056
Noblex	259
Olympus	054
Optimus	056,067,077,123
Optonica	081
Orion	498
Panasonic	054,096,181,244
Penney	054,056,057,059,061,073,259
Pentax	061,084,124
Philco	054
Philips	054,081,100,129
Pilot	056
Pioneer	077,086
Portland	039
Protec	091
Pulsar	058
Quarter	065
Quartz	065
Quasar	054,096
Radio Shack	019,056,344
Radix	056
Randex	056
RCA	061,079,084,096,124,125,168,221
Realistic	019,054,056,065,066,067,081,085,123,259
Ricoh	053
Runco	058
Samsung	064,259
Sanky	058,067
Sansui	060,086
Sanyo	065,066,123,259
Scott	062,064,140,203,229,230,231
Sears	054,056,061,065,066,073,085,123,124
Sharp	067,081
Shintom	091
Shogun	259
Singer	091
Sony	051,052,053,054
STS	061
Sylvania	019,054,062,100,129
Symphonic	019,344
Tatung	060
Teac	019,060
Technics	054,181
Teknika	019,054,056,071
Telefunken	060,206
TMK	227,259
Toshiba	062,064,085,229,231,385
Totevision	056,259
Unitech	259
Vector	064
Vector Research	057,059
Video Concepts	059,064,080
Videosonic	259
Wards	019,054,061,066,067,081,091,168,231,259
XR-1000	019,054,091
Yamaha	057
Zenith	052,053,058

Cable TV converter code table

Brand name	Code number
ABC	020,022,026,027, 030,032,033,036, 066
Antronix	041
Archer	041,058,172
Belcor	075
Cable Star	075
Cabletenna	041
Cableview	041
Century	172
Citizen	172
Colour Voice	044,050
Comtronics	059,079
Contec	038
Dae Ryung	027
Eastern	021
Focus	419
Garrard	172
GC Electronics	035,075
Gemini	034,089
General Instrument	030,295
GoldStar	059,163
Hamlin	028,039,053,278, 292
Hitachi	030
Hytex	026
Jasco	172
Jerrold	022,030,031,033, 034,043,066,295
Macom	052
Magnavox	046
Memorex	019
Movie Time	175
NSC	089,175
Oak	026,038,267
Panasonic	019,040,126
Paragon	019
Philips	044,046,047,048, 049,050,172
Pioneer	042,163,552
Popular Mechanics	419
Pulsar	019
RCA	040
Recoton	419
Regal	039,278,292
Regency	021
Rembrandt	030,089
Runco	019
Samsung	059,163
Scientific Atlanta	025,027,036,296
Signal	034,059
Signature	030
SL Marx	059
Sprucer	040
Standard Components	174
Starcom	022,034,066
Stargate	034,059
Starquest	034
Sylvania	020
Teleview	059
Texscan	020
Tocom	031,032,078
Toshiba	019
Tusa	034
Unika	041,172
United Artists	026
United Cable	022
Universal	041,058,075,096, 172,210
Viewstar	046,079,230
Zenith	019
Zentek	419

Learning about the remote control

POWER turns the TV on and off

RECALL displays screen information (page 45)

LIGHT illuminates the keypad for five seconds

TIMER sets the TV to turn off at a specific time (page 40)

TV/VIDEO selects video input source (pages 18, 38)

MUTE mutes the sound (page 41)

TV/CABLE/VCR switches between TV, Cable and VCR (pages 12-13)

Channel ▲▼ cycles through programmed channels (page 20)

Channel Numbers allow direct access to channels (page 20)

Volume ▲▼ adjusts the volume level

CH RTN returns to the last viewed channel (page 22)

PIC SIZE cycles through the three picture formats: Normal, Letterbox, and Compression (page 25)

MENU allows access to on-screen programming menus (page 17)

ENTER sets programmed menu information (page 17)

▲▼◀▶ select or adjust programming menus (page 17)

PIP Channel ▲▼ selects the PIP (sub-picture) channel (page 26)

FAV ▼▲ cycles through favorite channels (page 22)

FAVORITE allows access to the favorite channel search function (page 28)

STROBE allows access to multi-window function (page 28)

EXIT exits programming menus (page 17)

PIP turns the PIP/double-window feature on and off (page 26)

SOURCE selects the PIP/double-window picture source (page 26)

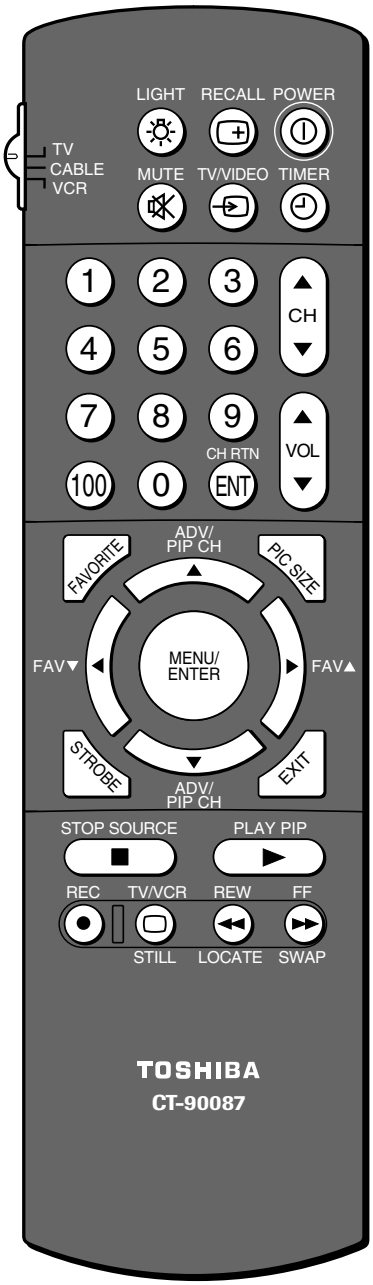
STILL freezes the PIP/double-window picture (page 27)

LOCATE moves the small picture (page 27)

SWAP switches the main and sub pictures (page 27)

VCR Functions allow access to VCR functions (page 12)

- **STOP** stops a videotape
- **REC** starts recording a videotape
- **PLAY** plays a videotape
- **FF** fast forwards a videotape
- **REW** rewinds a videotape
- **TV/VCR** toggles between TV and VCR when viewing while recording



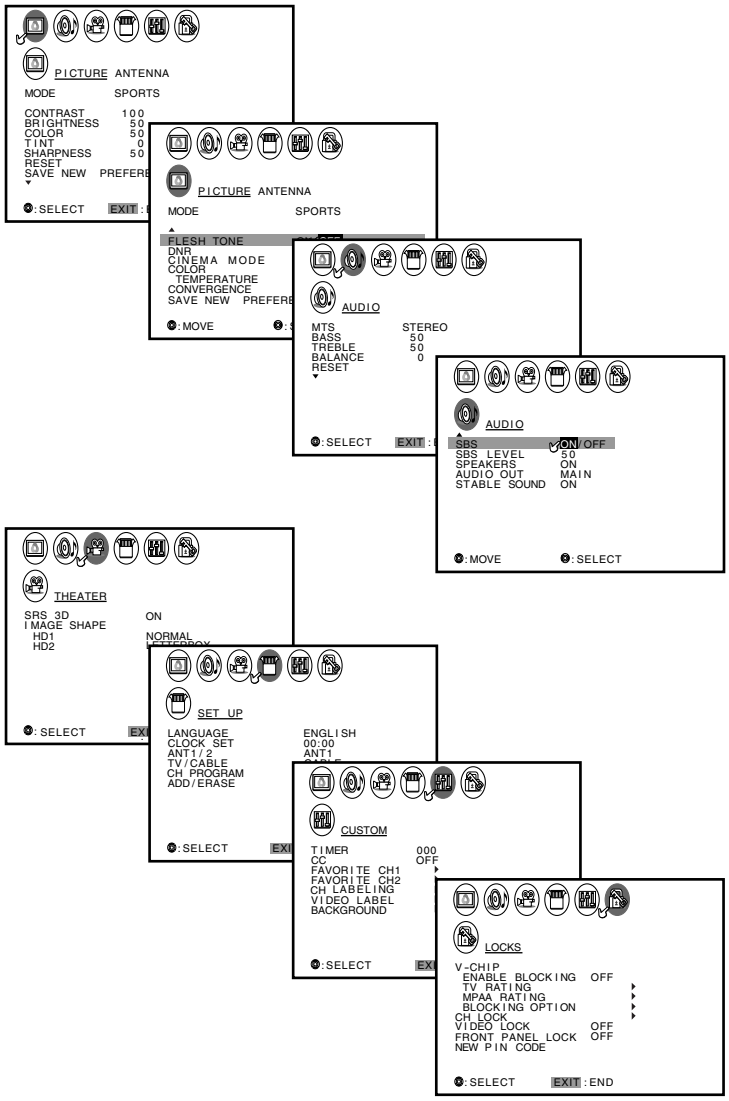
Note:
The error message "Not Available" will appear if you press a key for a function that is not available.

Setting up your TV

Learning about the menu system

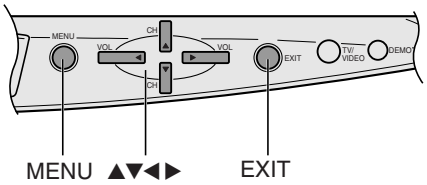
After you have installed the batteries and programmed the remote control, you will need to set some preferences on the TV using the menu system. You can access the menus using the buttons on your TV or remote control.

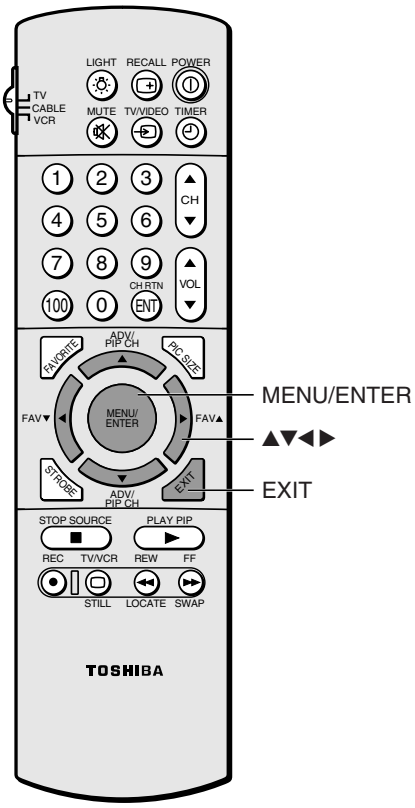
1. Press MENU to display the menu system.
2. Press ◀ or ▶ to select a menu.
3. Press ▲ or ▼ to select an item.
4. Press ◀ or ▶ to select or adjust a setting.



- Press ENTER to activate the function settings in the CUSTOM menu, etc.
- The main menu display will disappear automatically if you do not make a selection within 15 seconds; the other displays will disappear automatically within 6 seconds. (Except the Convergence menu which will remain until a button is pressed.)
- If you want to close all the on-screen displays instantly, press EXIT.

TV front panel





Note:

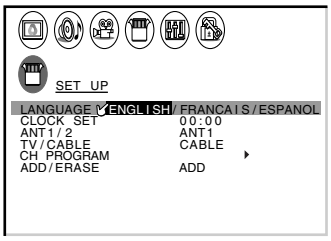
You can change the background of the menu. See page 45 for details.

Changing the on-screen display language

Choose from three different languages (English, French and Spanish) for the on-screen display of adjustment menus and messages.

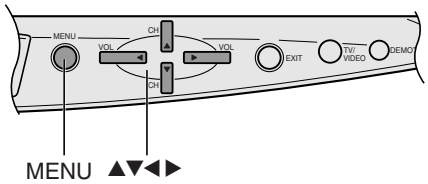
To select a language:

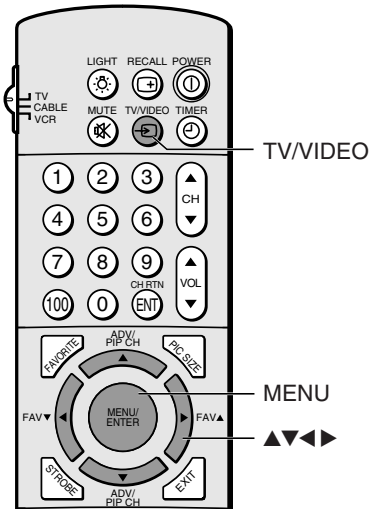
1. Press MENU, and then press ◀ or ▶ until the SET UP menu appears.
2. Press ▲ or ▼ to highlight LANGUAGE.



3. Press ◀ or ▶ to highlight your desired language.

TV front panel



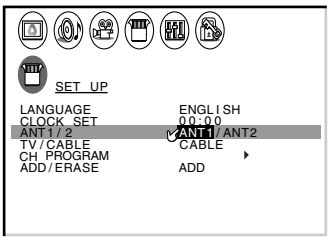


Selecting the antenna input

You can connect to two different antenna input sources (ANT 1 or ANT 2).

To select the antenna input using the menu system:

1. Press MENU, and then press ◀ or ▶ to highlight the SET UP menu.
2. Press ▲ or ▼ to highlight ANT 1/2.

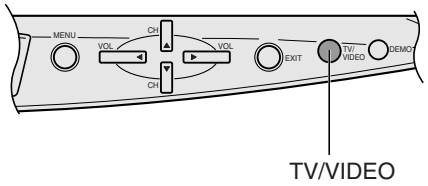


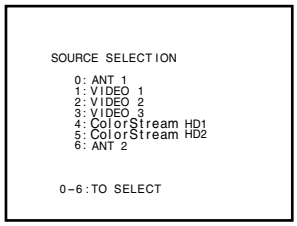
3. Press ◀ or ▶ to highlight either ANT 1 or ANT 2, depending on the antenna terminal you wish to use.

To select the antenna input using the TV/VIDEO button:

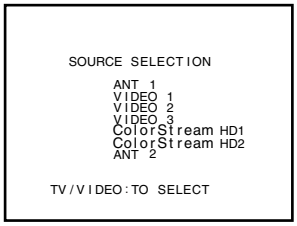
1. Press the TV/VIDEO button on the remote control or TV (see illustrations below). The current signal source displays in purple.
2. Continue pressing the TV/VIDEO button to select ANT 1 or ANT 2.

TV front panel





Pressing TV/VIDEO on the remote control displays the current signal source (press TV/VIDEO again or 0-6 to change)



Pressing TV/VIDEO on the TV changes the current signal source

Adding channels to the TV's memory

When you press Channel ▲ or ▼, your TV will stop only on the channels stored in the TV's channel memory.

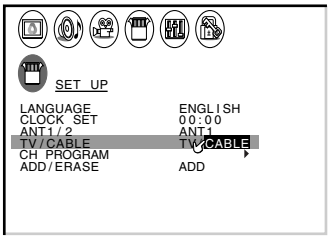
Follow the steps below and on the next page to program all active channels into the TV's memory.

Programming channels automatically

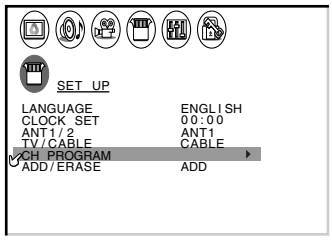
Your TV can automatically detect all active channels in your area and store them in its memory. After the channels are stored automatically, you can manually add or erase individual channels.

To program channels automatically:

1. Press MENU, and then press ◀ or ▶ until the SET UP menu appears.
2. Press ▲ or ▼ until the TV/CABLE is highlighted.
3. Press ◀ or ▶ to highlight either TV or CABLE, depending on which you use. If you use an antenna, highlight TV; if you use cable, highlight CABLE.



4. Press ▼ to select CH PROGRAM.



5. Press ◀ or ▶ to start channel programming. The TV will automatically cycle through all the TV or Cable channels (depending on which you selected), and store all active channels in the channel memory.

   While the TV is cycling through the channels, the message "Programming Now—Please Wait" appears.
6. When channel programming is complete, the message "Completed" appears.
7. Press Channel ▲ or ▼ to view the programmed channels.

Adding and erasing channels manually

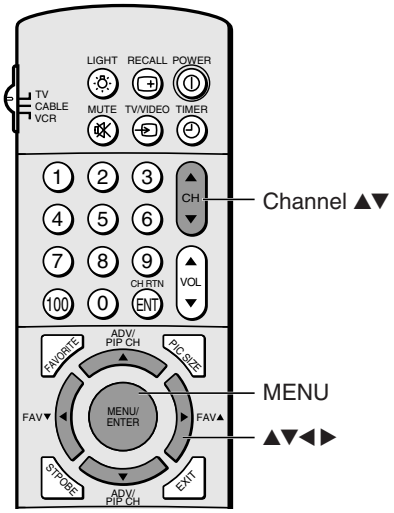
After you have programmed the channels automatically, you can manually add or erase specific channels.

To add or erase channels:

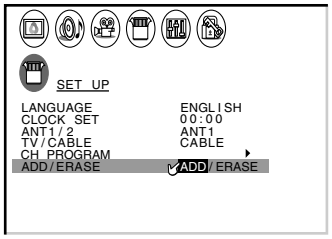
1. Select the channel you want to add or erase. If you are adding a channel, you must select the channel using the Channel Number buttons.
2. Press MENU, and then press ◀ or ▶ until the SET UP menu appears.

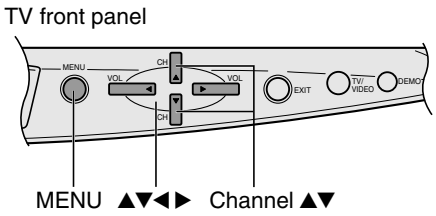
(continued on next page)

Note:
To tune the TV to a channel not programmed in the channel memory, you must use the Channel Number buttons on the remote control.



3. Press ▲ or ▼ to highlight ADD/ERASE.





4. Press ◀ or ▶ to select ADD or ERASE, depending on the function you want to perform.
5. Repeat steps 1–4 for other channels you want to add or erase.

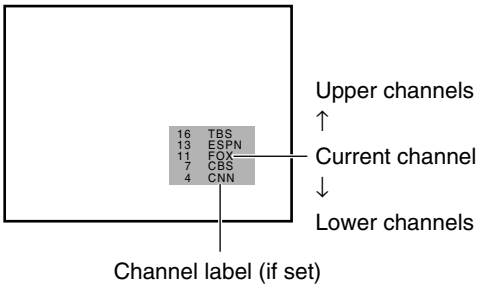
Changing channels

To change to the next programmed channel:

Press Channel ▲ or ▼ on the TV or remote control.

To change to the specific programmed channel:

Press and hold Channel ▲ or ▼ for about one second. The TV will enter the channel surf mode.

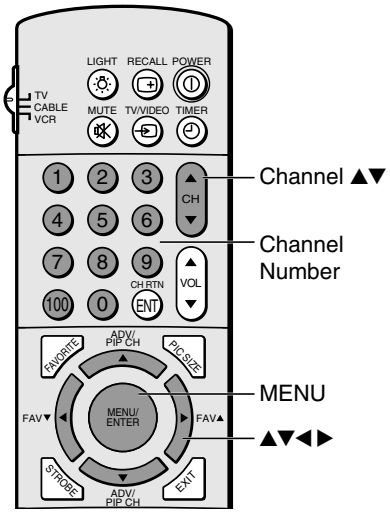


Repeatedly press or hold channel ▲ or ▼ while the channel surf mode is on-screen to scroll the channel list. Release the button to display the highlighted channel.

To change to a specific channel (programmed or unprogrammed):

Press the Channel Number buttons (0-9 and 100).

For channels 100 and higher, press the 100 button, and then the next two numbers. For example, to select channel 125, press 100, 2, 5.



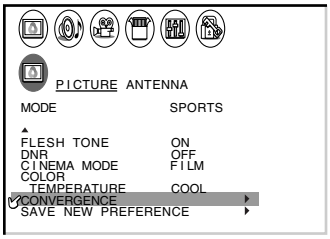
Adjusting the color convergence

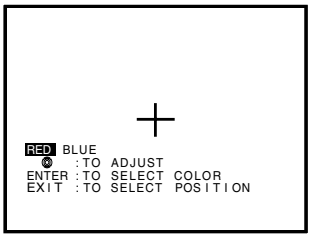
This projection TV uses three separate TV tubes: red, green, and blue. The red, green, and blue images are projected onto the screen where they converge to form a full-color picture. You can see a clear picture only when the three images converge correctly. Convergence may drift over time or if you move the TV. If you can see clear images on your TV screen, skip this procedure.

This adjustment should be made only after the TV has been on for at least 30 minutes.

To check and adjust the color convergence:

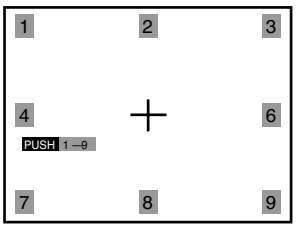
1. Press MENU, and then press ◀ or ▶ until the PICTURE menu appears.
2. Press ▲ or ▼ to highlight CONVERGENCE (see illustration, below left).
3. Press ◀ or ▶ to display the Center Convergence menu (see illustration, below right).

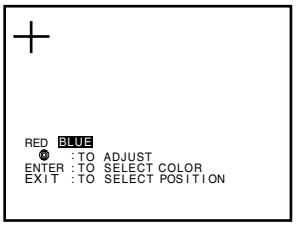




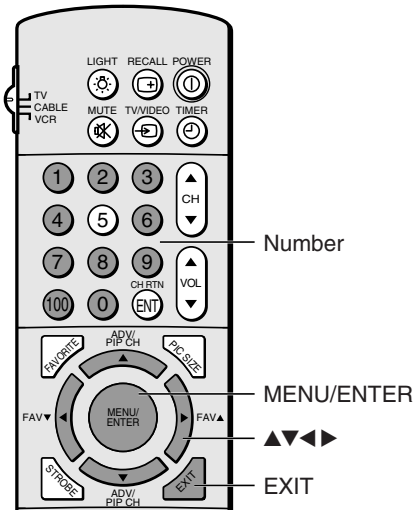
If you see separate red, blue, or green crossed lines (or red or blue shadows next to white lines), you need to adjust the convergence.

4. Press ENTER to highlight RED or BLUE, depending on which color needs adjusting. If both red and blue need adjusting, you will need to perform steps 4 and 5 twice.
5. Press ▲ (up), ▼ (down), ◀ (left), or ▶ (right) on the remote control to converge the red or blue line into the green line, which will turn completely white when correctly adjusted. When color convergence is correctly adjusted, you will see two single crossed white lines.
6. Press EXIT to display the Circumference Convergence menu.
7. Press the corresponding Number button (1–4 and 6–9) to select the area you want to adjust (see illustration, below left).
8. Press ENTER to highlight RED or BLUE, depending on which color needs adjusting (see illustration, below right). If both red and blue need adjusting, you will need to perform steps 8 and 9 twice for the selected area.





9. Press ▲▼◀▶ to converge the red or blue line into the green line, which will turn completely white when correctly adjusted. Repeat steps 8 and 9 until you see two single crossed white lines.
10. Press EXIT once to select another area to adjust, and then repeat steps 7–9.
11. Press EXIT twice to close the Convergence menu.



Using the TV's features

Adjusting the channel settings

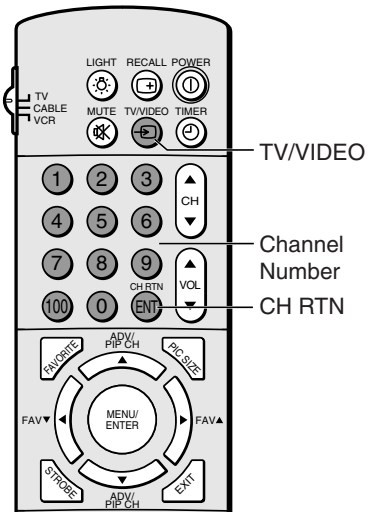
Switching between two channels

You can switch between two channels without entering an actual channel number each time.

To switch between two channels:

1. Select the first channel or video mode you want to view.
2. Select a second channel with the Channel Number buttons (0-9, 100).
3. Press CH RTN. The previous channel will be displayed.

Each time you press CH RTN, the TV will switch back and forth between the two channels.

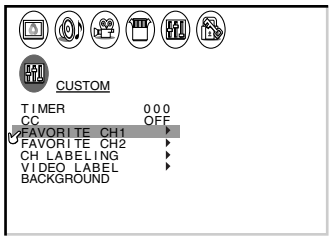


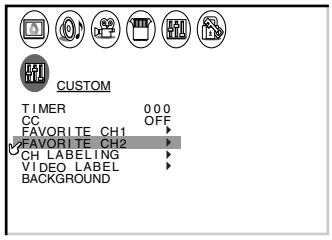
Programming your favorite channels

You can preset up to 9 of your favorite channels each for FAVORITE CH1 and FAVORITE CH2 modes using the Favorite Channel Programming feature. Because this feature scans through only your favorite channels, it allows you to skip other channels you do not normally watch.

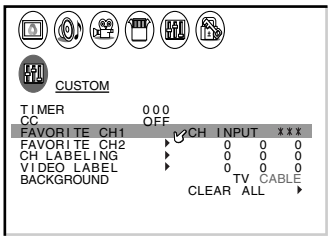
To program your favorite channels:

1. Press MENU, and then press ◀ or ▶ until the CUSTOM menu appears.
2. Press ▲ or ▼ to highlight FAVORITE CH1 or FAVORITE CH2.

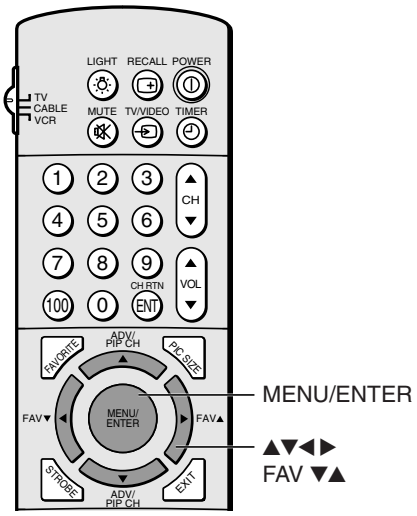




3. Press ◀ or ▶ to display the FAVORITE CH1 menu, for example. CH INPUT will be highlighted.



4. Press the Channel Number buttons to enter one of your favorite channel.
5. Press ENTER.
6. Repeat steps 4 and 5 for other channels.



Note:

- *The FAV ▼▲ buttons operate as MENU ◀ ▶ buttons when a menu display is on the screen.*
- *The favorite channel feature is not available in ANT2 mode.*

To select your favorite channels:

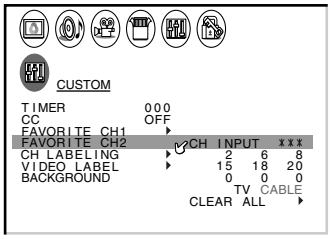
Press FAV ▼ or ▲.

To quickly scan through your favorite channels in a 9-picture multi-window:

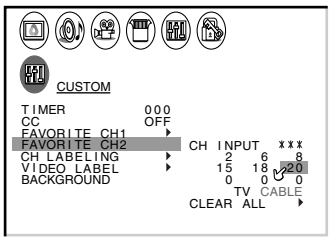
Press FAVORITE (see page 28).

To clear a favorite channel:

1. Press MENU, and then press ◀ or ▶ until the CUSTOM menu appears.
2. Press ▲ or ▼ to highlight FAVORITE CH2, for example.
3. Press ◀ or ▶ to display the FAVORITE CH2 menu.



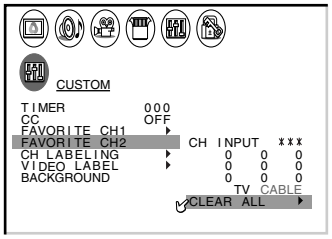
4. Press ▲▼◀▶ to highlight the channel you want to clear, then press ENTER.



5. Repeat step 4 for other channels.

To clear all favorite channels at once:

Press ▲ or ▼ to highlight CLEAR ALL in step 4 above, and then press ◀ or ▶ to clear all favorite channels at once.



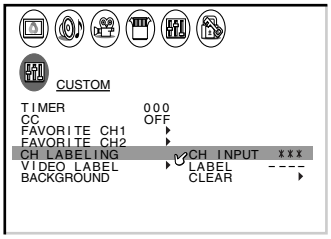
Labeling channels

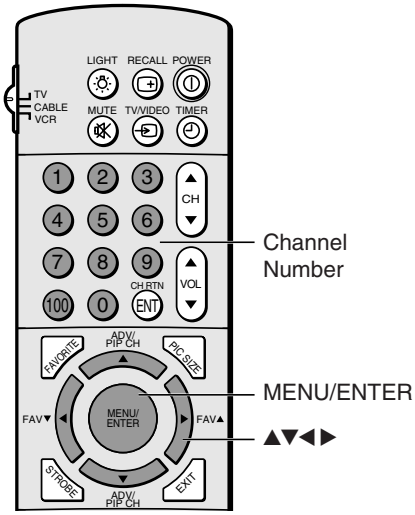
Channel labels appear above the on-screen channel number display each time you turn on the TV, change a channel, or press RECALL. You can choose any four characters to identify a channel.

To create channel labels:

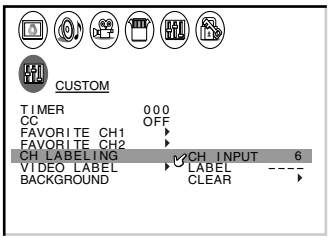
1. Press MENU, and then press ◀ or ▶ until the CUSTOM menu appears.
2. Press ▲ or ▼ to highlight CH LABELING.
3. Press ◀ or ▶ to display the CH LABELING menu.

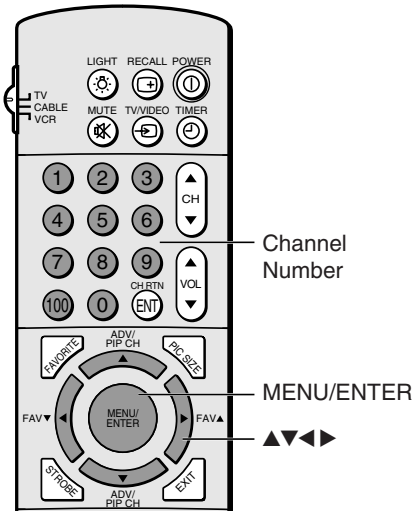
   CH INPUT will be highlighted.



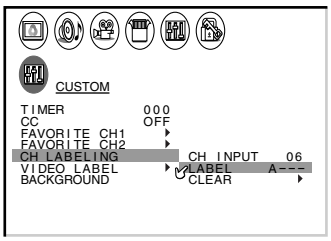


4. Press the Channel Number buttons to select a channel you want to label.





5. Press ▼ to highlight LABEL.
6. Press ◀ or ▶ repeatedly to select a character for the first space, and then press ENTER.

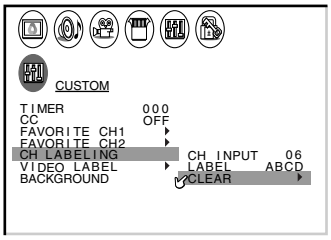


7. Repeat step 6 to enter the rest of the characters.

   If you would like a blank space in the label name, you must choose an empty space from the list of characters. Otherwise, a dash "–" will appear in that space.
8. Repeat steps 4–7 for other channels. You can assign labels to a maximum of 32 channels.

To erase channel labels:

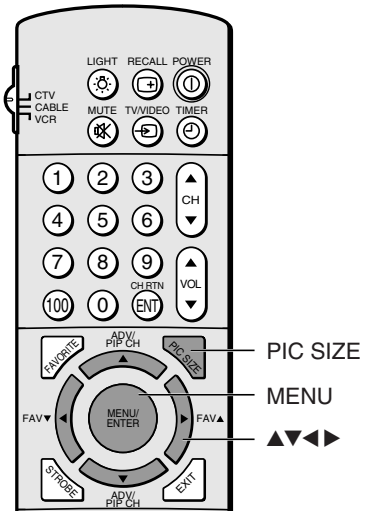
1. Press MENU, and then press ◀ or ▶ until the CUSTOM menu appears.
2. Press ▲ or ▼ to highlight CH LABELING.
3. Press ◀ or ▶ to display the CH LABELING menu.
4. Press ▼ to highlight CH INPUT, then select the channel you want to clear with the Channel Number buttons.
5. Press ▼ to highlight CLEAR.



6. Press ◀ or ▶ to erase the channel label.
7. Repeat steps 4–6 to erase other channel labels.

Viewing the wide-screen picture formats

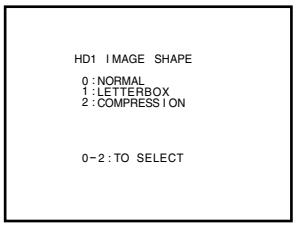
You can view programs that have the conventional TV picture format (4:3 aspect ratio) and the wide-screen format (16:9 aspect ratio). This feature is available for 1080i digital broadcasts and 480p/480i DVD signals connected to the ColorStream HD1 and HD2 jacks.



Selecting the image shape

1. Make sure the ColorStream HD1 or HD2 mode is selected. (See page 38 for details.)
2. Press PIC SIZE repeatedly to select either Normal, Letterbox, or Compression image shape, as described below.

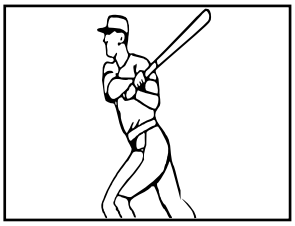
   Note: *The message "Not Available" will appear when the PIC SIZE button is pressed in the mode other than the ColorStream HD1 or HD2.*



While the above menu is on-screen, select the desired picture size by pressing the corresponding number button (0–2).

Normal

The Normal picture size displays the picture in the conventional 4:3 aspect ratio. The picture is stretched vertically to fill the screen.

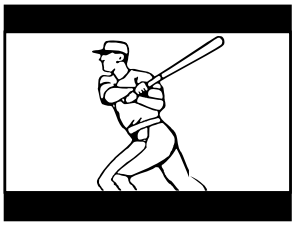


Letterbox, Compression

The Letterbox and Compression modes display the wide picture (16:9) with bars at top and bottom. The picture retains its true proportion.

Letterbox (recommended mode):

- Picture is horizontally stretched, with bars at the top and bottom.
- Lower picture quality than in the Compression mode because of a reduction in the scanning lines.
- Slightly lower chance of permanently engraining stationary patterns on the picture tube than in the Compression mode.

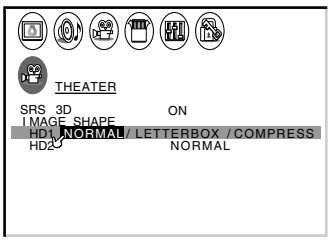


Letterbox and Compression modes have bars at top and bottom of screen. See "Notice of possible adverse effects on TV picture tube," at right.

Compression:

- Picture is vertically compressed, with bars at the top and bottom.
- Better picture quality than in the Letterbox mode because of more effective use of scanning lines.
- Greater chance of permanently engraining stationary patterns on the picture tube than in the Letterbox mode, since there is no raster in the bars at top and bottom.

Note:
You can also change the image shape using the menu system. Select IMAGE SHAPE HD1 or HD2 in the THEATER menu.



NOTICE OF POSSIBLE ADVERSE EFFECTS ON TV PICTURE TUBE

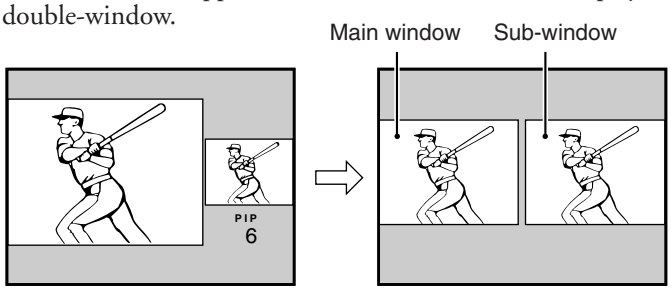
If a fixed (non-moving) pattern remains on the TV screen for long periods of time, the image can become permanently engrained in the picture tube. See page 2 for details.

Watching PIP/double-window

The PIP/double-window feature allows you to watch two pictures at the same time. The sub-picture can be a TV broadcast or come from an external source, such as a VCR.

To display a TV broadcast as a sub-picture:

1. Turn on the TV and select the program you want to watch.
2. Press PIP once to display a small picture. A window 1/9 the size of the screen will appear. Press PIP a second time to display a double-window.

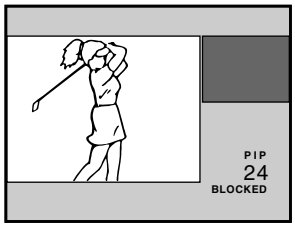


PIP mode Double-window mode

3. Press PIP CH ▲▼ to choose the program you want to be displayed as a sub-picture.

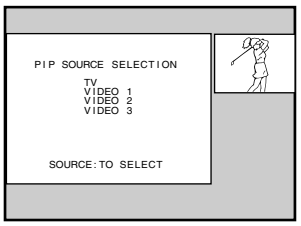
   If the V-CHIP feature is active and you try to watch a TV program that exceeds the rating limits you set, the TV will enter into the program block mode. See "Using V-CHIP menu" on page 30.

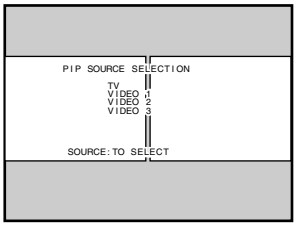
Example: PIP mode



To display a picture from an external source as a sub-picture:

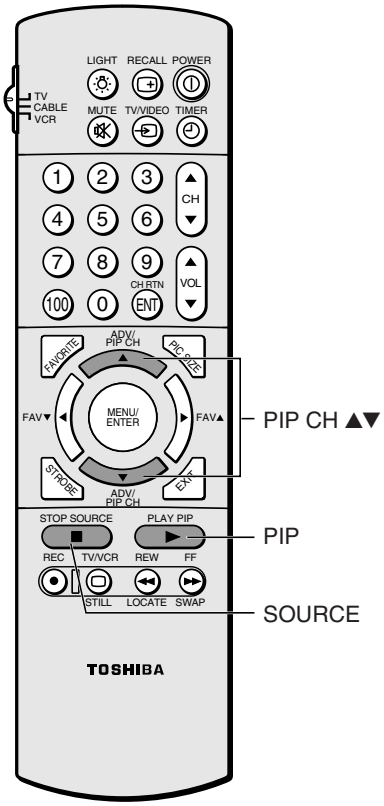
1. Make sure you have connected the external source equipment properly. For more information, see the "Connecting your TV" on page 5.
2. Turn on the TV and select the program you want to watch.
3. Press PIP once to display a small picture. A window 1/9 the size of the screen will appear. Press PIP a second time to display a double-window.
4. Press SOURCE repeatedly to select the input source (VIDEO 1, VIDEO 2 or VIDEO 3) for the sub-picture. The selected source will be displayed in purple. ColorStream HD1 and HD2 can not be selected.





To turn PIP off:

Press PIP once or twice, depending on the size of the sub-picture screen you selected.



Note:

- *PIP/double-window can not be turned on when the ColorStream input (HD1 or HD2) is being viewed.*
- *You can not display the signal sources input through the ANT-2 terminal as a sub-picture.*

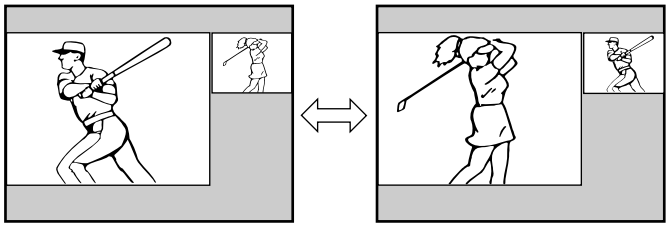
NOTICE OF POSSIBLE ADVERSE EFFECTS ON TV PICTURE TUBE

If a fixed (non-moving) pattern remains on the TV screen for long periods of time, the image can become permanently engrained in the picture tube. See page 2 for details.

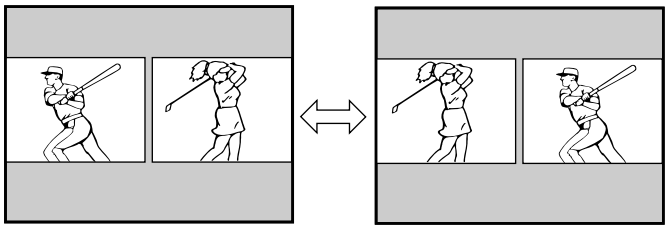
Switching the main and sub-pictures

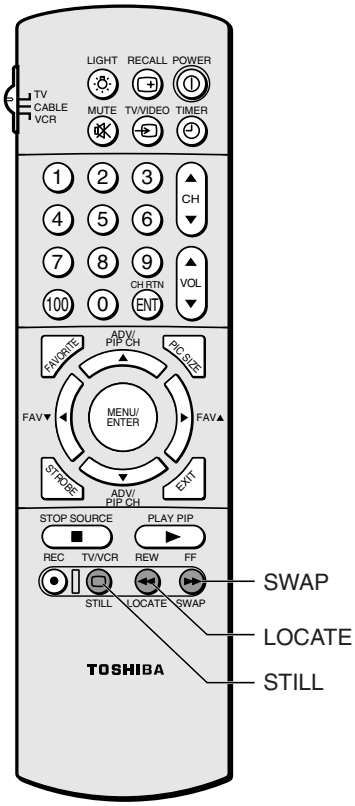
Press SWAP while you are using the PIP feature to switch the main and sub-pictures. The main and sub-pictures will switch each time you press the SWAP button.

PIP mode



Double-window mode

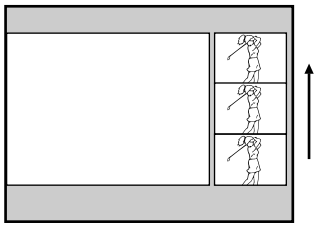




Changing the position of the small picture

Press LOCATE repeatedly while you are watching a small picture. The display position of the small picture will change in the following order:

Note: *The LOCATE button is not available while in the double-window mode.*



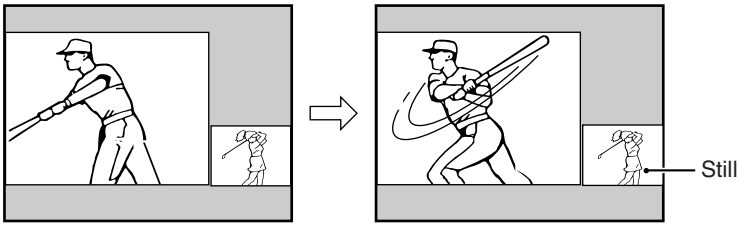
NOTICE OF POSSIBLE ADVERSE EFFECTS ON TV PICTURE TUBE

If a fixed (non-moving) pattern remains on the TV screen for long periods of time, the image can become permanently engrained in the picture tube. See page 2 for details.

Freezing the sub-picture

Press STILL while you are watching a sub-picture. The sub-picture will become a still picture. To return to the moving picture, press STILL again.

Example: PIP mode



Using the multi-window feature

The multi-window feature provides two functions. One is the Favorite that scans the channels programmed in the TV memory by the FAVORITE CH function (9-picture multi-search) and the other is the Strobe that is convenient when watching a quickly moving picture such as a sports program.

Using the favorite function

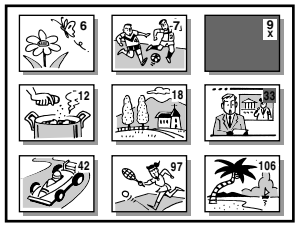
1. Press FAVORITE to scan the channels programmed in the TV memory by the favorite channel function (page 22).

   The 9-picture multi-search will start.

   The first window will be displayed with a moving picture.

   Each time you press FAVORITE, the display will change in the following order.

   FAVORITE CH1—— FAVORITE CH2 —— off
2. Press ▲▼◀▶ to select a channel you want to see with a moving picture.
3. Press ENTER to display the channel you selected at step 2 with a normal picture.

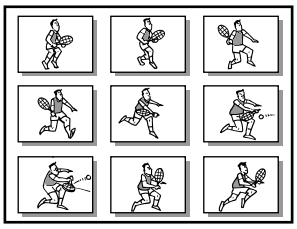


To cancel the favorite function:

Press FAVORITE again.

Using the strobe function

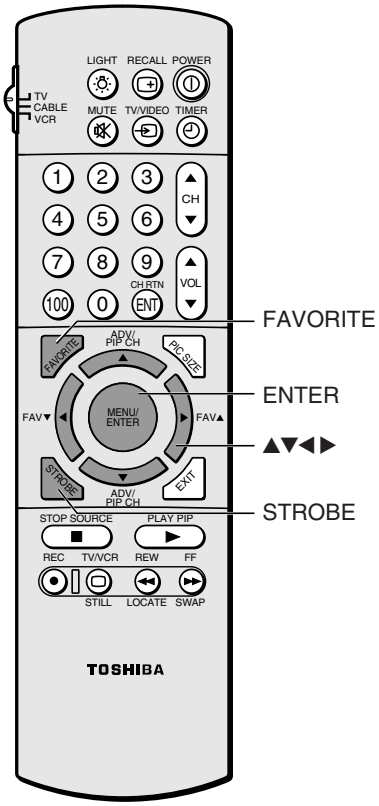
Press STROBE to start the strobe function. 9-picture multi-strobe starts for the present main picture.



For example, you can watch a decisive moment of a sports program that has been recorded previously.

To cancel the strobe function:

Press STROBE again.



Note:

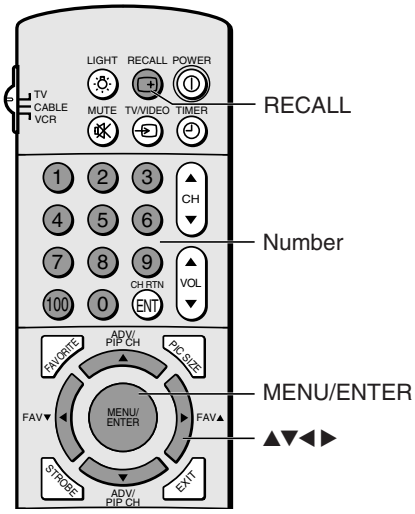
- *When the main picture source is "colorstream", the FAVORITE and STROBE buttons are not available.*
- *If the V-CHIP feature is active and you try to scan a TV program that exceeds the rating limits you set, the "X" mark on the black window will appear. However, during the scanning period, the V-CHIP operation may not be done correctly.*

NOTICE OF POSSIBLE ADVERSE EFFECTS ON TV PICTURE TUBE

If a fixed (non-moving) pattern remains on the TV screen for long periods of time, the image can become permanently engrained in the picture tube. See page 2 for details.

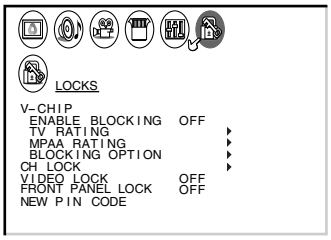
Using the LOCKS menu

The LOCKS menu includes the V-Chip, CH Lock, Video Lock, and New PIN Code functions. You can use these functions after entering the correct PIN code.



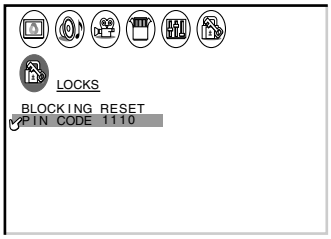
Entering the PIN code

1. Press MENU, and then press ◀ or ▶ until the LOCKS menu appears.

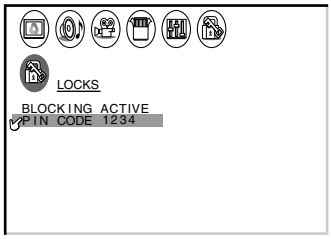


2. Press ▲ or ▼ to display the PIN code entering mode.

- Blocking Reset status:
  Set your 4-digit code by pressing the Number buttons (0-9), and then press ENTER.

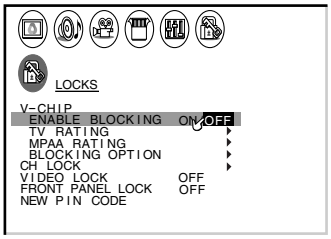


- When the PIN code is already stored:
  Press the Number buttons (0-9) to enter the 4-digit PIN code used for blocking channels, and then press ENTER.



If a wrong PIN code is entered, the message “Incorrect” appears. Enter the code again, and then press ENTER.

If you cannot remember the PIN code, while in the PIN code entering mode, press the RECALL button four times within five seconds. The PIN code will be released (Blocking Reset status restored).

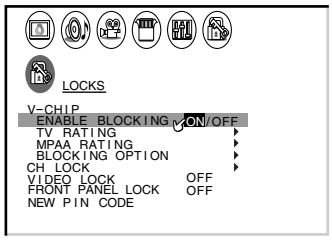


Continue to set each item following the steps on the next page.

Using the V-CHIP menu

Some TV programs and movies include signals that classify the content of the program (violence, sex, dialog, language). The V-CHIP control feature in this TV detects the signals and blocks the programs according to your selections. To use this feature, perform the following setup.

LOCKS menu



To select each item:

Press ▼ or ▲ .

ENABLE BLOCKING

1. From the LOCKS menu, select ENABLE BLOCKING.
2. Press ◀ or ▶ to select ON or OFF.

   ON : To enable your setting (Lock)

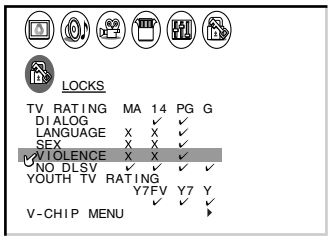
   OFF: To release your setting (Unlock)

   Note: *The CH LOCK function is not affected with this selection.*

TV RATING (Independent rating system for broadcasters)

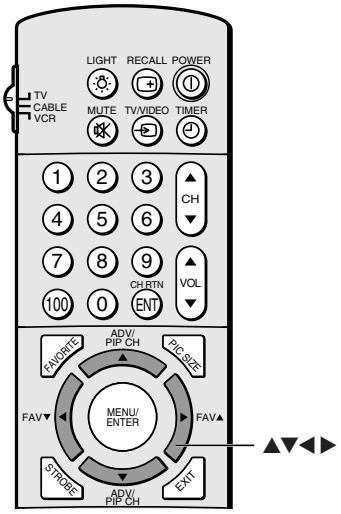
1. From the LOCKS menu, select TV RATING.
2. Press ◀ or ▶ to display the TV RATING menu.
3. Press ▼ or ▲ to select item.
4. Press ▶ to lock (display "X")

   Press ◀ to unlock (display "✓ ")
5. Repeat steps 3 and 4 to set the next item.

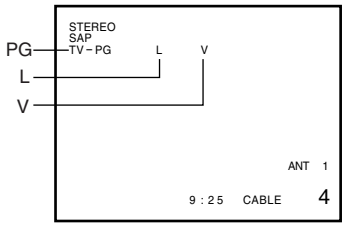


The TV age-based ratings and content themes you can lock are listed in the table below.

Ratings	Description and Content themes
MA	Mature Audience Only (This program is specifically designed to be viewed by adults and therefore may be unsuitable for children under 17.) **L) Crude or indecent language S) Explicit sexual activity V) Graphic violence**
14	Parents Strongly Cautioned (This program contains some material that many parents would find unsuitable for children under 14 years of age.) **D) Intensely suggestive dialog L) Strong, coarse language S) Intense sexual situations V) Intense violence**
PG	Parental Guidance Suggested (This program contains material that parents may find unsuitable for younger children.) **D) Some suggestive dialog L) Infrequent coarse language S) Some sexual situations V) Moderate violence**
G	General Audience (Most parents would find this program suitable for all ages.)
Y7, Y7FV	Directed to Older Children (This program is designed for children age 7 and above. Note: Programs in which fantasy violence may be more intense or more combative than other programs in this category are designated Y7FV.)
Y	All Children (This program is designed to be appropriate for all children)

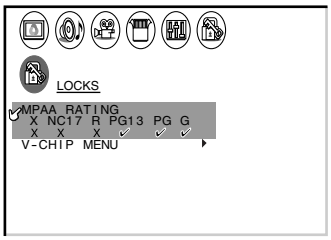


Press RECALL to display the rating of the TV program you are currently watching.



MPAA RATING (Independent rating system for movies)

1. From the LOCKS menu, select MPAA RATING.
2. Press ◀ or ▶ to display the MPAA RATING menu, then press ▼ or ▲ to highlight MPAA RATING.
3. Press ◀ or ▶ to display the MPAA RATING menu.



4. Press ▶ to lock ("X") or press ◀ to unlock ("✓").

The movie ratings you can lock are described as follows:

X : X-rated (For adults only)

NC17 : Not intended for anyone 17 and under

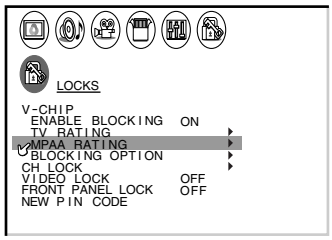
R : Restricted (Under 17 requires accompanying parent or adult guardian.)

PG13 : Parents Strongly Cautioned (Some material may be inappropriate for children under 13)

PG : Parental Guidance Suggested (Some material may not be suitable for children)

G : General Audience (Appropriate for all ages)

LOCKS menu



To select each item:

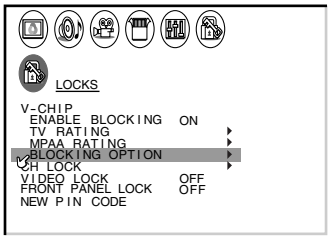
Press ▼ or ▲ .

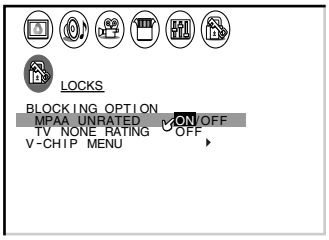
BLOCKING OPTION

1. From the LOCKS menu, select BLOCKING OPTION.
2. Press ◀ or ▶ to display the BLOCKING OPTION menu, then press ▲ or ▼ to select item.

MPAA UNRATED:

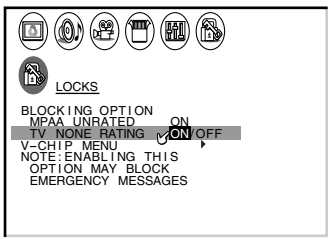
Press ◀ or ▶ to select ON (Lock) or OFF (Unlock) for unrated programs in the MPAA rating system.





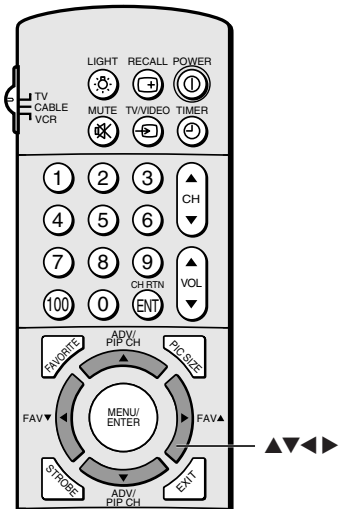
TV NONE RATING

Press ◀ or ▶ to select ON (Lock) or OFF (Unlock) for programs rated NONE in the TV PARENTAL GUIDELINES.



V-CHIP MENU:

Press ◀ or ▶ to return to the LOCKS menu.



Caution:

Setting the TV None Rating to ON may block the broadcast of emergency information. The menu will display the note, "Enabling this option may block emergency messages" to warn you of this possibility.

Unlocking programs temporarily

1. If you try to watch a TV program that exceeds the rating limits you set, the TV enters into the program lock mode.

```
THIS PROGRAM HAS BEEN BLOCKED!
TV-PG   L   V
EXCEEDS SET LIMITS

 PUSH MUTE TO ENTER PIN

                    CABLE  4
```

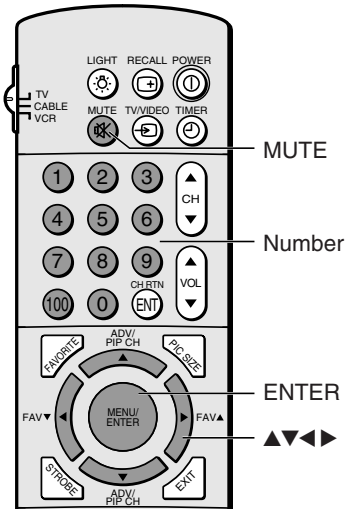
2. To temporarily unlock the program, press MUTE.
3. Press the Number buttons (0-9) to enter your 4-digit pin code.

```
BLOCKING ACTIVE

ENTER PIN CODE
TO TEMPORARILY UN-BLOCK

        ----

0-9:TO SELECT   ENTER:TO SET
```

4. Press ENTER.

   If the number is correct, the lock mode will be released and the normal picture will appear.

   All locking is disabled until the TV is turned off, and will be enabled when the TV is turned on again.



Locking channels

With the CH LOCK feature, you can lock specific channels. The TV will not be able to tune locked channels with the Channel ▲ ▼ buttons or Channel Number buttons, unless you clear the setting.

You can lock a maximum of nine channels.

To lock channels:

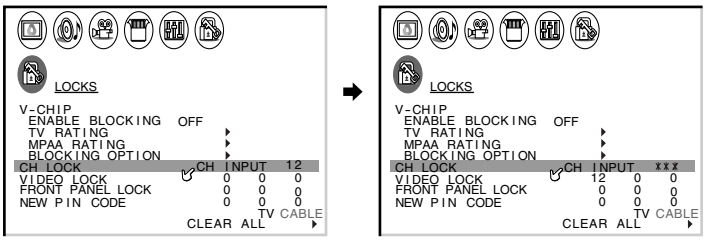
1. From the LOCKS menu, select CH LOCK. CH INPUT will be highlighted.
2. Press ◀ or ▶ to display the CH LOCK menu.
3. Press the Channel Number buttons to enter the channel you want to lock. (The channel you are currently watching cannot be locked.)
4. Press ENTER.

LOCKS menu

```
LOCKS
V-CHIP
 ENABLE BLOCKING   ON
 TV RATING          ▸
 MPAA RATING        ▸
 BLOCKING OPTION    ▸
 CH LOCK            ▸
 VIDEO LOCK        OFF
 FRONT PANEL LOCK  OFF
 NEW PIN CODE
```

To select each item:

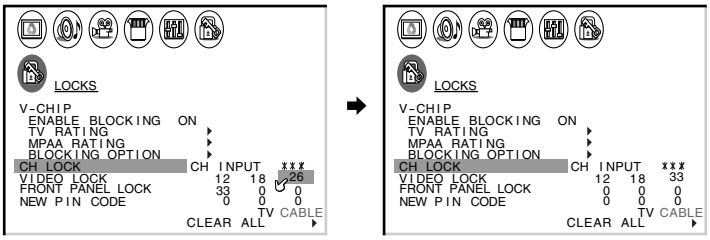
Press ▼ or ▲ .



5. Repeat steps 3 and 4 for other channels.

To unlock channels:

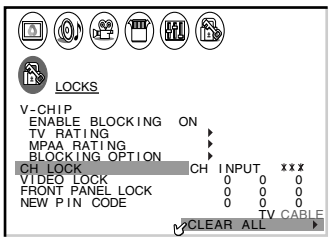
1. From the LOCKS menu, select CH LOCK.
2. Press ◀ or ▶ to display the CH LOCK menu.
3. Press ▲▼◀▶ to highlight the channel you want to unlock, then press ENTER.

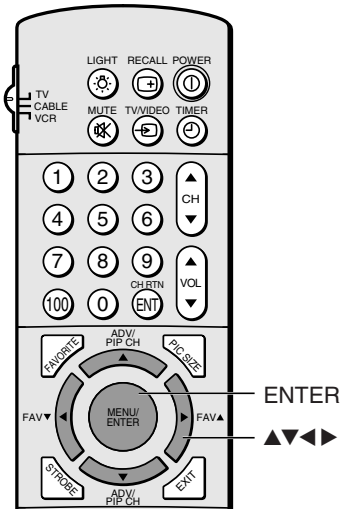


4. Repeat step 3 for other channels.

To clear all locked channels at once:

Press ▲ or ▼ to highlight CLEAR ALL, and then press ◀ or ▶.





Locking video inputs

With the VIDEO LOCK feature, you can lock out the input sources (Video 1, Video 2, Video 3, ColorStream HD1, ColorStream HD2) and channels 3 and 4.

You will not be able to select the input sources with the TV/VIDEO button or Channel buttons unless you clear the setting.

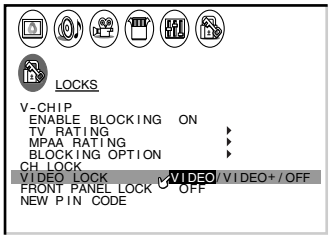
To set up the video lock:

1. From the LOCKS menu, select VIDEO LOCK.
2. Press ◀ or ▶ to highlight the level of video locking you want (Video, Video+, or Off), as follows:

   VIDEO : Locks Video 1, Video 2, Video 3, ColorStream HD1 and HD2.

   VIDEO+ : Locks Video 1, Video 2, Video 3, ColorStream, HD1/HD2, and channels 3 and 4. This option should be used if you use the antenna terminal to play a video tape.

   OFF : Unlocks all video input sources.

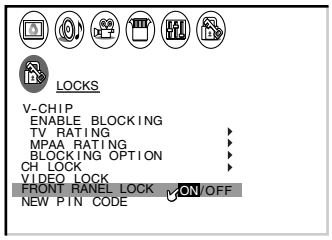


Using the front panel lock feature

Lock the front panel buttons to prevent the buttons from being pressed accidentally (by children, for example). When the front panel lock is in ON mode, all control buttons on the TV front panel (except POWER) do not operate.

To lock the front panel:

1. From the LOCKS menu, select FRONT PANEL LOCK.
2. Press ◀ or ▶ to highlight ON.

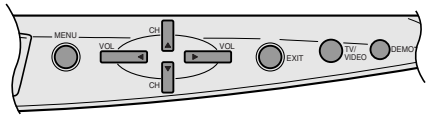


If a button on the front panel is pressed, the message "Not Available" appears.

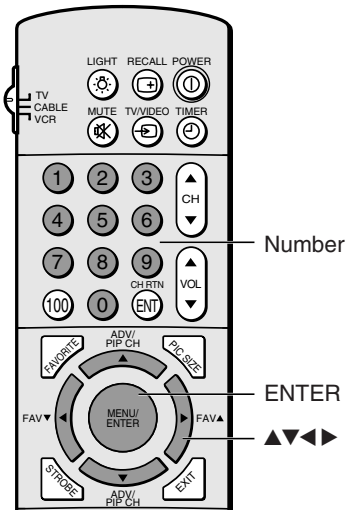
To unlock the front panel:

Highlight OFF in step 2 above.

TV front panel

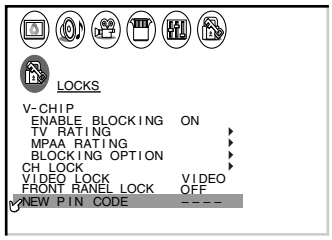


Buttons to be locked



Changing the PIN code

1. From the LOCKS menu, select NEW PIN CODE.
2. Press the Number buttons (0-9) to enter a 4-digit code.
   The numbers you enter will replace the dashes in the display.



3. Press ENTER.
   The new PIN code is now active.

Adjusting the picture

Selecting the picture mode

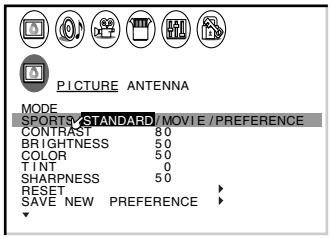
You can select your desired picture type from four picture modes: Sports, Standard, Movie, and Preference.

Mode	Picture Quality
Sports	Bright and dynamic picture (factory setting)
Standard	Standard picture setting (factory setting)
Movie	Movie-like picture setting (factory setting)
Preference	Your personal preference*

*(see “Saving new preference” on page 36.)

To select the picture mode:

1. Press MENU, and then press ◀ or ▶ until the PICTURE menu appears.
2. Press ▼ or ▲ to select MODE.
3. Press ◀ or ▶ to highlight the mode you prefer.



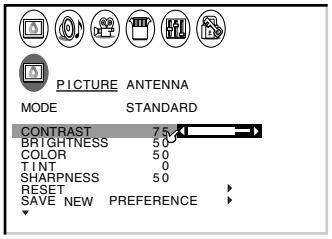
Adjusting the picture quality

You can adjust the picture quality to your personal preferences, including the contrast, brightness, color, tint, sharpness, flesh tone, noise reduction and color temperature.

Selection	◀ Pressing ▶	
contrast	lower	higher
brightness	darker	lighter
color	paler	deeper
tint	reddish	greenish
sharpness	softer	sharper

To adjust the picture quality:

1. Press MENU, and then press ◀ or ▶ until the PICTURE menu appears.
2. Press ▼ or ▲ until the item you want to adjust is highlighted.
3. Press ◀ or ▶ to adjust the level.



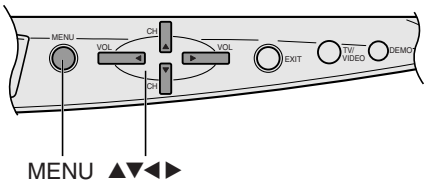
The PICTURE qualities you adjusted can be saved in the TV’s memory with the SAVE NEW PREFERENCE feature (see page 36). You can keep these settings or choose factory set options, as described under “Selecting the picture mode” above.

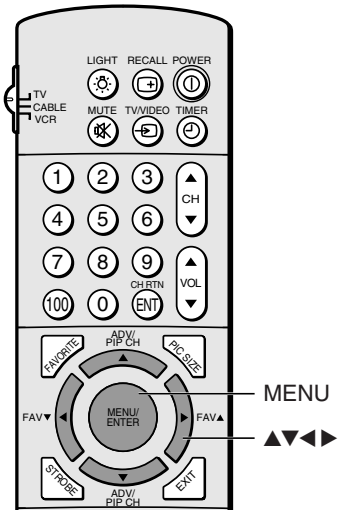
Note:

If you select one of the factory-set picture modes (SPORTS, STANDARDS, or MOVIE) and then change a picture quality setting (for example, increase the contrast), the picture mode automatically changes to PREFERENCE in the Picture menu.

To save your new picture quality settings, you must select SAVE NEW PREFERENCE (see page 36) before closing the Picture menu or the TV will return to the previous picture mode.

TV front panel



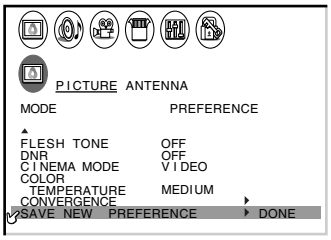


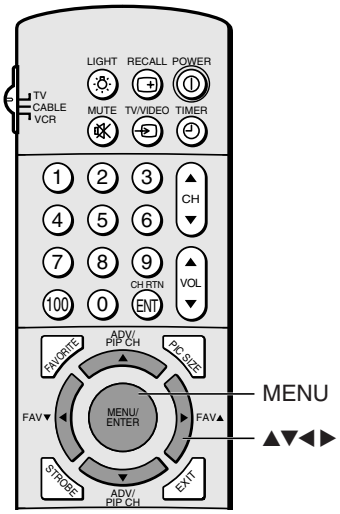
Saving new preference

You can save the PICTURE qualities (contrast, brightness, color, tint, and sharpness) you adjusted in the picture preference mode.

To save your new preferences:

1. Press MENU, and then press ◀ or ▶ until the PICTURE menu appears.
2. Press ▲ or ▼ to highlight SAVE NEW PREFERENCE.
3. Press ◀ or ▶. When complete, the menu displays “DONE”.





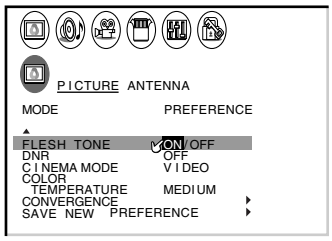
You can choose your saved preferences by selecting PREFERENCE (see “Selecting the picture mode” on page 35).

Using the flesh tone feature

This feature displays natural flesh tones by correcting the tint.

To turn on the flesh tone feature:

1. Press MENU, and then press ◀ or ▶ until the PICTURE menu appears.
2. Press ▲ or ▼ to highlight FLESH TONE.
3. Press ◀ or ▶ to highlight ON.

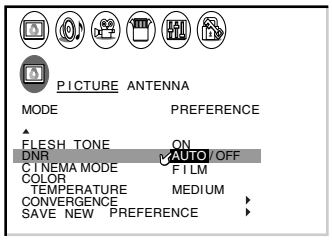


Using the Digital Noise Reduction (DNR) feature

This feature allows you to reduce visible interference in your TV picture. This is useful when receiving a broadcast with a weak signal or playing back a video cassette or disc damaged by repeated use.

To turn on the DNR feature:

1. Press MENU, and then press ◀ or ▶ until the PICTURE menu appears.
2. Press ▲ or ▼ to highlight DNR.
3. Press ◀ or ▶ to highlight AUTO.



To turn off the DNR feature:

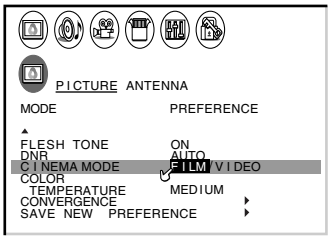
Highlight OFF in step 3 above.

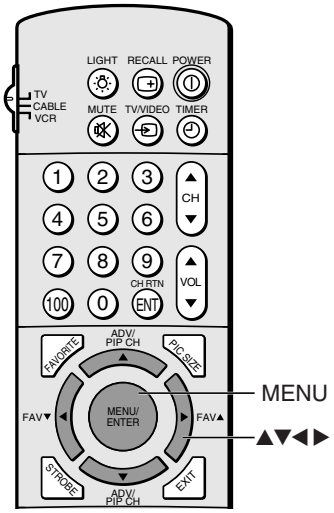
Selecting the cinema mode

When you view a DVD movie (3-2 pulldown processed) from a DVD player connected to the ColorStream (component video) inputs on the TV, smoother and more natural motion can be obtained by setting the CINEMA MODE to FILM (auto).

To set the CINEMA MODE to FILM (auto):

1. Press MENU, and then press ◀ or ▶ until the PICTURE menu appears.
2. Press ▲ or ▼ to highlight CINEMA MODE.
3. Press ◀ or ▶ to select FILM (auto).





To set the CINEMA MODE to VIDEO (off):

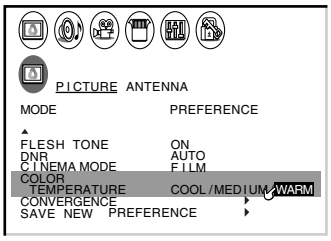
Press ◀ or ▶ to select VIDEO in step 3 above.

Selecting the color temperature

You can change the quality of the picture by selecting from three preset color temperatures: cool, medium, and warm.

To select the color temperature:

1. Press MENU, and then press ◀ or ▶ until the PICTURE menu appears.
2. Press ▲ or ▼ to highlight COLOR TEMPERATURE.
3. Press ◀ or ▶ to highlight the mode you prefer.



Mode	Picture Quality
cool	blueish
medium	neutral
warm	reddish

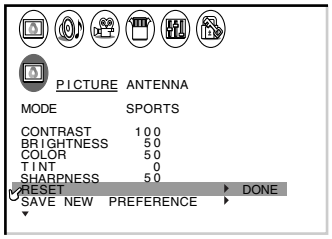
Resetting picture adjustments

The RESET function adjusts the picture qualities to the following factory settings:

Contrast ..... max (100)
Brightness ..... center (50)
Color ..... center (50)
Tint ..... center (0)
Sharpness ..... center (50)
Color temperature ..... cool
DNR ..... auto
Mode ..... sports

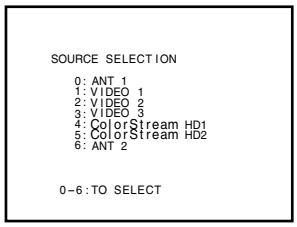
To reset the picture adjustments:

1. Press MENU, and then press ◀ or ▶ until the PICTURE menu appears.
2. Press ▲ or ▼ to highlight RESET.
3. Press ◀ or ▶. The menu displays “DONE”.

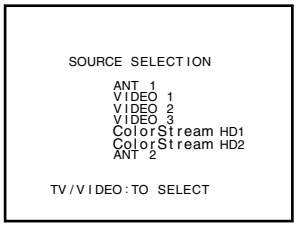


Selecting the video input source

Press TV/VIDEO button on the remote control or the TV to view a signal coming from another device connected to your TV, such as a VCR or video disc player (see illustrations below). You can select ANT 1, VIDEO 1, VIDEO 2, VIDEO 3, ColorStream HD1, ColorStream HD2, or ANT 2 depending on which input jacks are used for connecting the devices (see "Connecting your TV" on page 5.)



Pressing TV/VIDEO on the remote control displays the current signal source (press TV/VIDEO again or 0-6 to change)

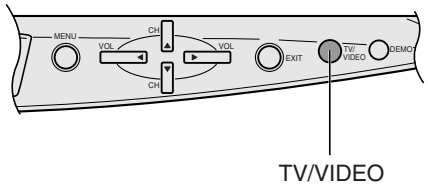


Pressing TV/VIDEO on the TV changes the current signal source

Note:

- *When ColorStream HD 1 or HD 2 is selected, the video OUT jack does not output a signal. To receive a video OUT signal, use a video or S-video IN connection instead of the ColorStream connection.*
- *If you select ColorStream HD1 or HD2 while the PIP/Double-Window is active, the window will close.*

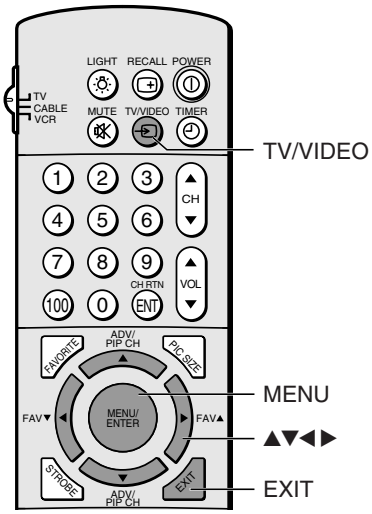
TV front panel



Labeling the video input sources

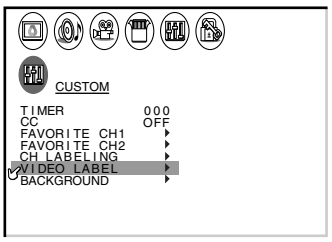
The video label feature allows you to label each input source for your TV from the following preset list of labels:

–	: Uses the default label name
VCR	: Video cassette recorder
DVD	: DVD video
DTV	: Digital TV set-top box
SAT	: Satellite box
CBL	: Cable box

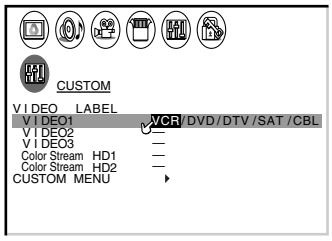


To label the video input sources:

1. Press MENU, and then press ◀ or ▶ until the CUSTOM menu appears.
2. Press ▲ or ▼ to highlight VIDEO LABEL.



3. Press ◀ or ▶ to display the VIDEO LABEL menu.
4. Press ▲ or ▼ to highlight the video source you want to label.
5. Press ◀ or ▶ to select the desired label for that input source.



6. Finish labeling the other video sources as desired. To return to the previous menu, press ▲ or ▼ to highlight CUSTOM MENU, and then press ◀ or ▶.
7. To exit the menu, press EXIT.

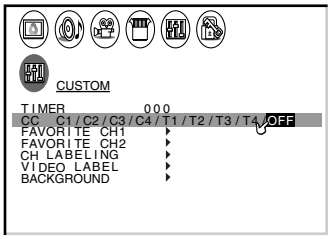
Using the closed caption feature

The closed caption feature has two options:

- Captions—An on-screen display of the dialogue, narration, and sound effects of TV programs and videos that are closed captioned (usually marked as "CC" in TV listings).
- Text—An on-screen display of information not related to the current program, such as weather or stock data (when provided by individual stations).

To view captions or text:

1. Tune the TV to the desired program.
2. Press MENU, and then press ◀ or ▶ until the CUSTOM menu appears.
3. Press ▼ or ▲ to highlight CC.



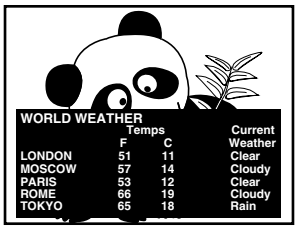
4. Press ◀ or ▶ to highlight the desired closed caption mode, as follows:

- To view captions, highlight C1, C2, C3, or C4 (C1 displays translation of the primary language in your area).

  Note: If the program or video you selected is not closed captioned, no captions will display on the screen.

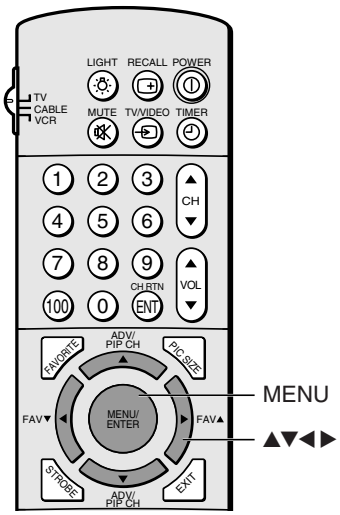
- To view text, highlight T1, T2, T3, or T4.

  Note: If text is not available in your area, a black rectangle may appear on your screen. If this happens, turn the Closed Caption feature OFF.



To turn off the Closed Caption feature:

Highlight OFF in step 4.



Note:

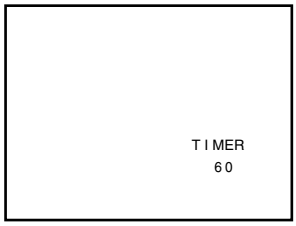
A closed caption signal may not display in the following situations:

- *when a videotape has been dubbed*
- *when the signal reception is weak*
- *when the signal reception is nonstandard*

Setting the sleep timer

To set the sleep timer to turn the TV off automatically:

1. Press TIMER to set the length of time until the TV turns off.



Every time you press the button, the time display will increase by 10 minutes, up to 180 minutes.

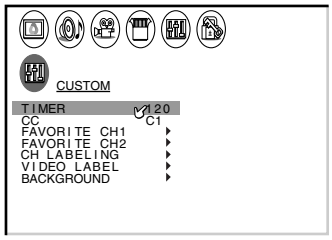
10 → 20 – – – – – → 170 → 180 → 0 → 10 MIN.

To cancel the sleep timer:

Press TIMER until it is set to 0.

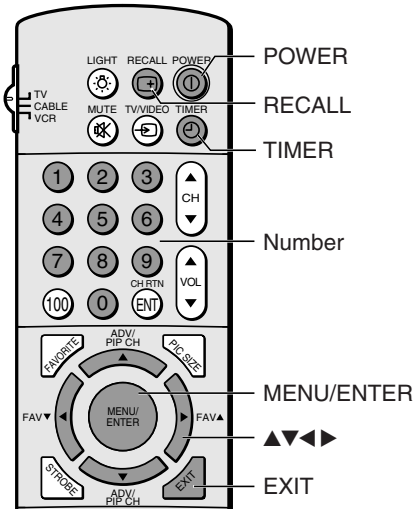
The timer can also be set using the on-screen menu:

1. Press MENU, and then press ◀ or ▶ until the SETUP menu appears.
2. Press ▲ or ▼ to highlight TIMER.
3. After the number position starts to blink, press the Number buttons (0-9) to enter the length of time until the TV turns off automatically.
4. Press ENTER to start the timer.



Note :

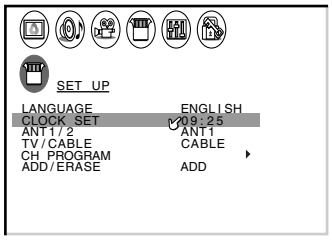
To display the amount of time left until the TV turns off automatically, press TIMER once.



Setting the clock

To set the clock:

1. Press MENU, and then press ◀ or ▶ until the SET UP menu appears.
2. Press ▲ or ▼ to highlight CLOCK SET.
3. After the number position starts to blink, press the Number buttons (0-9) to enter the correct time. The clock operates on a 12-hour cycle.
4. Press ENTER to start the clock.



Note :

If the TV's power source is interrupted (the power cord is unplugged or a power failure occurs), the clock must be reset.

To display the time on-screen:

Press RECALL.

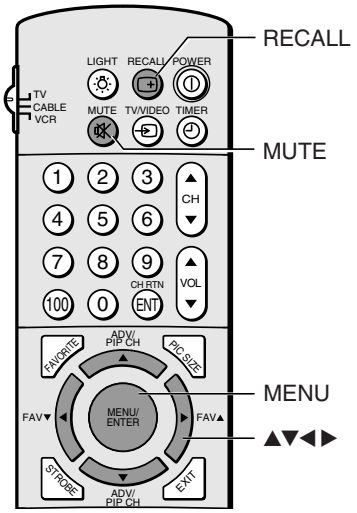
Adjusting the sound

Muting the sound

Press MUTE to temporarily turn off the sound. While the sound is off, the screen will display the word “1/2 MUTE” or “MUTE” in the lower right corner. Every time you press the button, the mute mode will change in the following order.

→ Normal → 1/2 MUTE → MUTE

When you select “MUTE” mode, the closed caption feature is automatically activated. To deactivate this feature, press MUTE again. This feature works only when the closed caption mode is set to OFF. See “Using the closed caption feature” on page 39 for more information.



Selecting stereo/SAP broadcasts

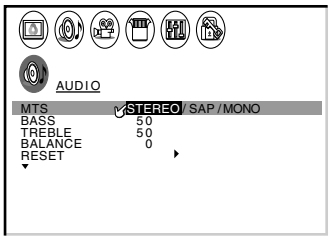
The multi-channel TV sound (MTS) feature allows you to listen to high-fidelity stereo sound while watching TV. MTS can also transmit a second audio program (SAP) containing a second language, music, or other audio information (when provided by individual stations).

When the TV receives a stereo or SAP broadcast, the word STEREO or SAP appears on-screen every time the TV is turned on, the channel is changed, or the RECALL button is pressed.

The MTS feature is not available when the TV is in VIDEO mode.

To listen to stereo sound:

1. Press MENU, and then press ◀ or ▶ until the AUDIO menu appears.
2. Press ▲ or ▼ to highlight MTS.
3. Press ◀ or ▶ to highlight STEREO.



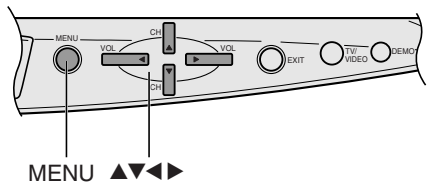
You can leave your TV in STEREO mode because it will automatically output the type of sound being broadcast (stereo or monaural). The word “STEREO” or “SAP” displays in yellow in the menu when the TV receives the signal.

If the stereo sound is noisy, select MONO to reduce the noise.

To listen to SAP (if available):

1. Press MENU, and then press ◀ or ▶ until the AUDIO menu appears.
2. Press ▲ or ▼ to highlight MTS.
3. Press ◀ or ▶ to highlight SAP. You will hear the station’s second audio program (if available) from the speakers, while viewing the original program’s picture (see note at right).

TV front panel



Note :

A second audio program (SAP) can be heard only on those TV stations that offer it.

For example, a station might broadcast music as a second audio program. If you have SAP on, you will see the current program on the screen but hear music instead of the program’s normal audio.

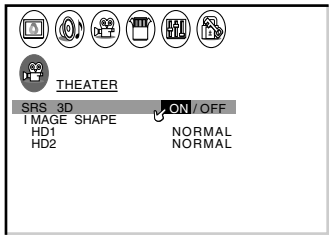
However, if you have SAP on, and the station you are watching is not currently broadcasting a second audio program, you will see the picture but not hear any sound. If this happens, put the TV in STEREO mode so you can hear the station’s normal audio.

Using the SRS 3D surround sound feature

The SRS 3D surround sound feature expands the audio listening field wider and deeper to create exceptional sound quality from the TV's speakers. The feature uses stereo signals from a TV broadcast or video input.

To turn on the SRS 3D surround:

1. Select STEREO mode (see "Selecting stereo/SAP broadcasts" on page 41).
2. Press MENU, and then press ◀ or ▶ until the THEATER menu appears.
3. Press ▲ or ▼ to highlight SRS 3D.
4. Press ◀ or ▶ to highlight ON.



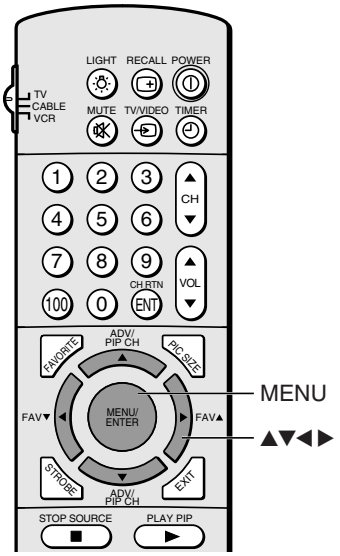
To turn off the SRS 3D surround:

Highlight OFF in step 4 above.

In general, you can leave your TV in ON mode because it will automatically produce the type of sound being broadcast (surround stereo or monaural).

Note:

If the broadcast is monaural, the SRS 3D effect does not work.

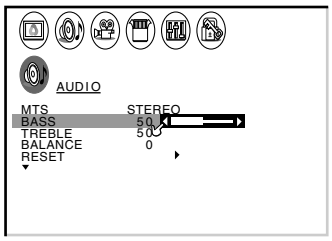


Adjusting the sound quality

You can change the quality of your TV's sound by adjusting the bass, treble, and balance.

To adjust the sound quality:

1. Press MENU, and then press ◀ or ▶ until the AUDIO menu appears.
2. Press ▲ or ▼ to highlight the item you want to adjust.



3. Press ◀ or ▶ to adjust the level.

- ◀ makes the sound quality weaker or decreases the balance in the right channel, depending on the item selected.
- ▶ makes the sound quality stronger or decreases the balance in the left channel, depending on the item selected.

SRS, and the (●) symbol are trademarks of SRS Labs, Inc.

SRS technology is incorporated under license from SRS Labs, Inc.

Resetting audio adjustments

The RESET function returns the audio adjustments to the following factory settings:

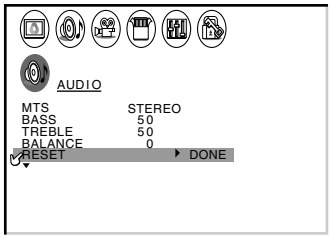
Bass ..... center (50)

Treble ..... center (50)

Balance ..... center (0)

To reset the audio adjustments:

1. Press MENU, and then press ◀ or ▶ until the AUDIO menu appears.
2. Press ▲ or ▼ to highlight RESET.
3. Press ◀ or ▶. The menu displays "DONE".

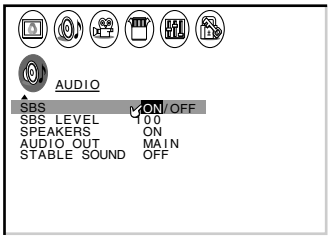


Using the sub-bass system (SBS)

The sub-bass system allows you to enhance bass performance, even when the sound volume is low.

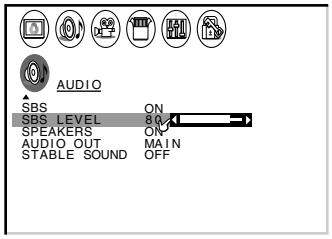
To turn on the SBS:

1. Press MENU, and then press ◀ or ▶ until the AUDIO menu appears.
2. Press ▲ or ▼ to highlight SBS.
3. Press ◀ or ▶ to highlight ON.



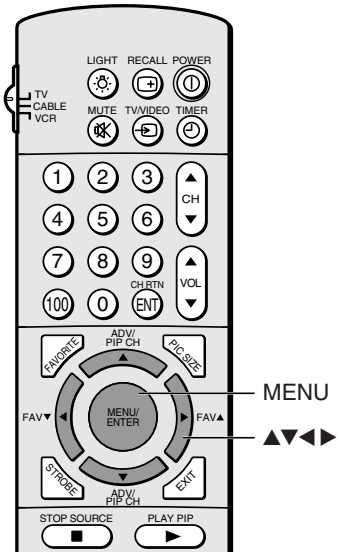
To adjust the SBS level:

4. Press ▲ or ▼ to highlight SBS LEVEL.
5. Press ◀ or ▶ to adjust the SBS level.



To turn off the SBS:

Highlight OFF in step 3 above.



Note:

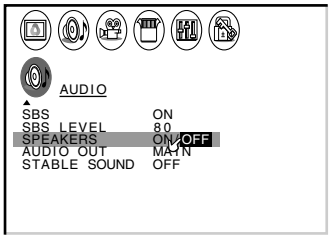
The SBS signal does not pass through the "Variable Audio OUT" jacks (see "Connecting an audio system" on page 11); however, the AUDIO menu will appear when the buttons are pressed.

Turning off the built-in speakers

Use this feature to turn the TV speakers off when you connect an audio system (see “Connecting an audio system” on page 11).

To turn off the built-in speakers:

1. Press MENU, then press ◀ or ▶ until AUDIO menu appears.
2. Press ▲ or ▼ to highlight SPEAKERS.
3. Press ◀ or ▶ to highlight OFF.



To turn on the built-in speakers:

Highlight ON in step 3 above.

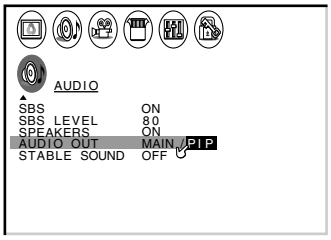
Selecting the Audio OUT sound

This feature allows you to select the sound source (MAIN or PIP) that is output from the Audio OUT jacks.

This is useful when amplifying or recording the PIP/double-Window sound with external equipment while hearing the sound of the main picture through the built-in speakers.

To select the Audio OUT sound:

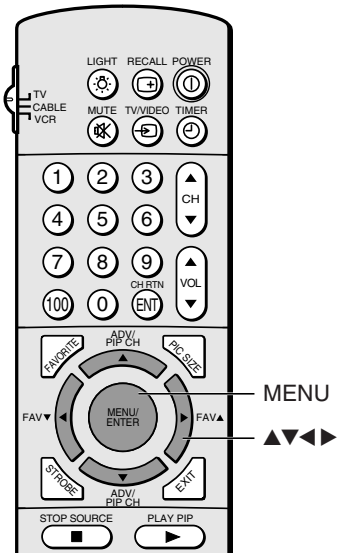
1. Press MENU, and then press ◀ or ▶ until the AUDIO menu appears.
2. Press ▲ or ▼ to highlight AUDIO OUT.
3. Press ◀ or ▶ to select MAIN or PIP.



- MAIN : Outputs the sound of the main program.
- PIP : Outputs the sound of the PIP/double-window program.

Note:

Make sure the volume control of your audio amplifier is set to a moderate listening level.

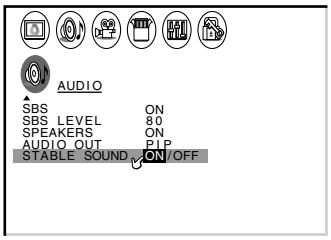


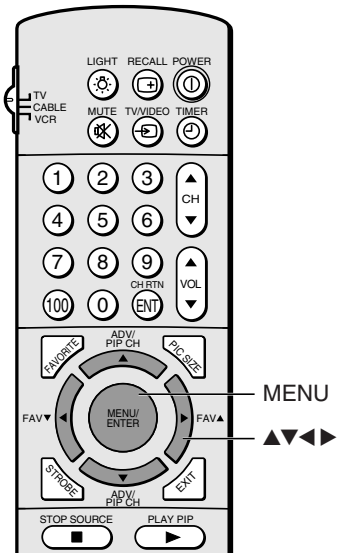
Using the StableSound™ feature

When the signal source is changed, the stable sound feature limits the high volume level to prevent extreme changes in volume (for example, to prevent the sudden increase in volume that often happens when a TV program switches to a commercial).

To turn on the StableSound feature:

1. Press MENU, and then press ◀ or ▶ until the AUDIO menu appears.
2. Press ▲ or ▼ to highlight STABLE SOUND.
3. Press ◀ or ▶ to select ON.



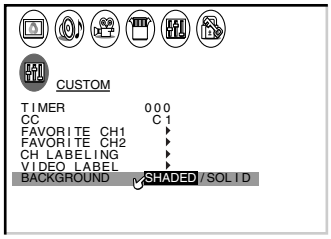


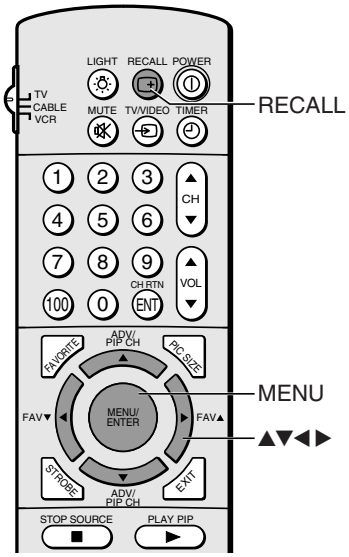
Selecting the background of the menu display

You can change the background of the menu display by selecting from two preset types: shaded and solid (gray).

To select the background:

1. Press MENU, and then press ◀ or ▶ until the CUSTOM menu appears.
2. Press ▲ or ▼ to highlight BACKGROUND.
3. Press ◀ or ▶ to select either a SHADED or SOLID background.

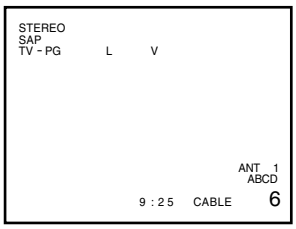




Displaying on-screen information

Press RECALL to display the following information on-screen:

- Antenna mode (when in TV mode)
- Channel number or VIDEO mode selected
- Time (if set)
- Channel label (if set)
- Stereo or SAP audio status
- V-CHIP rating status



Viewing the demonstration mode

When you press DEMO on the TV, the TV will automatically demonstrate several of your TV's features. This function is provided for demonstration purposes only.

To stop the demonstration mode:

Press DEMO again.

Understanding the auto power off feature

The TV will automatically turn itself off after approximately 15 minutes if it is tuned to a vacant channel or a station that completes its broadcast for the day. This feature does not work in VIDEO mode.

Understanding the last mode memory feature

If the power is cut off while you are viewing the TV, the Last Mode Memory feature turns the TV on automatically when the power is resupplied.

If the power is going to be off for a long time and you are going to be away from your TV, unplug the power cord to prevent the TV from turning on in your absence.

Appendix

Specifications

Television System	NTSC standard
Channel Coverage	VHF: 2 through 13 UHF: 14 through 69 Cable TV: Mid band (A-8 through A-1, A through I) Super band (J through W) Hyper band (AA through ZZ, AAA, BBB) Ultra band (65 through 94, 100 through 125)
Power Source	120 V AC, 60 Hz
Power Consumption	204 W (average)
Audio Power	15 W + 15 W
Speaker Type	Two 6-1/4 inches (16 cm) round
Video/Audio Terminals	S-VIDEO INPUT Y-INPUT: 1 V(p-p), 75 ohm, negative sync. C-INPUT: 0.286 V(p-p) (burst signal), 75 ohm VIDEO/AUDIO INPUT VIDEO: 1 V(p-p), 75 ohm, negative sync. AUDIO: 150 mV(rms) (30% modulation equivalent, 47 kohm) ColorStream™ (component video) INPUT Y-INPUT: 1V(p-p), 75 ohm CR-INPUT: 0.7 V(p-p), 75 ohm CB-INPUT: 0.7 V(p-p), 75 ohm AUDIO: 150 mV(rms), 47 kohm VIDEO/AUDIO OUTPUT VIDEO: 1 V(p-p), 75 ohm, negative sync. AUDIO: 150 mV(rms) (30% modulation equivalent, 4.7 kohm) VARIABLE AUDIO OUTPUT 0–300 mV(rms) (30% modulation equivalent, 4.7 kohm) AUDIO CENTER CHANNEL INPUT 300 mV(rms) (30% modulation equivalent, 10 kohm)
Dimensions	Width 42 inches (1067 mm) Height 50-1/2 inches (1283 mm) Depth 20-7/8 inches (530 mm)
Mass	217 lbs (98.6 kg)
Supplied Accessories	Remote Control with 2 size “AA” alkaline batteries

Design and specifications are subject to change without notice.

Troubleshooting

Before calling a service technician, please check the following table for a possible cause of the problem and some solutions.

Problem	Solution
TV will not turn on	• Make sure the power cord is plugged in, then press POWER. • The remote control batteries may be dead. Replace the batteries.
No picture, no sound	• Check the antenna/cable connections.
No sound, picture OK	• The sound may be muted. Press VOLUME. • The station may have broadcast difficulties. Try another channel. • Check that the SPEAKERS function in AUDIO menu is set properly.
Poor picture, sound OK	• Check the antenna connections. • The station may have broadcast difficulties. Try another channel. • Adjust the PICTURE menu.
Poor reception of broadcast channels	• The station may have broadcast difficulties. Try another channel. • Check the antenna connections. • If you are using a VCR, make sure the TV/VCR button is set correctly.
Cannot receive above channel 13	• Make sure the TV/CABLE switch is set to the mode that corresponds with the signal source type (cable company or outside antenna).
Black box appears on the screen	• The closed caption feature may be set to one of the Text modes (T1, T2, T3, or T4). Turn closed captioning OFF.
Unable to select a certain channel	• The channel may be locked out with the CH LOCK feature, or erased with the ADD/ERASE feature.
Multiple images	• The station may have broadcast difficulties. Try another channel. • Antenna reception may be poor. Use a highly directional outdoor antenna.
Poor color or no color	• The station may have broadcast difficulties. Try another channel. • Adjust the TINT and/or COLOR in the PICTURE menu.
No stereo or SAP sound from a known MTS broadcast	• Make sure the MTS feature is set properly.
The front panel buttons do not operate	• Check the FRONT PANEL LOCK feature.
The remote control does not operate	• Check if the TV/CABLE/VCR switch is properly set. • Remove all obstructions between the remote control and the remote control sensor in the TV. • The remote control batteries may be dead. Replace the batteries.
Cannot access signal input sources (Video1, Video2, Video3, ColorStream HD1/HD2) and/or Channels 3 and 4.	• Check the VIDEO LOCK feature.

Limited United States Warranty

Toshiba America Consumer Products, Inc. ("TACP") and Toshiba Hawaii Inc. ("THI") make the following limited warranties. These limited warranties extend to the original consumer purchaser or any person receiving this set as a gift from the original consumer purchaser and to no other purchaser or transferee.

Limited One (1) Year Warranty

TACP and THI warrant this product and its parts against defects in materials or workmanship for a period of one (1) year after the date of original retail purchase. During this period, TACP and THI will repair or replace a defective part, at their option, with a new or refurbished part, without charge to you. TACP/THI Authorized Service Station personnel will come to your home when warranty service is required. Depending on the type of repair required, the service will either be performed in your home or the set will be taken to the TACP/THI authorized service station for repair and returned to your home at no cost to you.

Limited Two (2) Year Warranty of Picture Tube

TACP and THI further warrant the picture tube in this product against defects in materials or workmanship for a period of two (2) years after the date of original retail purchase. During this period, TACP and THI will repair or replace a defective picture tube at their option, with a new or refurbished picture tube, without charge to you, except that if a defective picture tube is replaced after one (1) year from the date of the original retail purchase, you pay labor charges involved in the replacement.

Rental Units

The warranty for rental units begins with the first rental or thirty (30) days from the date of shipment to the rental firm, whichever comes first.

Commercial Units

Products sold and used for commercial use have a limited ninety (90) day warranty for all parts, labor and picture tube.

Owner's Manual and Demographic Card

You should read this owner's manual thoroughly before operating this product. You should complete and mail the enclosed Demographic card within ten days after you, or the person who has given you this product as a gift, purchased this product. This is one way to enable TACP/THI to provide you with better customer service and improved products. Failure to return the Demographic card will not affect your rights under this warranty.

Your Responsibility

The above warranties are subject to the following conditions;

(1) You must retain your bill of sale or provide other proof of purchase.

(2) All warranty servicing of this product must be made by an Authorized TACP/THI Service Station.

(3) These warranties are effective only if the product is purchased and operated in the U.S.A. or Puerto Rico.

(4) Labor service charges for set installation, set up, adjustment of customer controls and installation or repair of antenna systems are not covered by this warranty. Reception problems caused by inadequate antenna systems are your responsibility.

(5) Warranties extend only to defects in materials or workmanship as limited above and do not extend to any product or parts which have been lost or discarded by you or to damage to products or parts caused by misuse, accident, damage caused by Acts of God, such as lightning or fluctuations in electric power, improper installation, improper maintenance or use in violation of instructions furnished by us; or to units which have been modified or had the serial number removed, altered, defaced or rendered illegible.

How to Obtain Warranty Service

If after following all of the operating instructions in this manual and checking the "Troubleshooting" section, you find that service is needed:

(1) Call the TACP toll-free number 1-800-631-3811 to find the nearest TOSHIBA Authorized Service Station. In Hawaii, contact Toshiba Hawaii, Inc. 327 Kamakee Street, Honolulu, Hawaii 96814 (808) 591-9281

(2) Present your bill of sale or other proof to the Authorized Service Station. "Authorized TACP/THI service station personnel will come to your home when warranty service is required. Depending on the type of repair required, the service will either be performed in your home or the set will be taken to the TACP/THI Authorized service station for repair and returned to your home at no cost to you."

For additional information, visit our web site:
www.toshiba.com

All warranties implied by state law, including the implied warranties of merchantability and fitness for a particular purpose, are expressly limited to the duration of the limited warranties set forth above. With the exception of any warranties implied by state law as hereby limited, the foregoing warranty is exclusive and in lieu of all other warranties, guarantees, agreements and similar obligations of manufacturer or seller with respect to the repair or replacement of any parts. In no event shall TACP or THI be liable for consequential or incidental damages.

No person, agent, distributor, dealer or company is authorized to change, modify or extend the terms of these warranties in any manner whatsoever. The time within which action must be commenced to enforce any obligation of TACP or THI arising under this warranty or under any state, or law of the United States or any state thereof, is hereby limited to 90 days from the date you discover or should have discovered, the defect. This limitation does not apply to implied warranties arising under state law.

This warranty gives you specific legal rights and you may also have other rights which may vary from state to state. Some states do not allow limitation on how long an implied warranty lasts, when an action may be brought, or the exclusion or limitation of incidental or consequential damages, so the above provisions may not apply to you.

ATTENTION CANADIAN CONSUMERS:

Canadian consumers are requested to complete the special Canadian "Warranty Registration Form" enclosed, and forward this completed form with a copy of bill of sale to TOSHIBA OF CANADA to "Register and Validate" their warranty.

Products purchased in the U.S.A. and used in Canada are not covered by these warranties.

Products Purchased in Canada and used in the U.S.A. are not covered by these warranties.

REV. 09-01

Index

A

A/V receiver connection 11
ANT 1/2 18
Antenna cables 5
Audio cables 5
AUDIO OUT sound, selecting 44
Audio system connection 11
Auto power off 46

B

BACKGROUND selection 45
Back of the TV 4

C

Cable converter box connection 6
Camcorder connection 10
CH ▲▼ buttons 20
Channel surf mode 20
CH LABEL 23
CH LOCK 32
CH RTN button 22
Channel Number buttons 20
Channel programming
  ADD/ERASE 19
  Automatic programming 19
  TV/CABLE selection 19
Cinema mode 37
Clock, setting 40
Closed caption 39
ColorStream cables 5
Convergence adjustment 21
Color temperature 37

D

DEMO button 46
Double-window 26
DNR (Digital Noise Reduction) 36
DTV receiver connection 9
DVD connection 7, 8

F I

FAV ▼▲ buttons 22
FAVORITE button 28
Favorite channels 22
Front of the TV 4
Front panel lock 34
Image shape selection 25

L M

Labeling channels 23
Labeling video inputs 38
Language selection 18
Last mode memory 46
Locking channels 32
Locking video inputs 33
Locks menu 29
Menu system 17
MTS feature 41
Multi-Window feature 28
MUTE button 41

P

Picture adjustments
  COLOR TEMPERATURE 37
  FLESH TONE 36
  Picture mode 35
  Picture quality 35
PIP feature
  LOCATE button 27
  PIP button 26
  PIP CH ▲▼ buttons 26
  SOURCE button 26
  STILL button 27
  SWAP button 27
PIC SIZE button 25

R

RECALL button 45
Remote control
  Battery installation 12
  Learning about the buttons 16
  Programming 13
RESET 37, 43

S

SAP sound 41
Satellite receiver connection 7
Set-top box connection 9
Sleep timer 40
Sound quality adjustments 42
SPEAKERS on/off 44
Specifications 47
SRS 3D surround 42
Stable Sound™ 45
Stereo sound 41
STROBE button 28
Sub-bass system (SBS) 43
S-video cables 5

T

TIMER button 40
Troubleshooting 48
TV/VIDEO button 18, 38

V

V-CHI P
  BLOCKING OPTION 31
  ENABLE BLOCKING 30
  MPAA RATING 31
  NEW PIN CODE 34
  TV RATING 30
  Unlocking programs temporarily 32
VCR connection 5–10
Video cables 5
VIDEO LABEL 38
VIDEO LOCK 33

W

Warranty 49

TOSHIBA AMERICA CONSUMER PRODUCTS, INC.

HEAD OFFICE/82 TOTOWA ROAD, WAYNE, NEW JERSEY 07470
NATIONAL SERVICE DIVISION:1420B TOSHIBA DRIVE, LEBANON, TN. 37087

TOSHIBA HAWAII, INC.

HEAD OFFICE/327 KAMAKEE STREET, HONOLULU, HAWAII 96814, U.S.A. TEL: (808) 591-9281

TOSHIBA OF CANADA LTD.

HEAD OFFICE/191 McNABB STREET MARKHAM, ONTARIO L3R 8H2, CANADA TEL: (905) 470-5400
SERVICE CENTERS/TORONTO: 191 McNABB STREET MARKHAM, ONTARIO L3R 8H2, CANADA TEL: (905) 470- 5400
MONTREAL: 1643, NORTH SERVICE RD., TRANS-CANADA HIGHWAY, DORVAL QUEBEC, H9P 1J1, CANADA TEL: (514) 856-4100
VANCOUVER: 22171 FRASERWOOD WAY, RICHMOND, B.C. V6W 1J5, CANADA TEL: (604) 303-2500

MANUFACTURED BY
TOSHIBA AMERICA CONSUMER PRODUCTS, INC.

ColorStream is a registered trademark of Toshiba Corporation.
StableSound is a trademark of Toshiba America Consumer Products, Inc.

TOSHIBA

PRINTED IN USA
(01-08) B

23565371