

TOSHIBA



Color Television

OWNER'S MANUAL

CN35F90/CN35F95



PREPARATION

BASIC OPERATION

ADVANCED
OPERATION

EQUIPMENT
CONNECTIONS

REFERENCE
SECTION

Dear Customer

Congratulations! You have purchased one of the finest Color TV's on the market!

This manual will help you use the many exciting and useful features to make your TV viewing more enjoyable than ever before.

Before operating your TV set, please read all these safety and operating instructions completely and then retain for future reference.

* This manual applies to models CN35F90 and CN35F95. The common illustrations used in the following texts represent model CN35F90.

Customer's Record

You will find the model number and serial number on the back of your TV set.

Record these numbers in the spaces provided below. Refer to them whenever you call upon your TOSHIBA dealer regarding this product.

Model Number _____

Serial Number _____

Safety Precautions

WARNING:

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

| | | |
|--|---|---|
|  | WARNING RISK OF ELECTRIC SHOCK DO NOT OPEN |  |
| AVIS: RISQUE DE CHOC ELECTRIQUE-NE PAS OUVRIR | | |
| WARNING: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL. | | |



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 point in the triangle tells you that important operating and maintenance instructions follow this symbol.

CAUTIONS:

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.

NOTE TO CATV SYSTEM INSTALLER IN THE USA:

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that 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.

Only for CN35F90:

This TV set may be used only with TOSHIBA stand model ST3504. Use with other stands may result in instability causing possible injury.

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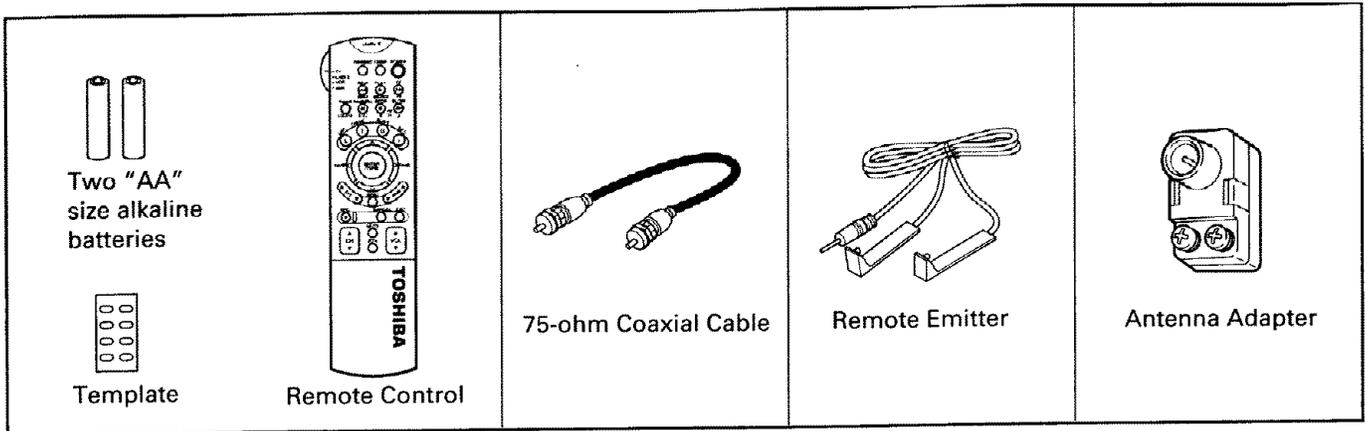
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Installing Your TV Set

Unpacking and checking accessories

When you unpack the package, be sure that it contains all the accessories shown below.



Installing your TV

Where to install

Place the TV on the floor or on a sturdy platform. The mounting surface should be flat and steady.

Lighting

Do not place the TV in a room where direct lighting strikes the screen. Use soft and indirect lighting.

Air circulation

Place the TV far enough from the walls to allow proper ventilation. This will prevent the TV from overheating and avoid possible damage to the TV. Avoid dusty places too.

Power supply

Plug into an electrical outlet with standard household power (120 volt AC, 60Hz). Do not change the plug's safety prong. See the right column.

WARNING :

TO AVOID PERSONAL INJURY

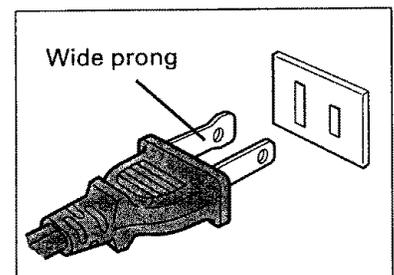
- Do not stand or climb on the TV.
- Do not put a VCR or any heavy object on top of the TV.

CAUTION :

As a safety feature, the plug has one prong wider than the other. It will fit only one way into a standard electrical outlet. If the plug will not fit into the outlet, try turning it around. If the plug will not fit either way, the outlet is probably old and non-standard.

You will need to have a new outlet installed by an electrician.

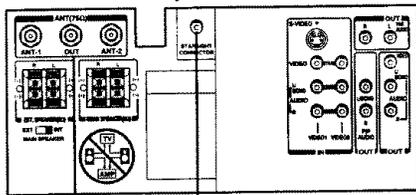
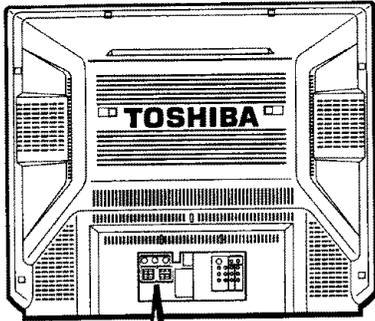
DO NOT CHANGE THE SAFETY FEATURE OF THE PLUG.



Antenna/Cable TV General Information

You can use either an indoor or outdoor antenna to receive VHF and/or UHF channels. Channels 2 - 13 are VHF channels, and channels 14 - 69 are UHF channels. We recommend using an outdoor antenna for better picture quality. You can receive Cable TV by connecting your local cable company.

Back of TV



STAR SIGHT CONNECTOR

Antenna/Cable terminals

Types of antenna cables

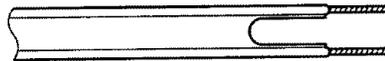
Shown below are two basic types of antenna cables. Signals from a home antenna may be conveyed by either type. Cable TV signals will always be conveyed by a 75 ohm coaxial cable.

- 1 A 75 ohm coaxial cable is generally a round cable with an F-type connector that can easily be attached to a terminal without tools.

F-type connector (not supplied)



- 2 A 300 ohm cable is a flat "twin-lead" cable that can be attached to a terminal through an antenna adapter supplied as an accessory.



Antenna/Cable terminals

There are two separate 75 ohm F-type connector terminals and a converter output terminal as shown below.



The ANT-1 and ANT-2 terminals are for connecting a VHF/UHF antenna or a cable TV system. The signal, which is input through the ANT-1 terminal, is also output from the OUT terminal whenever the antenna input is set to "ANT 2" mode. You can switch between "ANT 1" and "ANT 2" modes by using the SET UP menu or by pressing the ANT/VIDEO button on the TV. See page 36.

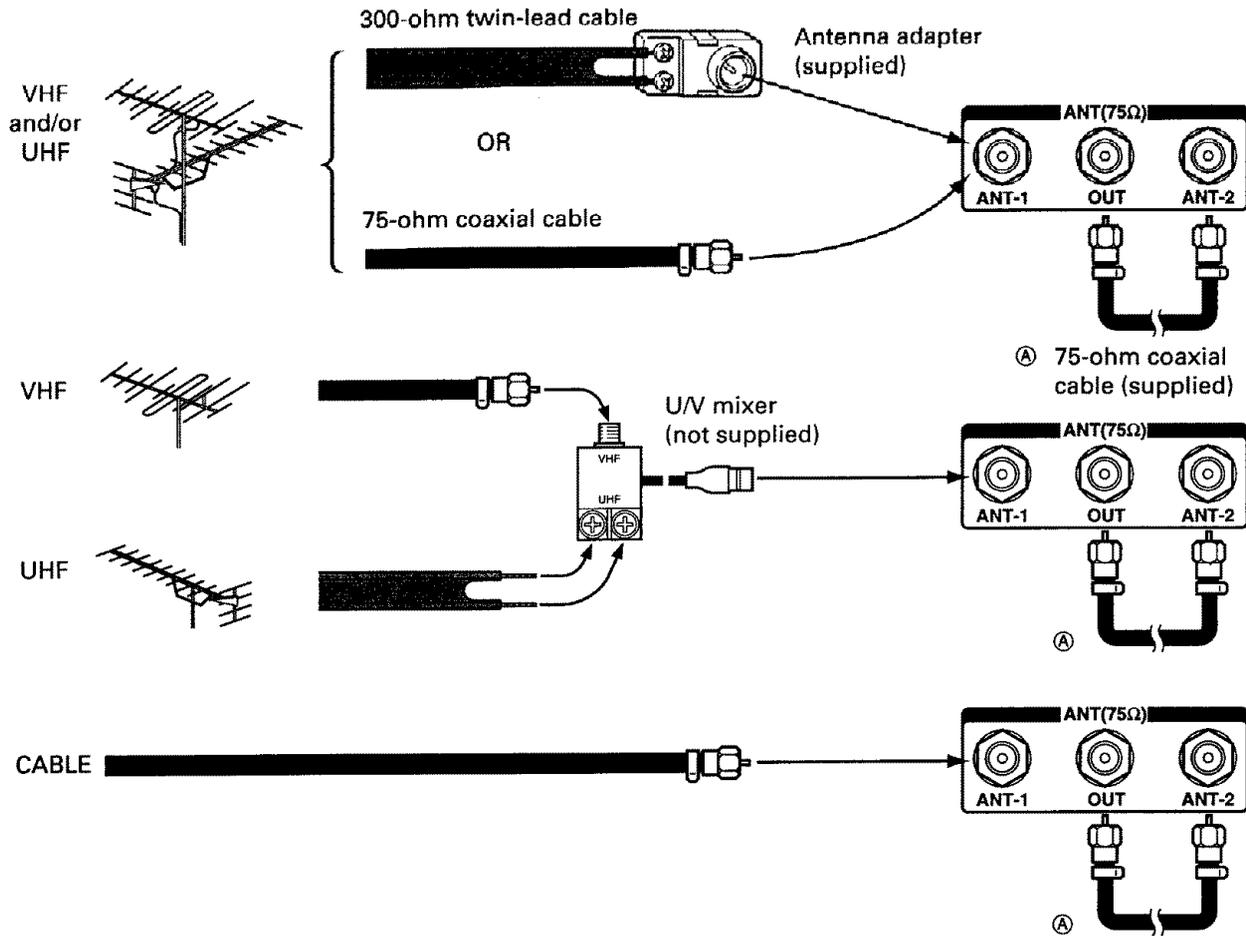
Note: StarSight is available on the ANT-2 terminal only.

StarSight Remote Emitter

Use to control a cable box or VCR with the TV's Remote Control. The Remote Emitter (supplied) setup allows your Remote Control to tune the channel on the cable box or VCR.

Antenna/Cable TV Connections

TV & Antenna or Cable without a cable box

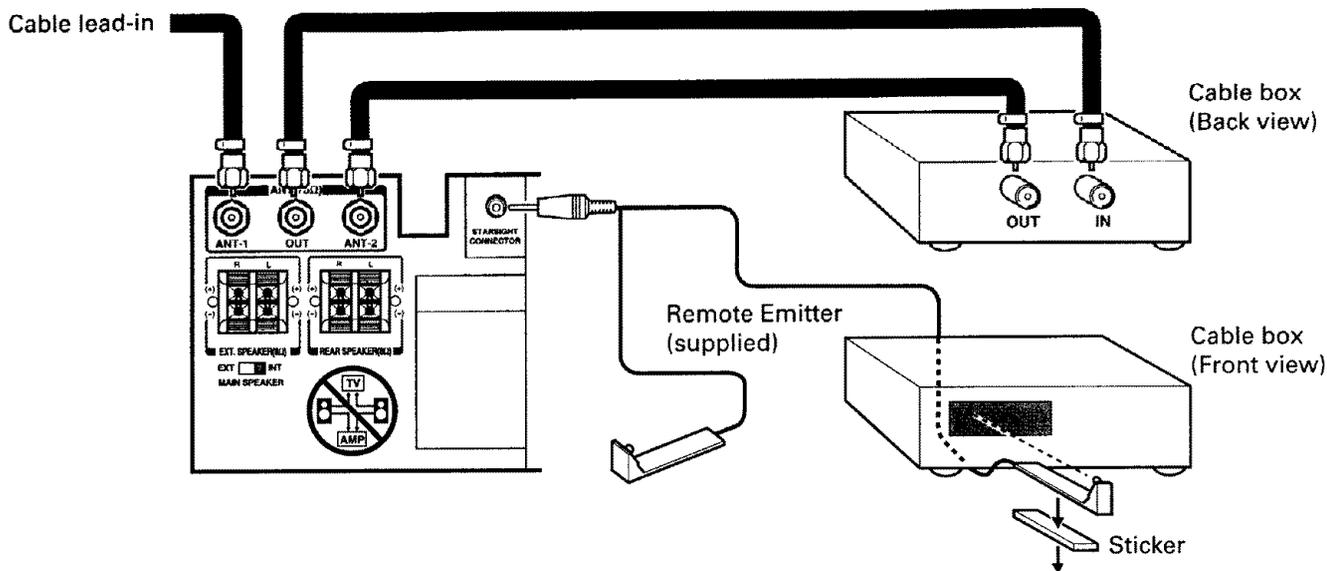


Notes on the StarSight setup:

- StarSight is available on the ANT-2 terminal only. The 75-ohm coaxial cable Ⓐ brings the signals input from the ANT-1 terminal to the ANT-2 terminal when the antenna input is set to "ANT 2" mode using the SET UP menu or by pressing the ANT/VIDEO button on the TV. See page 36.
- To use the StarSight features, plug your TV into an outlet that always has power running. Do not plug your TV into a wall socket that can be switched off.
- Read "Using StarSight" (separate volume) for more information.

TV & Cable with a cable box

Some cable companies offer “premium pay channels”. Since the signals of these premium pay channels are scrambled, a cable TV converter/decoder (cable box) is generally provided to the subscriber by the cable TV company. This cable box is necessary for normal viewing of scrambled channels. For more specific instructions on installing cable TV, consult your cable TV company.



You can choose between viewing unscrambled channels and scrambled channels by using the SET UP menu or by pressing the ANT/VIDEO button on the TV. See page 36.

Unscrambled channels will come through the ANT-1 terminal when the antenna input is set to “ANT 1” mode. The scrambled channels, after decoded by the cable box, will come through the ANT-2 terminal when the antenna input is set to “ANT 2” mode. Select channel 3 or 4 on your TV to match your cable box’s output channel and select channels using the cable box’s channel keys.

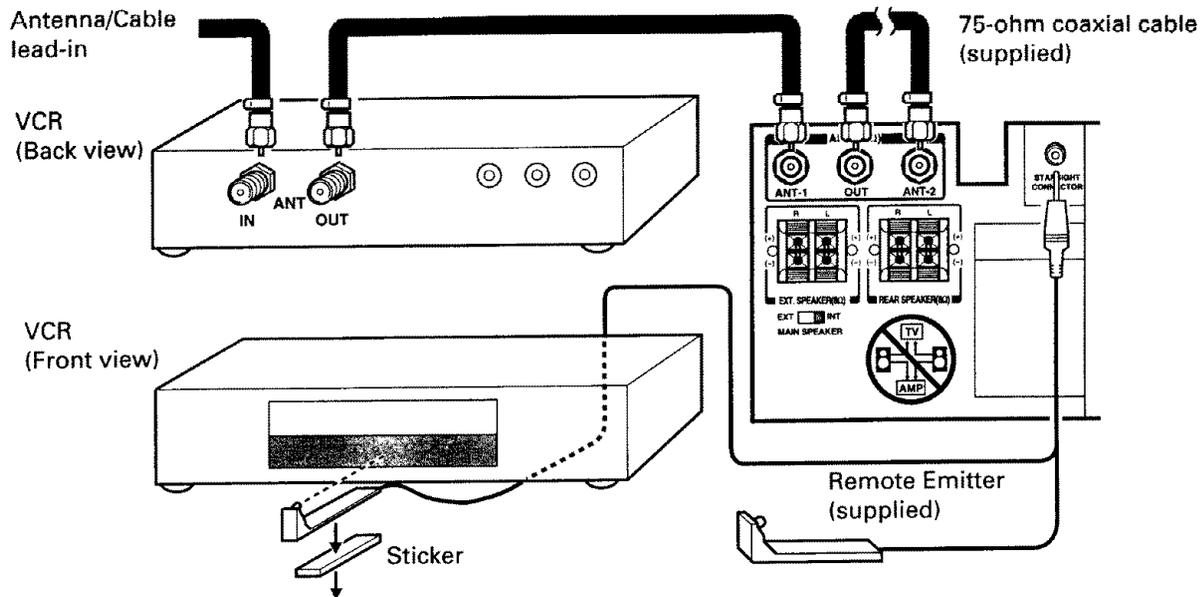
Notes on the StarSight setup:

- Plug the Remote Emitter into the STARSIGHT CONNECTOR on the back of your TV.
- Run one wire of the Remote Emitter under the cable box and place the emitter bulb about 2 inches in front of the cable box’s remote sensor that receives the remote signals. After you have completed activating StarSight (see page 18), and you have confirmed a correct code that operates your cable box (see page 15), you can peel off the backing of the sticker on the emitter to adhere it. It does not matter which of the emitters you use — both function in the same way.
- To use the StarSight features, plug your TV into a power outlet not controlled by a light switch. Do not plug your TV into the back of your cable box.
- Read “Using StarSight” (separate volume) for more information.

Antenna/Cable TV Connections (Continued)

After antenna cable connections are made, you are still required to connect the VCR using audio/video connecting cables for (stereo) playback of good quality from the VCR (see pages 62 and 63).

TV, VCR & Antenna or Cable without a cable box

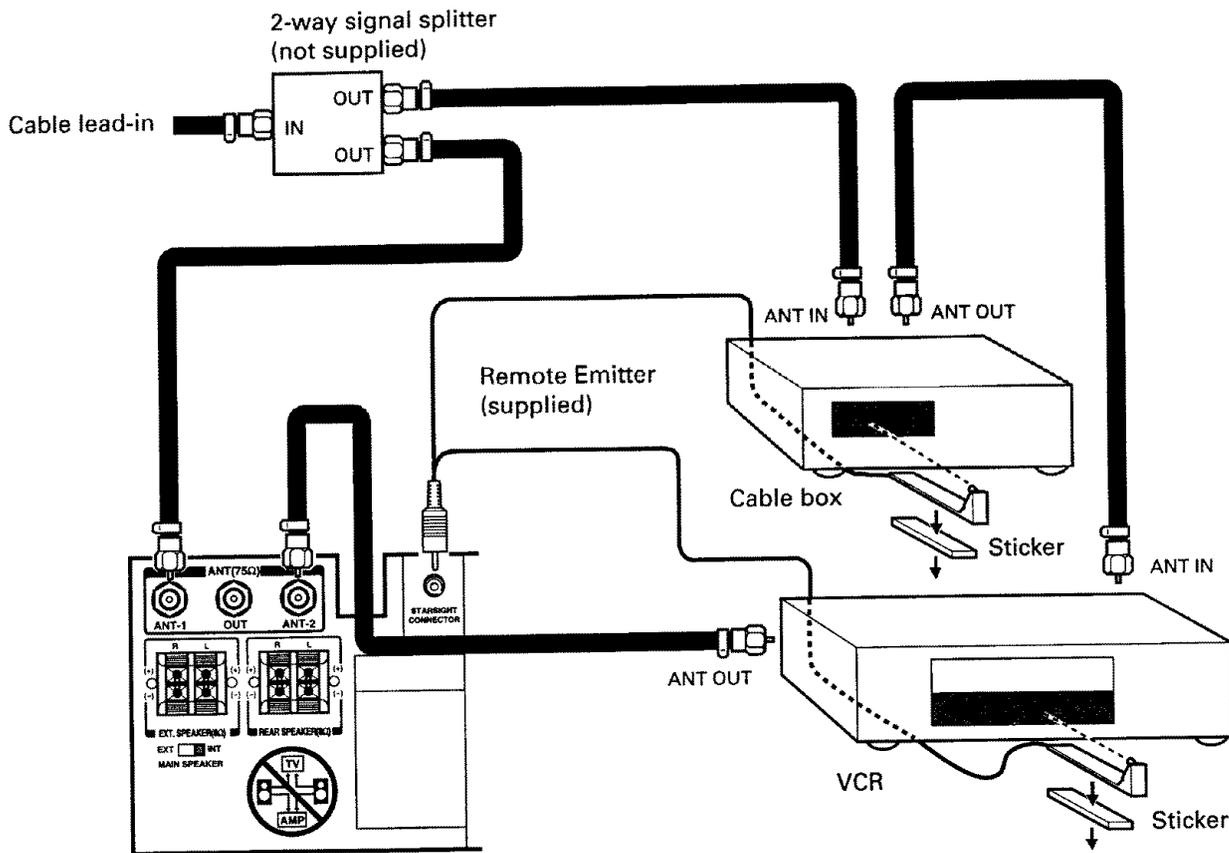


Note: On many VCR's, playing tapes causes the VCR's TV/VCR switching to disconnect the antenna signals from the TV. If you cannot select a certain channel, try pressing the TV/VCR button on the Remote Control.

Notes on the StarSight setup:

- Plug the Remote Emitter into the STARSIGHT CONNECTOR on the back of your TV.
- Run one wire of the Remote Emitter under the VCR and place the emitter bulb about 2 inches in front of the VCR's remote sensor that receives the remote signals. After you have completed activating StarSight (see page 18), and you have confirmed a correct code that operates your VCR (see page 16), you can peel off the backing of the sticker on the emitter to adhere it. It does not matter which of the emitters you use — both function in the same way.
- To use the StarSight features, plug your TV into a power outlet not controlled by a light switch.
- Read "Using StarSight" (separate volume) for more information.

TV, VCR & Cable with a cable box



The unscrambled channels will come through the ANT-1 terminal whenever the antenna input is set to "ANT 1" mode. The scrambled channels, after decoded by the cable box, will come through the VCR and the ANT-2 terminal whenever the antenna input is set to "ANT 2" mode (see page 36). Select channel 3 or 4 on your TV and VCR to match your cable box's output channel.

Notes on the StarSight setup:

- Plug the Remote Emitter into the STARSIGHT CONNECTOR on the back of your TV.
- Run one wire of the Remote Emitter under the cable box and place the emitter bulb about 2 inches in front of the cable box's remote sensor that receives the remote signals. Do the same for the VCR using the other wire and emitter bulb. After you have completed activating StarSight (see page 18), and you have confirmed correct codes that operate your cable box and VCR (see pages 15 and 16), you can peel off the backing of the emitters on the emitters to adhere them.
- To use the StarSight features, plug your TV into a power outlet not controlled by a light switch. Do not plug your TV into the back of your cable box.
- Read "Using StarSight" (separate volume) for more information.

Setting Up StarSight

StarSight® is a new way to receive and display TV program information and manage the many channels you receive. With StarSight, you can:

- Record a program with the touch of a button.
- See an instant description of what's on any channel.
- Select a program from a list that displays your favorite types of shows by theme (movies, sports, comedies, etc.).
- Get information about plots, actors, movie ratings, show times.
- Tune from an on-screen guide right to the program you selected.
- Rearrange the order of channels to put your favorite ones first.

Installing StarSight

To bring StarSight information into your home you must complete these simple steps in the following order:

- Make sure your equipment is hooked up according to the instructions in "Antenna/Cable TV Connections" (see pages 6 to 9).
- Fill out the StarSight Checklist on the next page.
- Activate StarSight by following the directions on your TV screen. The entire process takes only a few minutes.
- Test your StarSight setup. If you have a cable box or VCR, you will be guided through an on-screen process that will determine the codes that operate your equipment.

Please follow the directions on
the following pages, then call:
1-800-643-STAR

Your Toshiba TV that is equipped with the StarSight system is not designed to operate with, or control, a satellite dish. For information on StarSight products specifically designed for satellite systems, see your local satellite dealer.

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STARSIGHT TELECAST IS NOT IN ANY WAY LIABLE FOR THE ACCURACY OF THE PROGRAM SCHEDULE INFORMATION PROVIDED BY THE STARSIGHT SYSTEM. IN NO EVENT SHALL STARSIGHT TELECAST BE LIABLE FOR ANY AMOUNTS REPRESENTING LOSS OF PROFITS, LOSS OF BUSINESS, OR INDIRECT, SPECIAL, OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH THE PROVISION OR USE OF ANY INFORMATION, EQUIPMENT, OR SERVICES RELATING TO THE STARSIGHT SYSTEM.

StarSight Checklist

Fill in the blanks below. Keep this Checklist close at hand when you activate StarSight. You will find the information you need to complete this Checklist in the PBS Stations, Cable Box Codes and VCR Codes lists on pages 12 to 16.

A. PBS Stations:

From the PBS Stations section on the next page, find the PBS Station closest to your city. (If you have a choice of two or more PBS Stations, select the one with the clearest picture.) Write the PBS Station letters and channel number below.

PBS Station Letters: _____

PBS Station Channel Number: _____

For Cable Users Only:

Check your cable company's channel line-up or your local newspaper's TV listing to see if the PBS Station in your area has a different channel number than the one you wrote down above.

If so, enter your PBS Station's cable channel number here: _____
(You will tune to this channel number during the activation process.)

For the Canadian Customers Only:

From the PBS Station for Canadian Customers section on page 15, find the PBS Station that you receive. (If you have a choice of two or more PBS Stations, select the one with the clearest picture.) Write the PBS Station letters and channel number in the spaces provided above.

B. Code Numbers:

From the Cable Box Codes section, find the code numbers that apply to your brand of cable box and enter them below:

Code 1: _____ Code 2: _____ Code 3: _____ Code 4: _____ Code 5: _____

From the VCR Codes section, find the code numbers that apply to your brand of VCR and enter them below:

Code 1: _____ Code 2: _____ Code 3: _____ Code 4: _____ Code 5: _____

● IF YOUR BRAND IS NOT LISTED, USE A CODE OF "999".

C. Activating StarSight:

Now go to "Activating StarSight" on pages 18 to 21. During activation, StarSight will display your STAR number and ID number on your TV screen. When these numbers appear, write them below:

STAR #: _____

ID #: _____

Setting Up StarSight (Continued)

Selecting PBS Stations, Cable Box Codes and VCR Codes

Select the PBS Station closest to your residence. (It may be in a bordering state.)

PBS Stations

| State & City | Station | Channel | State & City | Station | Channel | State & City | Station | Channel |
|-------------------|---------|---------|--------------------------|---------|---------|-----------------|---------|---------|
| ALABAMA | | | CONNECTICUT | | | HAWAII | | |
| Anniston | WCIQ | 7 | Bridgeport | WEDW | 49 | Honolulu | KHET | 11 |
| Birmingham | WBIQ | 10 | Hartford | WEDH | 24 | Waikiki | KMEB | 10 |
| Decatur | WHIQ | 25 | New Haven | WEDY | 65 | | | |
| Dothan | WGIO | 43 | | WEDH | 24 | | | |
| Huntsville | WHIQ | 25 | Norwich | WEDN | 53 | IDAHO | | |
| Mobile | WEIQ | 42 | | | | Boise | KAID | 4 |
| | WSRE | 23 | DELAWARE | | | Idaho Falls | KISU | 10 |
| Montgomery | WAIQ | 26 | Seaford | WDPB | 64 | Twin Falls | KITT | 13 |
| | | | Wilmington | WHYY | 12 | | | |
| ALASKA | | | DIST. OF COLUMBIA | | | ILLINOIS | | |
| Anchorage | KAKM | 7 | Washington, D.C. | WETA | 26 | Carbondale | WSIU | 8 |
| Fairbanks | KUAC | 9 | | | | Champaign | WILL | 12 |
| | | | FLORIDA | | | Chicago | WTTW | 11 |
| ARIZONA | | | Daytona Beach | WMFE | 24 | Moline | WQPT | 24 |
| Phoenix | KAET | 8 | Ft. Lauderdale | WPBT | 2 | Peoria | WTVP | 47 |
| Tucson | KUAT | 6 | Ft. Myers | WSFP | 30 | Quincy | WQEC | 27 |
| | | | Gainesville | WUFT | 5 | Rock Island | WQPT | 24 |
| ARKANSAS | | | Jacksonville | WJCT | 7 | Springfield | WILL | 12 |
| Little Rock | KETS | 2 | Miami | WPBT | 2 | INDIANA | | |
| Pine Bluff | KETS | 2 | Naples | WSFP | 30 | Elkhart | WNIT | 34 |
| | | | Orlando | WMFE | 24 | Evansville | WNIN | 9 |
| CALIFORNIA | | | Panama City | WFSG | 56 | Fort Wayne | WFWA | 39 |
| Eureka | KEET | 13 | Pensacola | WSRE | 23 | Indianapolis | WFYI | 20 |
| Fresno | KVPT | 18 | St. Petersburg | WEDU | 3 | Lafayette | WFYI | 20 |
| Los Angeles | KCET | 28 | Tallahassee | WFSU | 11 | South Bend | WNIT | 34 |
| Monterey | KTEH | 54 | Tampa | WEDU | 3 | Vincennes | WVUT | 22 |
| Redding | KIXE | 9 | Thomasville | WFSU | 11 | IOWA | | |
| Sacramento | KVIE | 6 | West Palm Beach | WXEL | 42 | Ames | KDIN | 11 |
| Salinas | KTEH | 54 | GEORGIA | | | Cedar Rapids | KIIN | 12 |
| San Diego | KPBS | 15 | Albany | WABW | 14 | Council Bluffs | KBIN | 32 |
| San Francisco | KQED | 9 | Atlanta | WGTV | 8 | Davenport | KQCT | 36 |
| San Jose | KQED | 9 | Augusta | WCES | 20 | Des Moines | KDIN | 11 |
| Santa Barbara | KCET | 28 | Chatsworth | WCLP | 18 | Fort Dodge | KTIN | 24 |
| Stockton | KVIE | 6 | Columbus | WJSP | 28 | Iowa City | KIIN | 12 |
| Visalia | KVPT | 18 | Dawson | WACS | 25 | Mason City | KYIN | 24 |
| COLORADO | | | Macon | WDCO | 15 | Red Oak | KHIN | 36 |
| Colorado Springs | KTSC | 8 | Savannah | WVAN | 9 | Sioux City | KSIN | 27 |
| Denver | KRMA | 6 | Waycross | WXGA | 8 | Waterloo | KRIN | 32 |
| Pueblo | KTSC | 8 | | | | | | |



Setting Up StarSight

| State & City | Station | Channel | State & City | Station | Channel | State & City | Station | Channel |
|----------------------|---------|---------|----------------------|---------|---------|----------------------|---------|---------|
| KANSAS | | | MICHIGAN | | | MONTANA | | |
| Lakin | KSWK | 3 | Alpena | WCML | 6 | Bozeman | KUSM | 9 |
| Pittsburg | KOZJ | 26 | Bad Axe | WUCX | 35 | Butte | KUSM | 9 |
| Topeka | KTWU | 11 | Bay City | WUCM | 19 | | | |
| | | | Detroit | WTVS | 56 | NEBRASKA | | |
| KENTUCKY | | | Flint | WFUM | 28 | Basset | KMNE | 7 |
| Bowling Green | WKYU | 24 | Grand Rapids | WGVU | 35 | Hastings | KHNE | 29 |
| Cape Girardeau | WSIU | 8 | Kalamazoo | WGVK | 52 | | KUON | 12 |
| Lexington | WKLE | 46 | | WGVU | 35 | Lexington | KLNE | 3 |
| Louisville | WKPC | 15 | Lansing | WKAR | 23 | Lincoln | KUON | 12 |
| Paducah | WSIU | 8 | Marquette | WNMU | 13 | Merriman | KRNE | 12 |
| Tri-Cities | WSBN | 47 | Mount Pleasant | WCMU | 14 | Norfolk | KXNE | 19 |
| | | | Saginaw | WFUM | 28 | North Platte | KPNE | 9 |
| | | | Traverse City | WCMW | 21 | Omaha | KYNE | 26 |
| | | | | | | Scottsbluff | KTNE | 13 |
| LOUISIANA | | | MINNESOTA | | | NEVADA | | |
| Alexandria | KLPA | 25 | Austin | KYIN | 24 | Las Vegas | KLVX | 10 |
| Baton Rouge | WLPB | 27 | Duluth | WDSE | 8 | Reno | KNPB | 5 |
| El Dorado | KLTM | 13 | La Crescent | WHLA | 31 | | | |
| Lafayette | KLPB | 24 | Mason City | KYIN | 24 | NEW HAMPSHIRE | | |
| Lake Charles | KLTL | 18 | Minneapolis-St. Paul | KTCI | 17 | Durham | WENH | 11 |
| Monroe | KLTM | 13 | Superior | WDSE | 8 | Keene | WEKW | 52 |
| New Orleans | WYES | 12 | | | | Littleton | WLED | 49 |
| Shreveport | KLTS | 24 | | | | | | |
| MAINE | | | MISSISSIPPI | | | NEW JERSEY | | |
| Bangor | WMEB | 12 | Biloxi | WMAH | 19 | N. New Jersey | WNET | 13 |
| Calais | WMED | 13 | Bude | WMAU | 17 | S. New Jersey | WHYY | 12 |
| Lewiston | WCBB | 10 | Columbus | WMAB | 2 | | | |
| Presque Isle | WMEM | 10 | Greenville | WMAO | 23 | NEW MEXICO | | |
| | | | Greenwood | WMAO | 23 | Albuquerque | KNME | 5 |
| | | | Gulfport | WMAH | 19 | Santa Fe | KNME | 5 |
| MARYLAND | | | Jackson | WMPN | 29 | | | |
| Annapolis | WMPT | 22 | Meridian | WMAV | 14 | NEW YORK | | |
| Baltimore | WMPB | 67 | Oxford | WMAV | 18 | Albany | WMHT | 17 |
| Frederick | WFPT | 62 | | | | Binghamton | WSKG | 46 |
| Hagerstown | WWPB | 31 | MISSOURI | | | Buffalo | WNED | 17 |
| Oakland | WGPT | 36 | Hannibal | WQEC | 27 | New York | WNET | 13 |
| Salisbury | WCPB | 2 | Joplin | KOZJ | 26 | Norwood | WNPI | 18 |
| | | | Kansas City | KCPT | 19 | Plattsburgh | WCFE | 57 |
| MASSACHUSETTS | | | Pittsburg | KOZJ | 26 | Rochester | WXXI | 21 |
| Boston | WGBH | 2 | Springfield | KOZK | 21 | Schenectady | WMHT | 17 |
| Holyoke | WGBY | 57 | St. Louis | KETC | 9 | Syracuse | WCNY | 24 |
| Springfield | WGBY | 57 | | | | Watertown | WNPE | 16 |



Setting Up StarSight (Continued)

PBS Stations (continued)

| State & City | Station | Channel | State & City | Station | Channel | State & City | Station | Channel |
|-----------------------|---------|---------|-----------------------|---------|---------|----------------------|---------|---------|
| NORTH CAROLINA | | | PENNSYLVANIA | | | TEXAS | | |
| Asheville | WUNF | 33 | Altoona | WPSX | 3 | Amarillo | KACV | 2 |
| Charlotte | WUNG | 58 | Erie | WQLN | 54 | Austin | KLRU | 18 |
| Columbia | WUND | 2 | Harrisburg | WITF | 33 | Corpus Christi | KEDT | 16 |
| Greensboro | WUNL | 26 | Johnstown | WPSX | 3 | Dallas | KERA | 13 |
| Greenville | WUNK | 25 | Lancaster | WITF | 33 | El Paso | KCOS | 13 |
| Jacksonville | WUNM | 19 | Philadelphia | WHYY | 12 | Ft. Worth | KERA | 13 |
| Linville | WUNE | 17 | Pittsburgh | WQED | 13 | Harlingen | KMBH | 60 |
| Raleigh-Durham | WUNC | 4 | Scranton | WVIA | 44 | Houston | KUHT | 8 |
| Roanoke Rapids | WUNP | 36 | Wilkes-Barre | WVIA | 44 | Lubbock | KTXT | 5 |
| Wilmington | WUNJ | 39 | | | | Odessa Midland | KOCV | 36 |
| | | | | | | San Antonio | KLRN | 9 |
| | | | | | | Temple | KNCT | 46 |
| | | | | | | Waco | KNCT | 46 |
| NORTH DAKOTA | | | RHODE ISLAND | | | UTAH | | |
| Bismarck | KBME | 3 | New Bedford | WSBE | 36 | Salt Lake City | KUED | 7 |
| Drakinson | KDSE | 9 | Providence | WSBE | 36 | | | |
| Ellendale | KJRE | 19 | | | | | | |
| Fargo | KFME | 13 | SOUTH CAROLINA | | | VERMONT | | |
| Grand Forks | KGFE | 2 | Allendale | WEBA | 14 | Burlington | WCFE | 57 |
| Minot | KBME | 3 | Beaufort | WJWJ | 16 | | | |
| Williston | KWSE | 4 | Charleston | WITV | 7 | VIRGINIA | | |
| | | | Columbia | WRLK | 35 | Arlington | WETA | 26 |
| | | | Conway | WHMC | 23 | Charlottesville | WHTJ | 41 |
| | | | Florence | WJPM | 33 | Harrisonburg | WVPT | 51 |
| | | | Greenville | WNTV | 29 | Lynchburg | WBRA | 15 |
| | | | Greenwood | WNEH | 38 | Norfolk | WHRO | 15 |
| | | | Huntington | WPBY | 33 | Norton | WSBN | 47 |
| | | | Rock Hill | WNSC | 30 | Petersburg | WCVE | 23 |
| | | | Spartanburg | WRET | 49 | Portsmouth | WHRO | 15 |
| | | | Sumter | WRJA | 27 | Richmond | WCVE | 15 |
| | | | | | | Roanoke | WBRA | 15 |
| OHIO | | | SOUTH DAKOTA | | | WASHINGTON | | |
| Akron | WEAO | 49 | Aberdeen | KDSD | 16 | Seattle | KCTS | 9 |
| | WVIZ | 25 | Brookings | KESD | 8 | Spokane | KSPS | 7 |
| Athens | WOUB | 20 | Eagle Butte | KPSD | 13 | Tacoma | KCTS | 9 |
| Cleveland | WVIZ | 25 | Lowry | KQSD | 11 | Yakima | KYVE | 47 |
| Cincinnati | WCET | 48 | Martin | KZSD | 8 | | | |
| Columbus | WOSU | 34 | Pierre | KTSD | 10 | WEST VIRGINIA | | |
| Dayton | WPTD | 16 | Rapid City | KBHE | 9 | Beckley | WSWP | 9 |
| Lima | WBGU | 27 | Vermillion | KUSD | 2 | Bluefield | WSWP | 9 |
| Portsmouth | WPBO | 42 | | | | Charleston | WPBY | 33 |
| Steubenville | WOUC | 44 | | | | Clarksburg | WNPB | 24 |
| Toledo | WGTE | 30 | | | | Huntington | WPBY | 33 |
| Youngstown | WNEO | 45 | | | | Parkersburg | WOUB | 20 |
| | | | | | | Weston | WNPB | 24 |
| | | | | | | Wheeling | WOUC | 44 |
| OKLAHOMA | | | TENNESSEE | | | | | |
| Cheyenne | KWET | 12 | Chattanooga | WTCI | 45 | | | |
| Eufaula | KOET | 3 | Jackson | WLJT | 11 | | | |
| Oklahoma City | KETA | 13 | Johnson City | WSJK | 2 | | | |
| Tulsa | KOED | 11 | Knoxville | WKOP | 15 | | | |
| | | | Memphis | WKNO | 10 | | | |
| | | | Nashville | WDCN | 8 | | | |
| | | | Sneedville | WSJK | 2 | | | |
| OREGON | | | | | | | | |
| Bend | KOAB | 3 | | | | | | |
| Corvallis | KOAC | 7 | | | | | | |
| Eugene | KEPB | 28 | | | | | | |
| Klamath Falls | KFTS | 22 | | | | | | |
| Medford | KSYS | 8 | | | | | | |
| Portland | KOPB | 10 | | | | | | |

PBS Stations for Canadian Customers

Cable box codes

| State & City | Station | Channel |
|------------------|---------|---------|
| WISCONSIN | | |
| Appleton | WPNE | 38 |
| Eau Claire | WHLA | 31 |
| Green Bay | WPNE | 38 |
| La Crosse | WHLA | 31 |
| Madison | WHA | 21 |
| Menomonie | WHWC | 28 |
| Milwaukee | WMVS | 10 |
| Park Falls | WLEF | 36 |
| Rhineland | WHRM | 20 |
| Wausau | WHRM | 20 |
| WYOMING | | |
| Cheyenne | KTNE | 13 |
| Evanston | KUED | 7 |

| State & City | Station |
|---------------------|------------|
| MAINE | |
| Bangor | WMEB, WMED |
| MICHIGAN | |
| Detroit | WTVS |
| Marquette | WNMU |
| MINNESOTA | |
| Duluth | WDSE |
| NORTH DAKOTA | |
| Fargo | KFME, KGFE |
| NEW YORK | |
| Buffalo | WNED |
| Plattsburgh | WCFE |
| Rochester | WXXI |
| Watertown | WNPE |
| OHIO | |
| Cleveland | WVIZ |
| Toledo | WGTE |
| PENNSYLVANIA | |
| Erie | WQLN |
| WASHINGTON | |
| Seattle | KCTS |
| Spokane | KSPS |

| Brand Name | Code Number |
|-----------------------|----------------------------------|
| ABC | 1, 2, 3, 0 |
| Antronix | 4 |
| Archer | 5, 6, 7, 4 |
| Century | 5 |
| Citizen | 5 |
| Comtronics | 8, 9 |
| Eagle Comtr | 9 |
| Eastern | 10 |
| Electricord | 11 |
| GC Electroni | 12 |
| Gemini | 13, 14, 15 |
| General Instr | 0 |
| Hamlin | 19, 18, 17, 16 |
| Hitachi | 0 |
| Jasco | 5 |
| Jerrold | 20, 0, 21, 15, 22, 23, 24, 25 |
| Macom | 26 |
| Memorex | 27 |
| Movie Time | 28, 11 |
| NSC | 28 |
| Oak | 2, 29, 30 |
| Panasonic | 31, 32 |
| Paragon | 27 |
| Philips | 33, 8 |
| Pioneer | 34, 35 |
| Pulsar | 27 |
| RCA | 31 |
| Realistic | 4 |
| Regal | 18, 16, 17 |
| Regency | 10 |
| Rembrandt | 14 |
| Samsung | 34, 9 |
| Scientific Atla | 37, 36, 1 |
| Signal | 9 |
| Signature | 0 |
| SL Marx | 9 |
| Sprucer | 31, 38 |
| Starcom | 25, 15, 21, 24 |
| Stargate | 15, 9 |
| Sylvania | 39 |
| TeleCaption | 40 |
| Texscan | 39 |
| Tocom | 3, 41, 42 |
| Toshiba | 27 |
| Unika | 4, 5, 6 |
| United Artists | 2 |
| United Cable | 21 |
| Universal | 11, 43, 5, 4, 6, 7 |
| Viewstar | 8, 44 |
| Zenith | 27 |



Setting Up StarSight

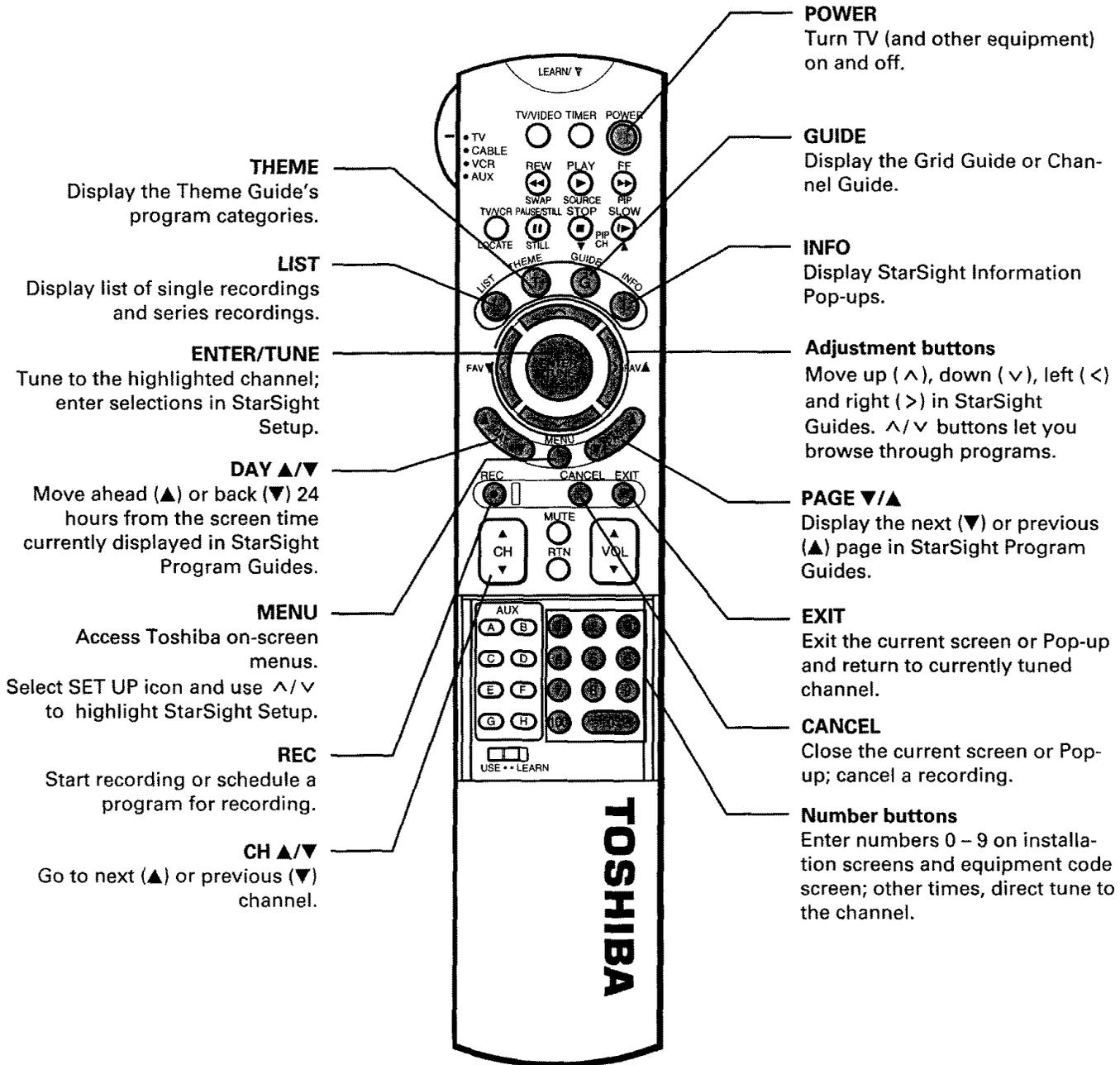
Setting Up StarSight (Continued)

VCR Codes

| Brand Name | Code Number | Brand Name | Code Number |
|-------------------|---------------------------------------|------------------|-------------------------------------|
| Admiral | 0, 1, 2, 3, 4 | Quartz | 30 |
| Aiwa | 5 | Quasar | 11 |
| Akai | 6, 7, 8, 9 | RCA | 4, 27, 37 |
| Bell and Ho | 2 | Realistic | 3, 5, 11, 14, 15, 20, 23, 24, 30 |
| Broksonic | 0, 1, 10 | Ricoh | 33 |
| Canon | 11 | Runco | 2 |
| Capehart | 12 | Samsung | 14 |
| Carver | 13 | Sansui | 6, 28 |
| Craig | 14, 15 | Sansung | 17 |
| Curtis Math | 11 | Sanyo | 15, 24, 30 |
| Daewoo | 12, 16, 17 | Scott | 0, 1, 34 |
| Daytron | 12 | Sears | 11, 15, 20, 23, 24, 27, 30 |
| Dynatech | 5 | Sharp | 3 |
| Emerson | 0, 1, 5, 9, 10, 18, 19, 20, 21, 22 | Shintom | 31 |
| Fisher | 15, 23, 24 | Sony | 11, 33, 35, 36 |
| Funai | 5 | STS | 27 |
| GE | 4, 11 | Sylvania | 11, 13, 32 |
| Goldstar | 20, 25 | Symphonic | 5 |
| Harman Kar | 25, 26 | Tandy | 5 |
| Hitachi | 5, 6, 27 | Tatung | 6 |
| J.C. Penny | 11, 14, 25, 27 | Teac | 5, 6 |
| JCL | 11 | Technics | 11 |
| Jensen | 6 | Teknika | 5, 11, 20 |
| JVC | 6, 28, 29 | TMK | 19 |
| Kenwood | 6, 28, 30 | Toshiba | 17, 23, 32, 34 |
| Lloyd | 5 | Totevision | 14, 20 |
| Logik | 31 | Unitech | 14 |
| LXI | 20 | Vector Res | 25 |
| M. Ward | 3, 5, 11, 14, 15, 27, 31 | Victor | 28, 29 |
| Magnavox | 11, 13 | Video Conc | 9, 25 |
| Marantz | 11, 13, 25 | Videosonic | 14 |
| Marta | 20 | Yamaha | 6, 25 |
| MEI | 11 | Zenith | 2, 33, 35 |
| Memorex | 2, 3, 5, 11, 15, 20, 24 | | |
| MGA | 9, 32 | | |
| Minolta | 27 | | |
| Mitsubishi | 9, 26, 32 | | |
| MTC | 5, 14 | | |
| Multitech | 5, 31 | | |
| NEC | 6, 25, 28 | | |
| Optonica | 3 | | |
| Panasonic | 11, 38, 39, 40 | | |
| Pentax | 27 | | |
| Philco | 11 | | |
| Philips | 11, 13 | | |
| Pilot | 20 | | |
| Pioneer | 28 | | |
| Portland | 12 | | |
| Pulsar | 2 | | |

Using the Remote Control for StarSight

Before starting the StarSight setup process, check the buttons you can use for StarSight operations. For more detailed information on StarSight operations, refer to "Using StarSight" (separate volume).

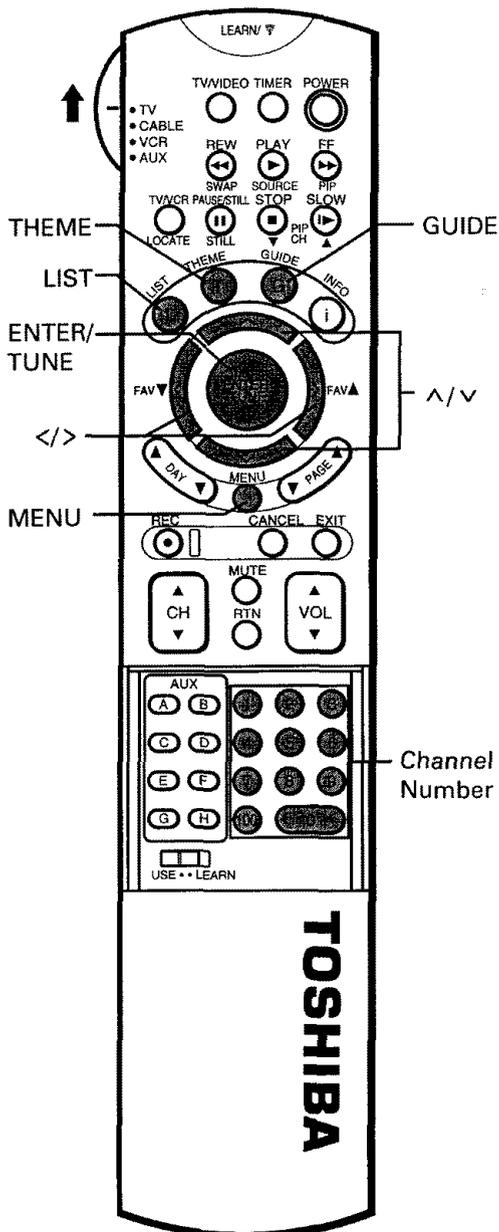


Note: For information on buttons for non-StarSight operations, see pages 26 and 28.

Activating StarSight

For your TV to receive StarSight information, you need to activate StarSight. You complete the process directly through your TV, in simple steps that take only minutes:

- 1 Follow the step-by-step instructions for connecting your cable box and VCR (see pages 6 to 9). Be sure to position one bulb of the Remote Emitter in front of your cable box or VCR.
- 2 Fill out parts A and B of the StarSight Checklist (see page 11).
- 3 Have your TV's Remote Control handy.
- 4 Have a telephone nearby to call StarSight's toll-free activation number: 1-800-643-STAR.
- 5 Follow the procedures below.



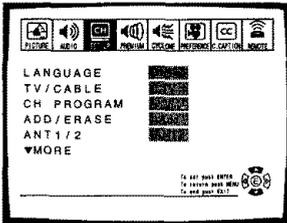
StarSight Activation process

If you have a cable box, make sure your TV is tuned to the cable box output channel (usually channel 3 or 4).

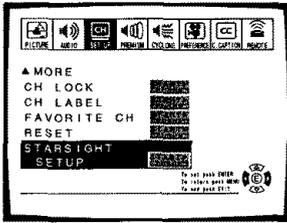
- 1 Move the **TV/CABLE/VCR/AUX** switch on your TV's Remote Control to the "TV" position.
- 2 If you have a cable box, tune it to the PBS Station on your StarSight Checklist. Do this manually or with your cable box's remote control.

If you do not have a cable box, use the **Channel Number** buttons on your TV's Remote Control to tune your TV to the correct PBS Station. StarSight will search for schedule information on this channel.

- 3 Press **MENU**, then press **>** or **<** until the **SET UP** icon at the top of the menu is highlighted.



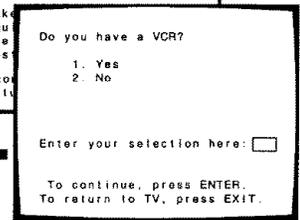
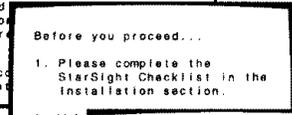
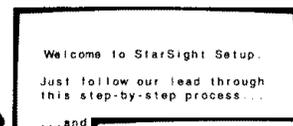
- 4 Press **^** (or **v**) until "STARSIGHT SETUP" is highlighted, then press **>**. The "Welcome to StarSight" menu appears.



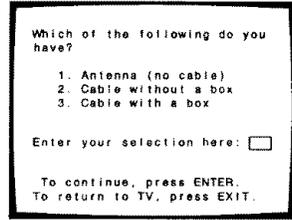
- Notes:**
- The **GUIDE**, **THEME**, and **LIST** buttons can also be used to call up "Welcome to StarSight" menu.
 - If "ANT 1" mode is selected from the antenna input, the error message will appear. In this case, select "ANT 2" mode. See page 36.



5 Press **^** (or **v**) to highlight "Activate StarSight", then press **ENTER/TUNE**.

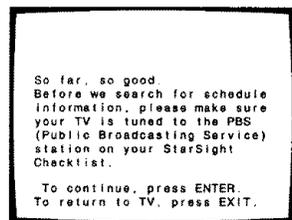


6 StarSight asks you to enter a selection for your equipment (VCR or cable box).

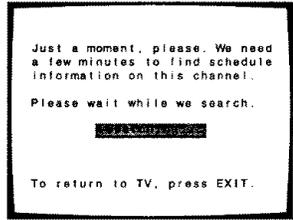


7 StarSight then asks you to tune to your PBS Station.

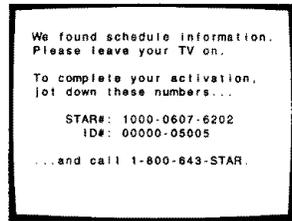
If you have a cable box, you will tune it to your PBS Station.
If you don't have a cable box, you will tune your TV to your PBS Station.



Make sure you have tuned to your PBS Station, and continue following the on-screen instructions.

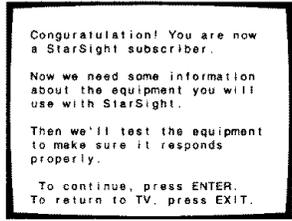


8 Next, when StarSight displays your STAR # and ID #, write these numbers in section C of your StarSight Checklist (see page 11).



9 Call StarSight toll free at **1-800-643-STAR**.

10 When you call StarSight, you will be asked for your STAR # and ID #. StarSight will then be activated in your TV. When StarSight has been activated, you will see a "Congratulations!" message.



11 Press **ENTER/TUNE** to continue.

Notes on StarSight:

- StarSight works with almost all cable boxes that can be operated by a wireless remote control.
- If no schedule data is found, you may be tuned to a wrong PBS Station. Check the PBS Station written on your StarSight Checklist and try again. Or, try tuning to a different PBS Station that is listed for your area in the PBS Stations section (see pages 12 to 14). (If no station is listed for your area, call **1-800-628-STAR** for further information.)



Activating StarSight (Continued)

Checking your StarSight setup

Now that you have subscribed, the final step is to test your equipment setup. Here's how:

- 1** Press **ENTER/TUNE** on the TV's Remote Control when you see the "Congratulations!" message on the screen.

StarSight will now guide you through a series of on-screen displays. Follow the instructions carefully. All you have to do is respond to the on-screen prompts.

- 2** Find the cable box and VCR Codes on your StarSight Checklist (see page 11).

If you have listed more than one code for a given brand of cable box and VCR, StarSight lets you test each code until the correct one has been entered.

Make sure the Remote Emitter you have placed previously is positioned according to the instructions.

- 3** With your equipment setup and StarSight activation complete, you will begin to collect StarSight program information. Your system will be automatically updated with the latest program information whenever your TV is turned off or is tuned to your PBS Station (the channel you used for activating StarSight.) **Initially, it will take between 4 and 12 hours to collect program information.** Do not be alarmed if your StarSight guide is not full right away; it has seven days of program information to collect. In a day or so, your data will be complete and will continue to be updated daily.

That's it! Your TV is now all set up and ready to collect program information. To learn how to use StarSight, refer to "Using StarSight" (separate volume).

Notes on StarSight:

- To maintain StarSight program information, always leave your TV power cord plugged in and your cable box on (if you have one).
- It is important that you leave your VCR off when it is not being used. If you forget to turn off your VCR, a scheduled recording cannot be done.

Important reminders for StarSight

When you use StarSight, make sure of the following:

- Leave the cable box on at all times.
- Leave the VCR off whenever you are not watching a video tape.
- Plug the TV into an outlet that is not controlled by a light switch. (Do not plug it into the back of the cable box.)

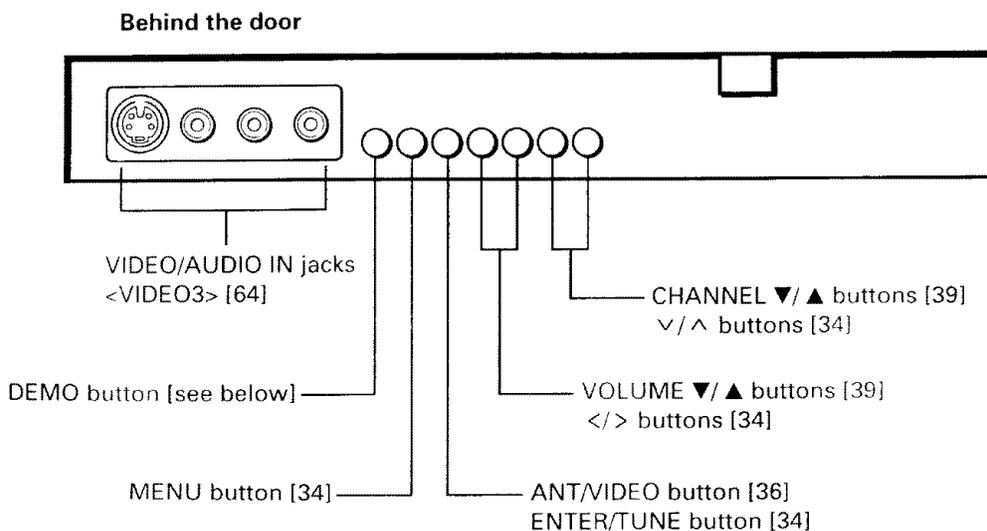
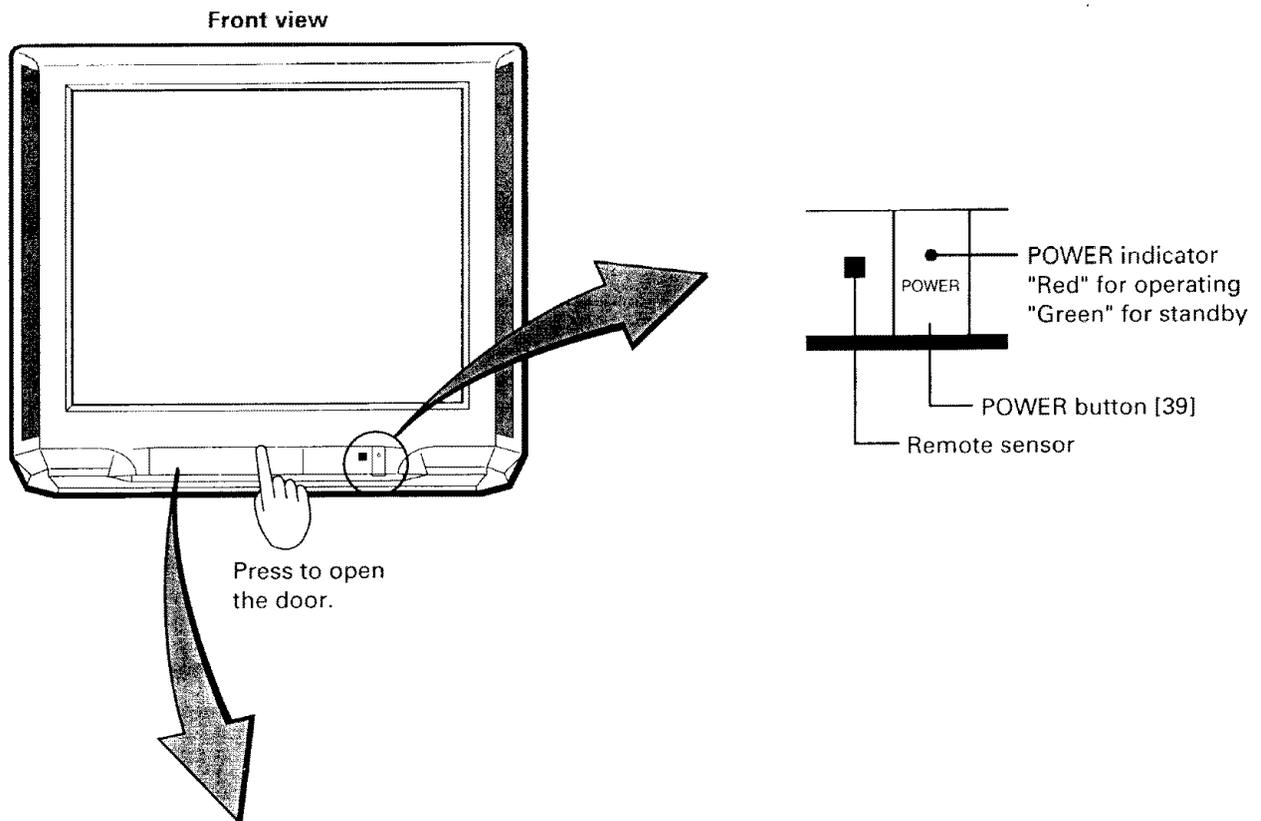
Troubleshooting

| Problem | Try this... |
|---|--|
| Cable box and VCR are not controlled by StarSight. | <ul style="list-style-type: none"> • Make sure the Remote Emitter is plugged into the STARSIGHT CONNECTOR on the back of the TV. • Check the placement of the Remote Emitter — the bulbs should be facing and a few inches in front of the remote sensor of the cable box and VCR. • Make sure you have tried all codes for your brand of equipment. (See page 11.) |
| VCR turns off and on, but will not change channels. | <ul style="list-style-type: none"> • If you have a cable box, your VCR does not need to change channels. (The cable box will change the channels.) • Your VCR must be capable of direct tuning, i.e. your VCR's remote control must have a 10 digit number pad. |
| No picture — "snow" | <ul style="list-style-type: none"> • Check the connections between TV, VCR and cable box. |
| TV is turned off during cable box testing. | <ul style="list-style-type: none"> • Make sure the TV is not plugged into the back of cable box or into an outlet that is controlled by a light switch. Leave the cable box on at all times. |

For questions regarding StarSight operations, call the StarSight Help Desk at 1-800-628-STAR.

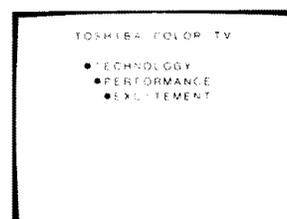
Location of Controls (TV Set)

For specific use of each control, consult the corresponding page numbers in brackets.

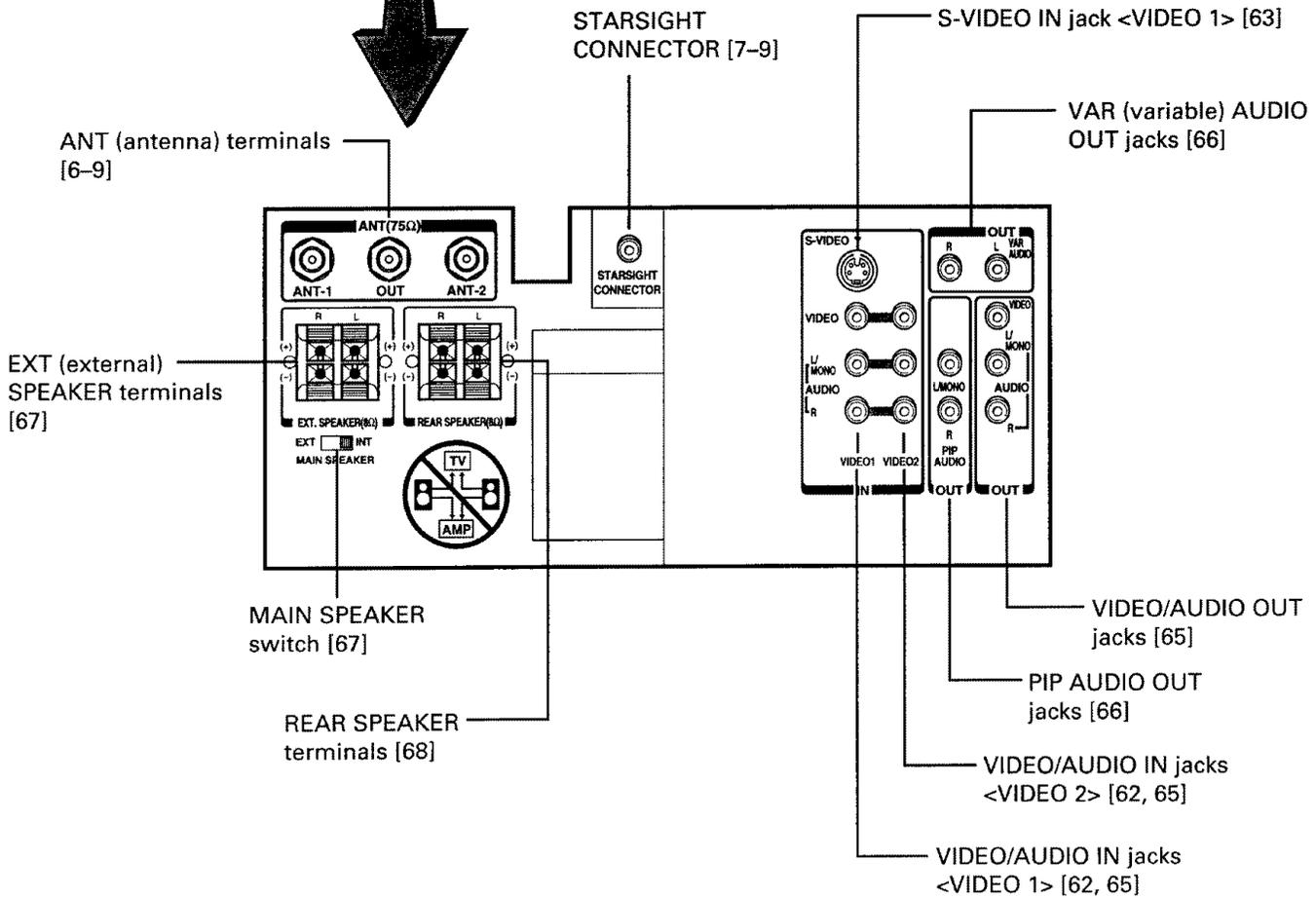
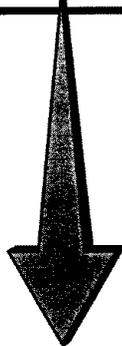
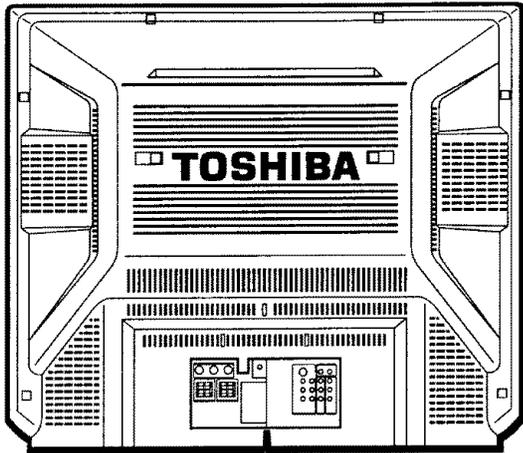


DEMO button

The on-screen demonstration starts about 4 seconds after you press this button. Your TV automatically displays a variety of its on-screen menus and special features. This function is provided for demonstration purpose only. To stop the demonstration, press **DEMO** again

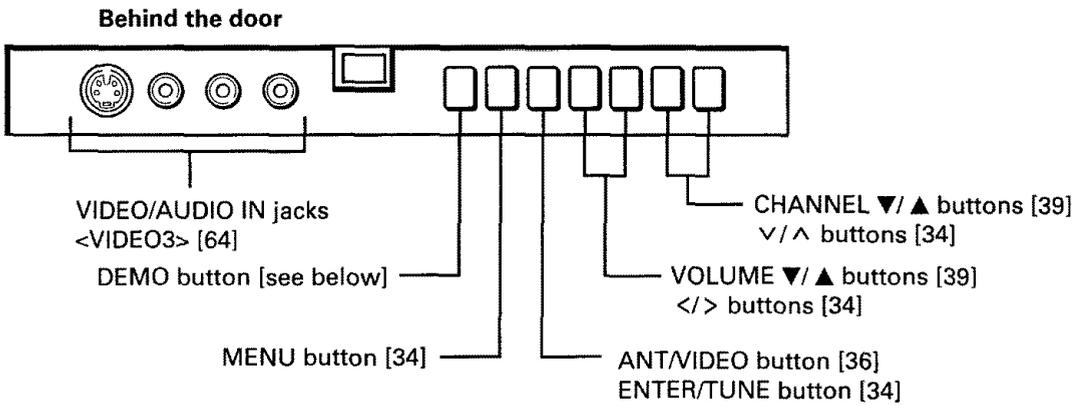
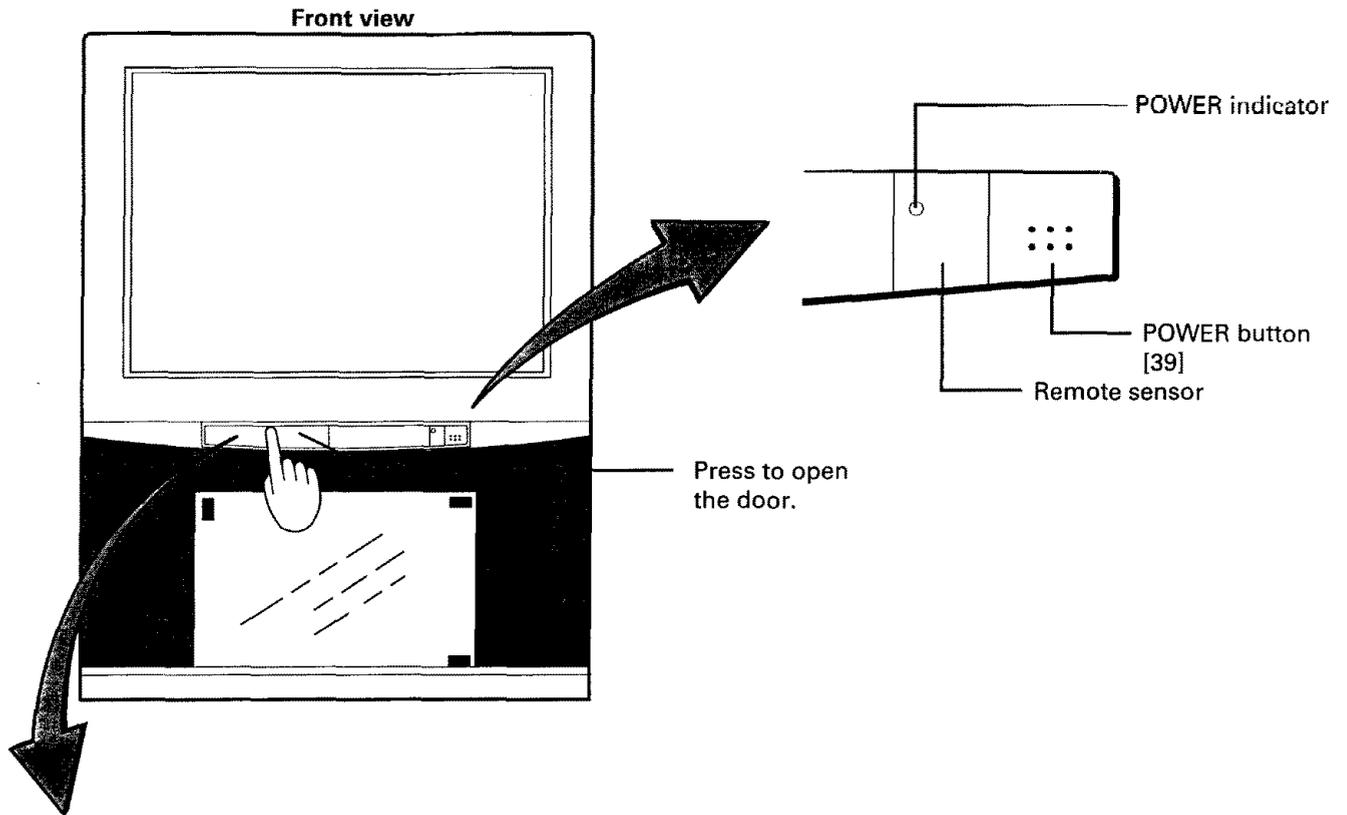


Rear view



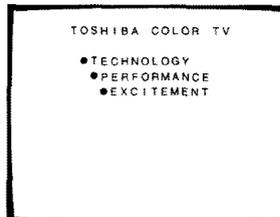
Location of Controls (TV Set) (Continued)

For specific use of each control, consult the corresponding page numbers in brackets.

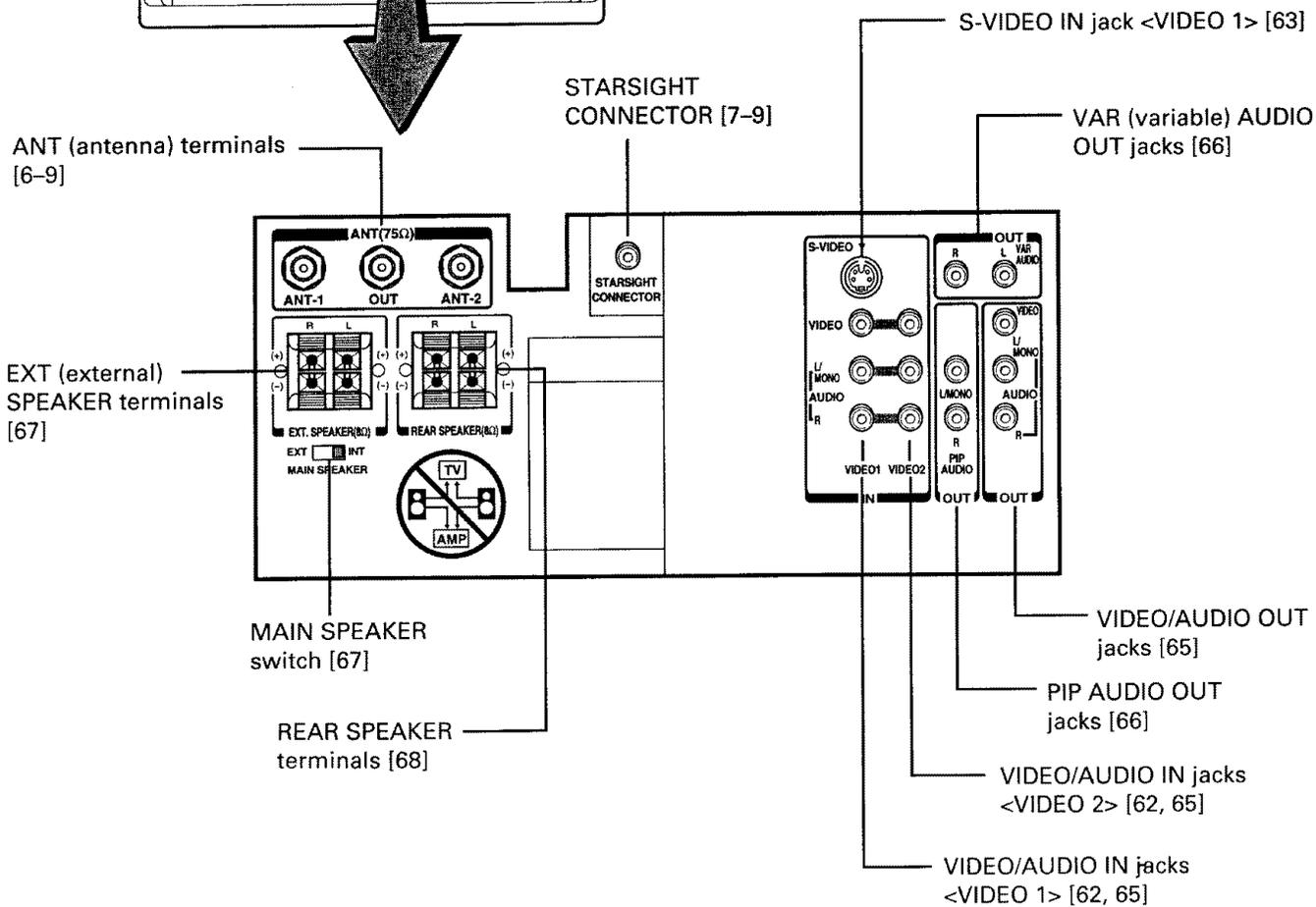
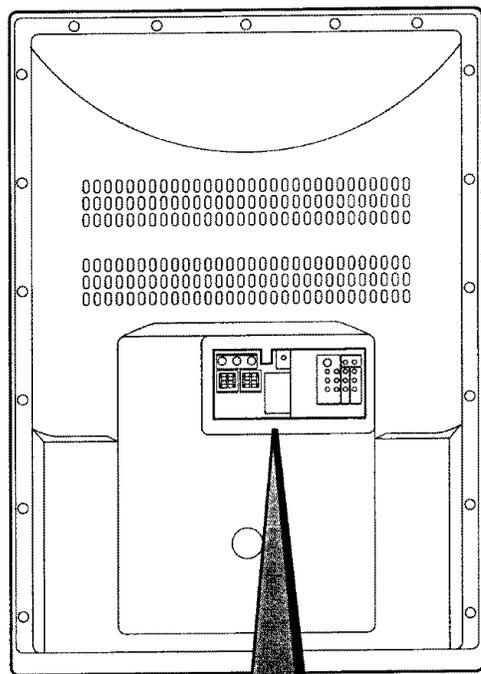


DEMO button

The on-screen demonstration starts about 4 seconds after you press this button. Your TV automatically displays a variety of its on-screen menus and special features. This function is provided for demonstration purpose only.



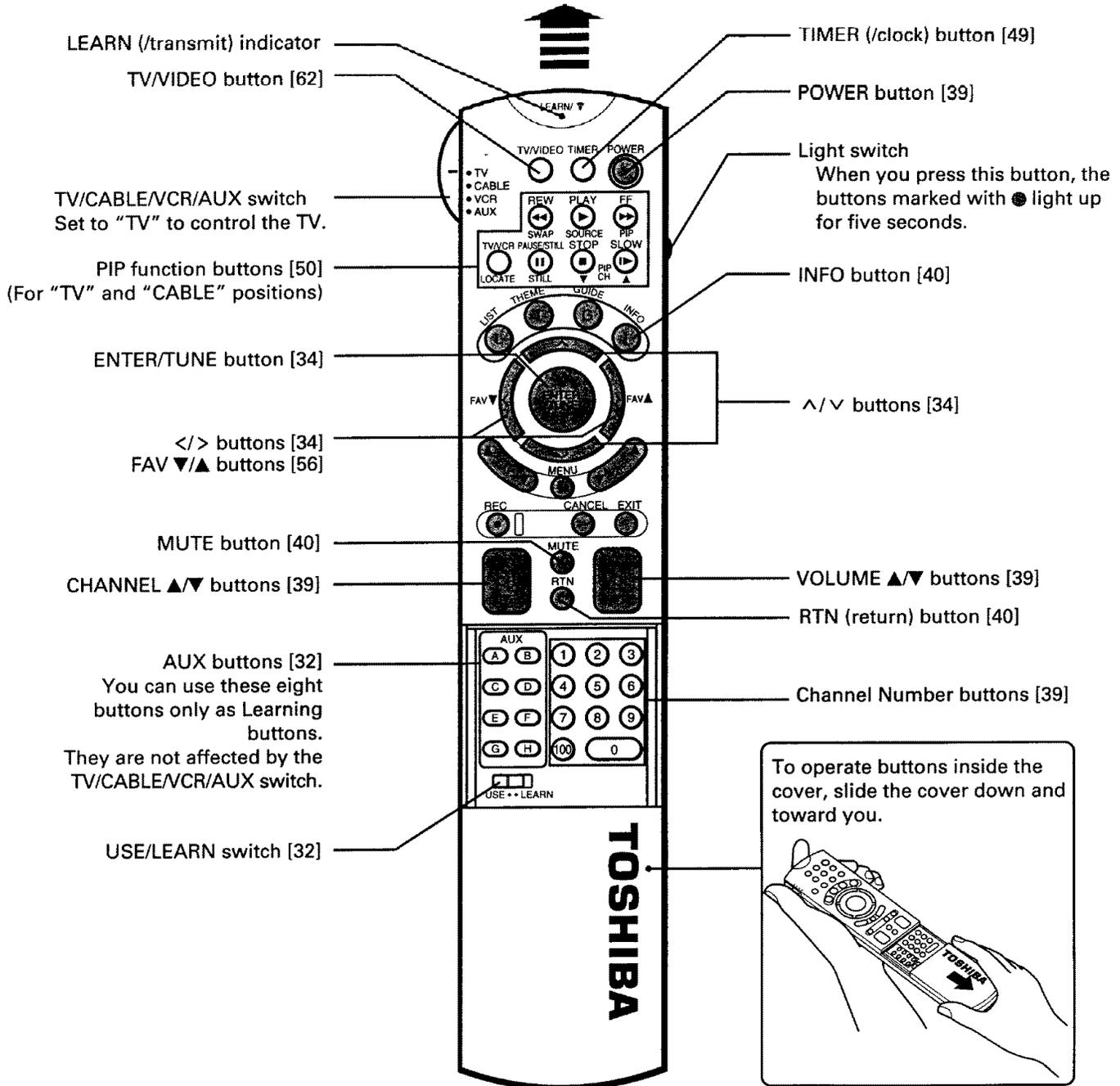
Rear view



Location of Controls (Remote Control)

Only the buttons that are used to operate the TV set are described here.
For details on the use of each control, refer to pages in brackets.

Aim at the remote sensor on the TV



Note: The TV/VIDEO, TIMER, PIP, INFO, ▲/▼/</>, ENTER/TUNE, MENU, EXIT, MUTE and VOL ▲ / ▼ buttons will always operate this TV regardless of the TV/CABLE/VCR/AUX switch setting.

Before Using the Remote Control

Introductions

With this Remote Control, you can operate your TV and most models of remote-controlled VCR's and cable boxes even if they are different brands.

However, this Remote Control must be programmed to control other brands of VCR's and/or cable boxes. See page 29. If you will be using your TV set with a Toshiba VCR, your Remote Control has already been preprogrammed for you.

Further, this Remote Control is capable of learning operating codes from most infrared remote control transmitters. See page 32.

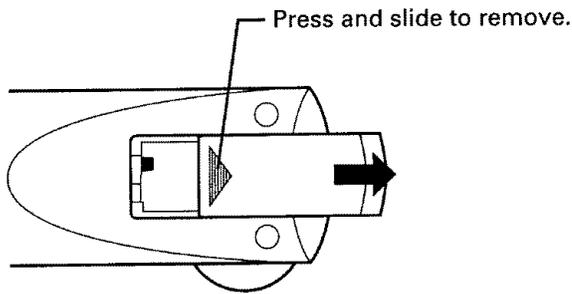
- Before attempting to operate your Remote Control, install the batteries according to "Installing and replacing batteries" (see below).

Notes:

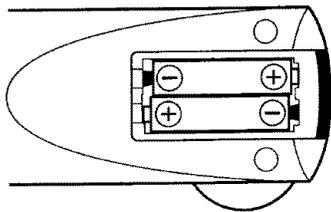
- After installing new batteries, the Remote Control will set itself to the codes for Toshiba's TV and VCR. If you are using the Remote Control to operate equipment that uses different codes, it will have to be reprogrammed for those codes.
- This Remote Control may have functions not available on the original remote controls of your VCR and cable box. These functions may or may not operate your VCR or cable box. Refer to the owner's manuals supplied with the equipment to see which functions are available.
- The remote control supplied with your VCR or cable box may have keys not duplicated on this Remote Control. If these functions are desired, the original remote control will have to be used.

Installing and replacing batteries

- 1 Place the Remote Control with the face down. Press down on the ridged area of the battery cover and slide it off.



- 2 Place two "AA" size alkaline batteries, matching the + and - signs on each battery to the + and - signs of the battery compartment.



- 3 Replace the battery cover until the lock snaps.

CAUTIONS:

- Do not throw your batteries into a fire. Dispose of your batteries in a designated disposal area.
- Do not combine used old batteries with new ones.
- Do not mix battery types.

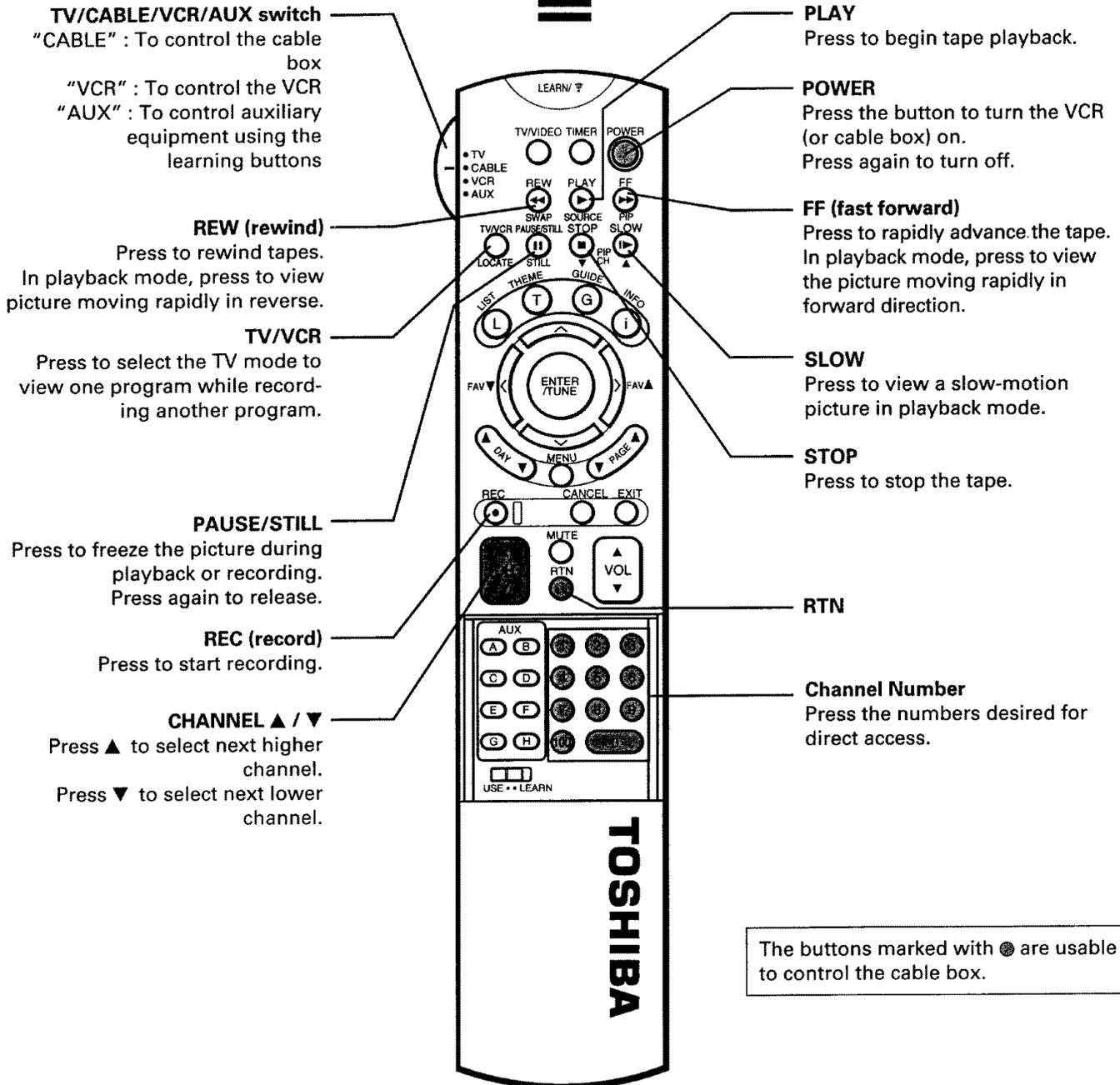
Tips for best operation

- For optimum performance, aim the Remote Control directly at the TV from a distance no more than 16 ft (5m) and be sure there is no obstruction between the Remote Control and the TV.
- If your Remote Control does not always adjust the TV as you wish, you probably need to replace the batteries. Use alkaline batteries for longer use.
- Remove dead batteries immediately to prevent battery acid from leaking into the battery compartment.
- If you do not intend to use the Remote Control for a long period, remove the batteries.

Using the Remote Control with VCR or Cable Box

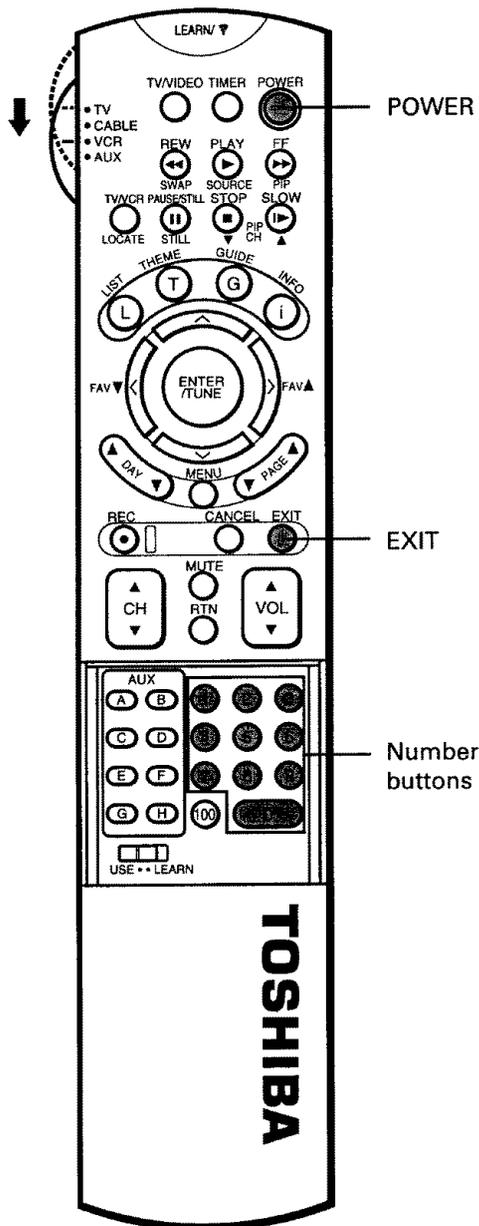
- To control a Toshiba VCR, first set the TV/CABLE/VCR/AUX switch to the "VCR" position. The buttons shown below will then control the VCR. The rest of the buttons operate the TV as usual. If you have another brand of VCR, you can probably program your Remote Control to control it. Details are on page 29.
- To control a cable box, this Remote Control must be programmed to recognize the brand of your cable box. See page 29. Set the TV/CABLE/VCR/AUX switch to the "CABLE" position whenever you control the cable box.

Aim at the VCR or cable box



Programming the Remote Control

- This Remote Control is preprogrammed to operate Toshiba VCR's.
- To use VCR's other than Toshiba models (or cable box), perform the following procedures before operating.



Controlling other brands of VCR's and cable boxes

1 Refer to the "VCR Code table" (or "Cable Box Code table") on pages 30 and 31 to find a code number that corresponds to the brand name of your VCR (or your cable box).

If more than one number is listed, try each one separately until you find the one that works.

2 Set the TV/CABLE/VCR/AUX switch to the "VCR" (or "CABLE") position.

3 While holding down EXIT, press the **Number** buttons for the 3-digit code number for your brand of VCR (or cable box). The transmit indicator lights up for 1 second when the programming is completed.

When an operation error has occurred, the indicator blinks. Press EXIT again to reset.

4 Point the Remote Control at the VCR (or cable box) and press **POWER** to test the code number.

- If the right number has been entered, the VCR (or cable box) should turn on.
- If the VCR (or cable box) does not respond to the Remote Control, repeat steps 1 to 4 with another code number.

Notes:

- You have to reprogram the Remote Control when you replace its batteries.
- Some newer VCR's are capable of working on either of two remote codes. These VCR's have a switch labeled, for example, "VCR1/VCR2". If your VCR has this kind of switch, and does not respond to all the code numbers for your VCR brand name, set the switch to another position ("VCR1" or "VCR2") and reprogram the Remote Control.

For future reference, write the code you used.

VCR CODE: _____

CABLE CODE: _____

Programming the Remote Control (Continued)

- In some rare cases, you may not be able to operate your non-Toshiba equipment with the supplied Remote Control. This is because your equipment may use a code that is not provided with this Remote Control. In this case, use the equipment's own remote control.

VCR Code table

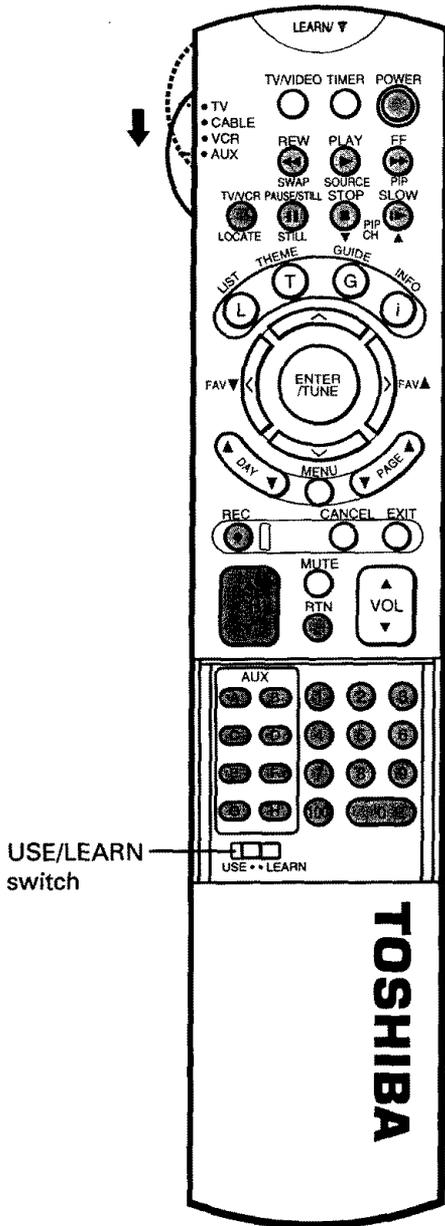
| BRAND NAME | CODE NUMBER | BRAND NAME | CODE NUMBER | BRAND NAME | CODE NUMBER |
|---------------|---|---------------|------------------------------------|---------------|---|
| Aiko | 297 | Granada | 065,100,123 | Philips | 054,081,100,129 |
| Aiwa | 019 | Grundig | 100 | Phonola | 100 |
| Akai | 060,068,080,125 261 | Harman/Kardon | 057 | Pilot | 056 |
| Alba | 039,228,297 | HCM | 091 | Pioneer | 086,100 |
| Amstrad | 019 | Hinari | 091,227 | Portland | 039 |
| Anitech | 091 | Hitachi | 019,060,061,084 124 | Profitronic | 259 |
| ASA | 056,100 | Imperial | 019 | Proline | 019 |
| Audiovox | 056 | Interfunk | 100 | Protec | 091 |
| Baird | 123 | ITT | 060,065,123,125 | Pulsar | 058 |
| Bell & Howell | 123 | JCL | 054 | Pye | 100 |
| Broksonic | 140,203,230 | Jensen | 060 | Quartz | 065 |
| Bush | 091,228,297 | JVC | 027,060,086 | Quasar | 054,115 |
| Canon | 054 | Kendo | 125 | Quelle | 100 |
| Capehart | 039 | Kenwood | 057,060,065,086 | Radiola | 100 |
| Carver | 100 | Lloyd | 019 | RCA | 054,061,084,096 124,168,221 |
| CCE | 091,297 | Loewe | 056 | RCA Unified | 079 |
| CGE | 019 | Loewe opta | 100 | Realistic | 019,054,056,065 066,067,081,085 123,259 |
| Cimline | 091 | Logik | 091,259 | Rex | 060 |
| Condor | 039 | Luxor | 062,065,125 | Ricoh | 053 |
| Craig | 066,259 | LXI | 056 | Roadstar | 056,091,259 |
| Crown | 297 | Magnavox | 019,054,100,129 168 | Runco | 058 |
| Curtis Mathes | 054 | Manesth | 064,091 | Saba | 060 |
| Daewoo | 039,064,065,297 | Marantz | 054,057,081,100 | Saisho | 227,228 |
| Dansai | 091 | Marta | 056 | Salora | 062,065,125 |
| Daytron | 039 | Matsui | 227,228 | Samsung | 064,259 |
| De Graaf | 061 | MEI | 054 | Sansui | 060,086 |
| Decca | 019,100 | Memorex | 019,054,056,058 065,066,067,123 | Sanyo | 065,066,123,259 |
| Dual | 060 | MGA | 062,080 | SBR | 100 |
| Dumont | 019,100,123,124 | Minolta | 061,124 | Schaub Lorenz | 019,060 |
| Dynatech | 019 | Mitsubishi | 062,080,086,100 192,233,261 | Schneider | 019,091,100,129 |
| Electronic | 019 | MTC | 019,259 | Scott | 064,140,203,229 231 |
| Emerex | 051 | Multitech | 019,091 | Sears | 054,056,061,065 066,073,085,123 124 |
| Emerson | 019,021,056,080 140,203,227,228 230,231,313 | Murphy | 019 | SEI | 100 |
| ESC | 297 | NEC | 057,059,060,069 086 | Sentra | 039 |
| Ferguson | 060 | Neckermann | 100 | Sharp | 067,081 |
| Fidelity | 019 | Nikko | 056 | Shintom | 091 |
| Finlandia | 100,123,129 | Noblex | 259 | Siemens | 056,123 |
| Finlux | 019,061,100,123 124 | Nokia | 060,065,123,125 259 | Sinudyne | 100 |
| First line | 062,091,228 | Nordmende | 060 | Sony | 051,052,053,054 |
| Fisher | 065,066,073,085 123 | Optonica | 067,081 | STS | 061 |
| Frontech | 039 | Orion | 140,227,228 | Sunstar | 019 |
| Funai | 019 | Osaki | 019,056,091 | Sylvania | 054,062,100,129 |
| GE | 054,079,084 | Otto Versand | 100 | Symphonic | 019 |
| GEC | 100 | Palladium | 091 | Tashiko | 019 |
| General | 071 | Panasonic | 054,096,244 | Tatung | 019,060,100 |
| Go Video | 251,298 | Penney | 054,056,057,059 061,259 | Teac | 019,060 |
| Goldstar | 056,057 | Pentax | 061,084,124 | Technics | 054 |
| Goodmans | 019,039,056,081 091,297 | Perdio | 019 | Teknika | 019,054,056,071 |
| Gradienta | 019 | Philco | 054 | Telefunken | 060,206 |
| Graetz | 060,123 | | | Tenosal | 091 |

Cable box code table

| BRAND NAME | CODE NUMBER | BRAND NAME | CODE NUMBER |
|----------------------|---|------------------------|--------------------------------|
| Tensai | 019 | ABC | 026,030,032,036 |
| Thomson | 060 | Archer | 058,172 |
| Thorn | 060 | Century | 172 |
| Toshiba | 060,062,064,085 229,231,385 | Citizen | 172 |
| Totevision | 056,259 | Colour Voice | 044,050 |
| Triumph | 227 | Comtronics | 059,079 |
| Unitech | 259 | Eastern | 021 |
| Universum | 019,056,068,100 125 | Garrard | 172 |
| Vector Research | 057,059 | Gemini | 034,089 |
| Victor | 027,060,086 | General | |
| Video Concepts | 059,080 | Instrument | 030 |
| Videosonic | 259 | Hamlin | 028,039,278,292 |
| Wards | 019,054,061,066 067,081,091,168 231,259 | Hitachi | 030 |
| Yamaha | 057,060 | Jasco | 172 |
| Yoko | 259 | Jerrold | 022,030,031,033 034,043,045 |
| Zenith | 052,053,058 | Macom | 052 |
| | | Magnavox | 046 |
| | | Memorex | 019 |
| | | Movie Time | 175 |
| | | NSC | 089,175 |
| | | Oak | 026,038 |
| | | Panasonic | 040 |
| | | Paragon | 019 |
| | | Philips | 044,046,047,048 049,050,079 |
| | | Pioneer | 163 |
| | | Pulsar | 019 |
| | | PVP Stereo | |
| | | Visual Matrix | 022 |
| | | RCA | 040 |
| | | Regal | 039,278,292 |
| | | Regency | 021 |
| | | Rembrandt | 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 |
| | | Stargate | 034,059 |
| | | STS | 175 |
| | | Tocom | 031,032,078 |
| | | Toshiba | 019 |
| | | Unika | 172 |
| | | United Artists | 026 |
| | | United Cable | 022 |
| | | Universal | 058,096,172,210 |
| | | Viewstar | 046,079 |
| | | Zenith | 019 |

Programming the Remote Control (Continued)

- This Remote Control is capable of learning operating codes from most infrared remote control transmitters. You can control the functions of your TV and a variety of video/audio equipment with the supplied Remote Control .
- The 31 buttons marked with ● can be used as the Learning buttons.

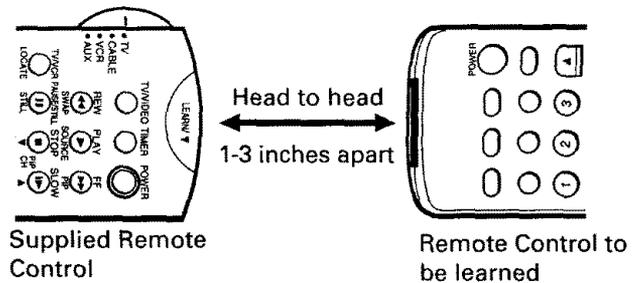


Learning operating code of another remote control

- 1 Set the TV/CABLE/VCR/AUX switch to the "AUX" position.
- 2 Set the USE/LEARN switch to the "LEARN" position.



- 3 Place the supplied Remote Control and the remote control transmitter to be learned, head to head approximately 1 to 3 inches (3 to 8 cm) apart.



- 4 Hold down the button to learn on the supplied Remote Control for about 1 second until the LEARN indicator lights up. When you press a button other than a Learning button, the indicator will blink.
- 5 Hold down the button of the function to be learned on the other remote control transmitter for about 3 seconds until the LEARN indicator goes off.

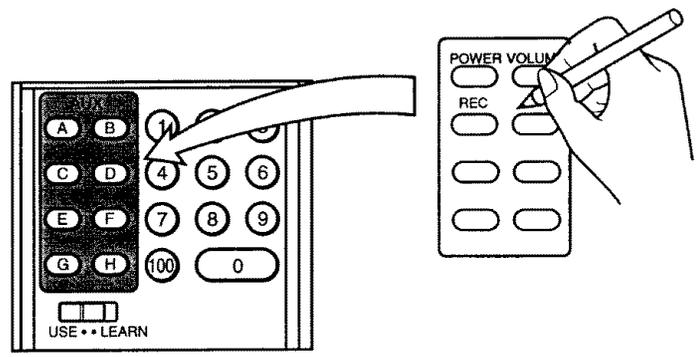
Note: If the LEARN indicator blinks, the supplied Remote Control cannot learn the operating code or an error has occurred. Try steps 4 and 5 again.

- 6 Repeat steps 4 and 5 for storing other functions into other buttons.
- 7 Set the USE/LEARN switch to the "USE" position.



- 8 To check your programming, operate the appropriate equipment with the supplied Remote Control. If the equipment does not operate as expected, repeat steps 1 to 7. If needed, try changing the distance between the two remote controls.

- Attach the supplied Template to the Remote Control to enter the function names of the AUX buttons you have programmed. Use a ballpoint pen, etc. to write the function names.



Cancelling the learned operating codes

- Set the TV/CABLE/VCR/AUX switch to the "AUX" position.
- Set the USE/LEARN switch to the "LEARN" position.



- Hold down the button of the function to cancel on the Remote Control for about 1 second until the LEARN indicator lights up.
- Hold down **EXIT** and **MUTE** at the same time for about 6 seconds until the LEARN indicator goes off after blinking.

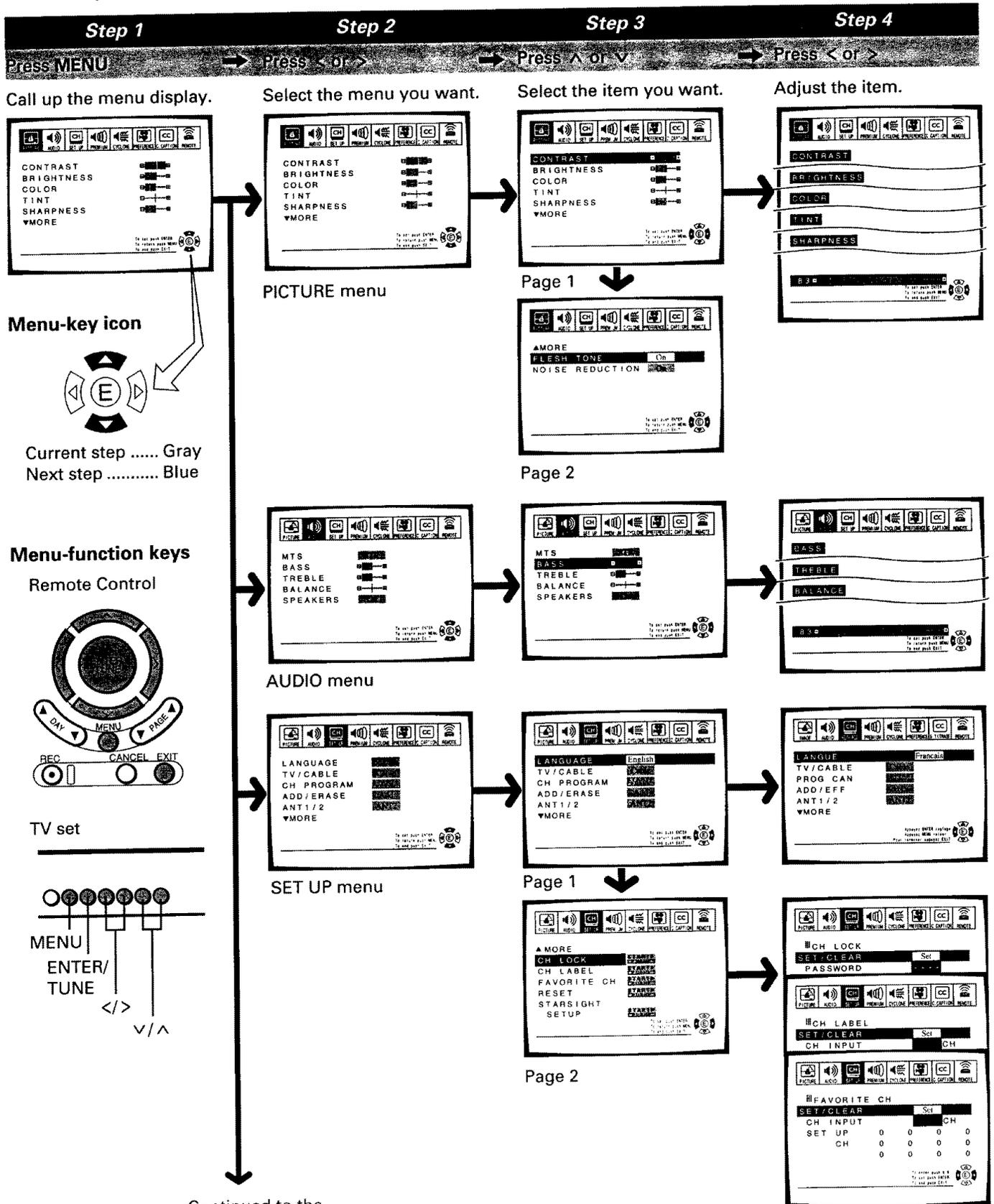
Note: You cannot cancel the programming if you release the button while the indicator is blinking.

- Set the USE/LEARN switch to the "USE" position.



Menu Function (General Instructions)

We suggest you familiarize yourself with the procedure before using the menu function. To adjust any TV feature by using the menu function, follow the flow chart explained below. You will take four main steps until the adjustments that can be made to the TV appear on the screen.



Step 1

Step 2

Step 3

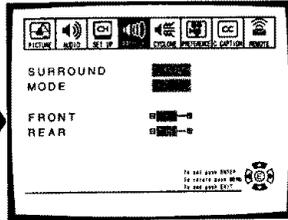
Step 4

Press MENU → Press < or > → Press ▲ or ▼ → Press < or >

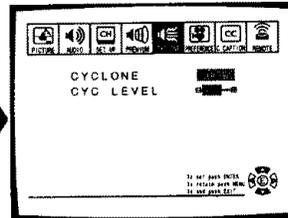
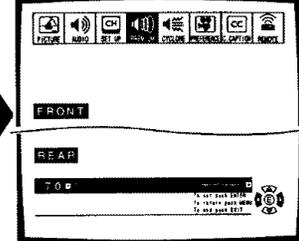
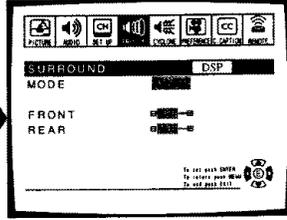
Select the menu you want.

Select the item you want.

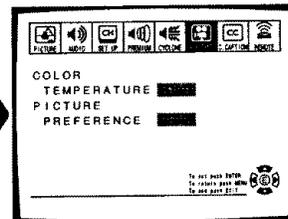
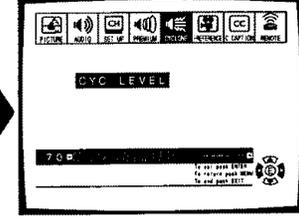
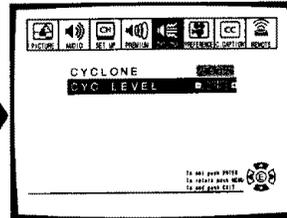
Adjust the item.



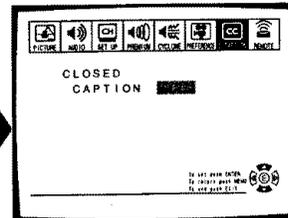
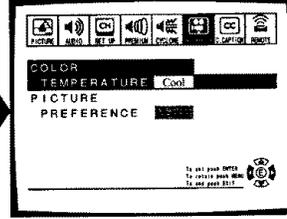
PREMIUM menu



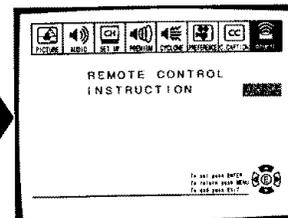
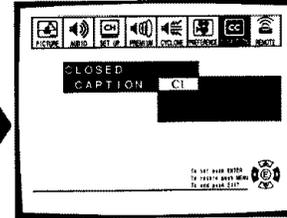
CYCLONE menu



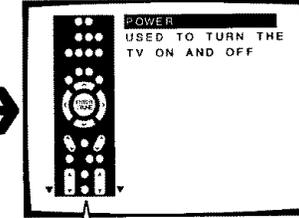
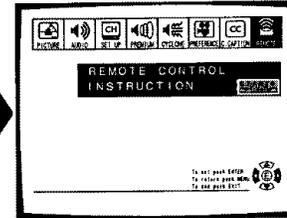
PREFERENCE menu



C.CAPTION menu



REMOTE menu



Notes:

- The ENTER/TUNE button should be used to activate your settings of the functions in the SET UP menu after step 4.
- To return to the first menu shown in step 1, press the MENU button.
- The main menus (step 1 – step 3) will disappear automatically if you do not press a button within 15 seconds and the other displays will also disappear in 6 seconds. If you want to erase the screen of all on-screen displays instantly, press the EXIT button on the Remote Control.
- The </> buttons on the TV will function as the CHANNEL ▼/▲ buttons when no menu display is on the screen.
- The ▼/▲ buttons on the TV will function as the VOLUME ▼/▲ buttons when no menu display is on the screen.
- The </> buttons on the Remote Control will function as the FAV ▼/▲ buttons when no menu display is on the screen.

PREPARATION

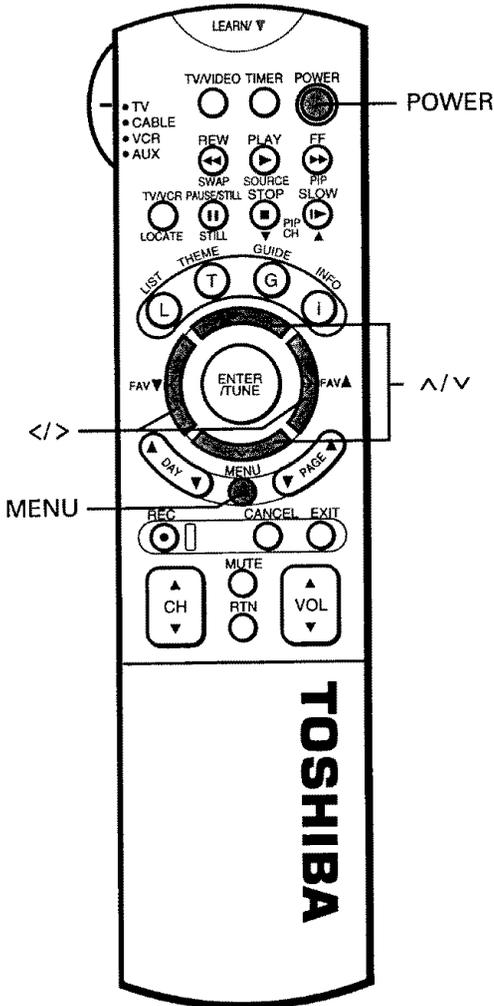
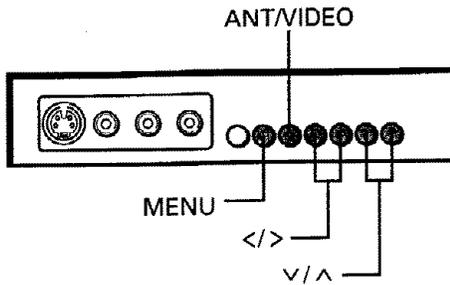
Menu Function (General Instructions)

Pressing </>/
▼/▲ buttons on
the Remote
Control will
change the
button's expla-
nations on the
screen.



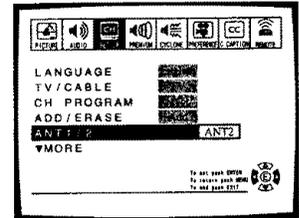
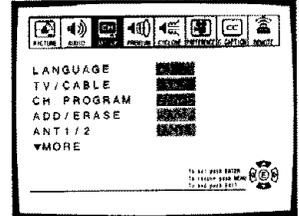
Selecting the Antenna Input

Your TV has two separate antenna inputs (ANT-1 and ANT-2) that allow you to connect two different signal sources, if desired.



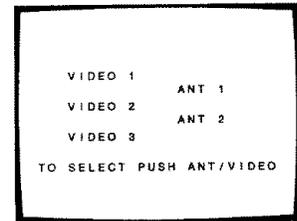
Using the SET UP menu (on the Remote)

- 1 Press **POWER** to turn on the TV.
- 2 Press **MENU**, then press **>** or **<** until the SET UP menu appears.
- 3 Press **v** (or **^**) until "ANT1/2" is highlighted.
- 4 Press **>** or **<** to highlight either "ANT1" or "ANT2", which matches the antenna terminal you use.



Using the ANT/VIDEO button (on the TV)

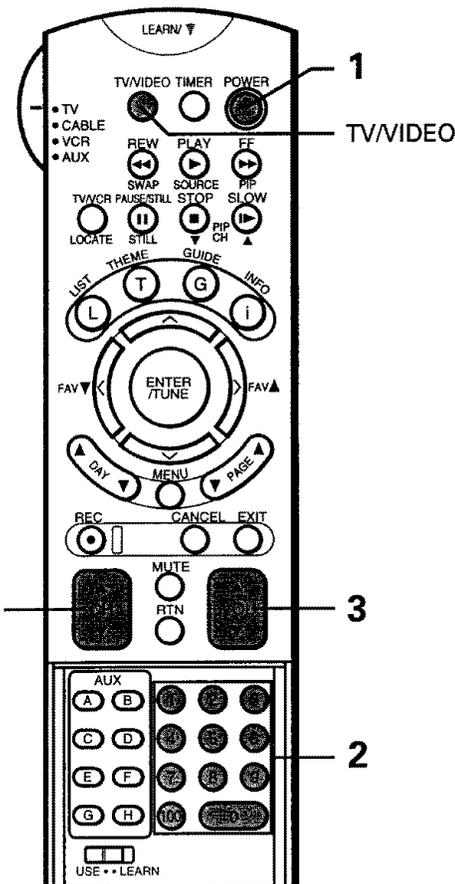
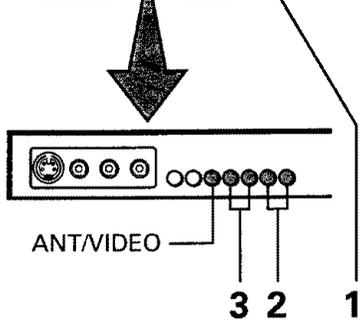
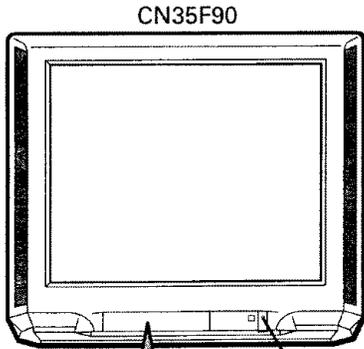
Each time you press the **ANT/VIDEO** button, the "ANT 1", "VIDEO 1", "VIDEO 2", "VIDEO 3" or "ANT 2" mode will be selected in order. The selected mode will be displayed in magenta to show which signal source you are watching. Press the button until "ANT 1" or "ANT 2" is displayed in magenta to match the antenna terminal you use.



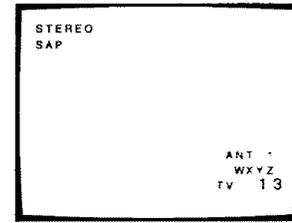
Note: This button functions as the ENTER/TUNE button while a menu is on the screen.

Watching TV Programs

- First set the TV/CABLE/VCR/AUX switch on the Remote Control to the "TV" position.



1 Press **POWER** to turn on the TV. The following on-screen information will be displayed for a few seconds.



- Antenna mode (when in the TV mode).
- Channel number or the VIDEO mode selected.
- Channel label (if previously preset).
- Stereo or SAP audio status.

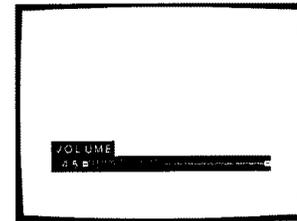
To turn off the TV, press **POWER** again.

- 2** Select a channel in one of the following two ways.
- **To scan the memorized channels in numerical sequence**
Press **CHANNEL ▲** to select the next higher channel.
Press **CHANNEL ▼** to select the next lower channel.
Press the button again to select the next memorized channels.
 - **To select a channel directly**
Press the **Channel Number** buttons (0-9 and 100).
To select channel 4, press "4" (or press "0", "4").
To select channel 38, press "3", "8".
To select channel 125, press "100", "2", "5" in sequence.

If you cannot select certain channels, either TV (off the air) or CABLE channels

Check if the TV/CABLE function is properly set. See page 37.

- 3** Press **VOLUME ▼/▲** to adjust the volume.
To increase the volume, press **▲**.
To decrease the volume, press **▼**.



Watching Video Input

The TV/VIDEO button (or ANT/VIDEO button on the TV) is used to view the signals coming from other devices like VCR's or Video Disc Players connected to this TV. Details are on page 62.

Auto-Power-Off

If a vacant channel is tuned or TV broadcast for a day is finished, the TV will automatically turn off after about 15 minutes. This feature does not operate in the VIDEO mode.

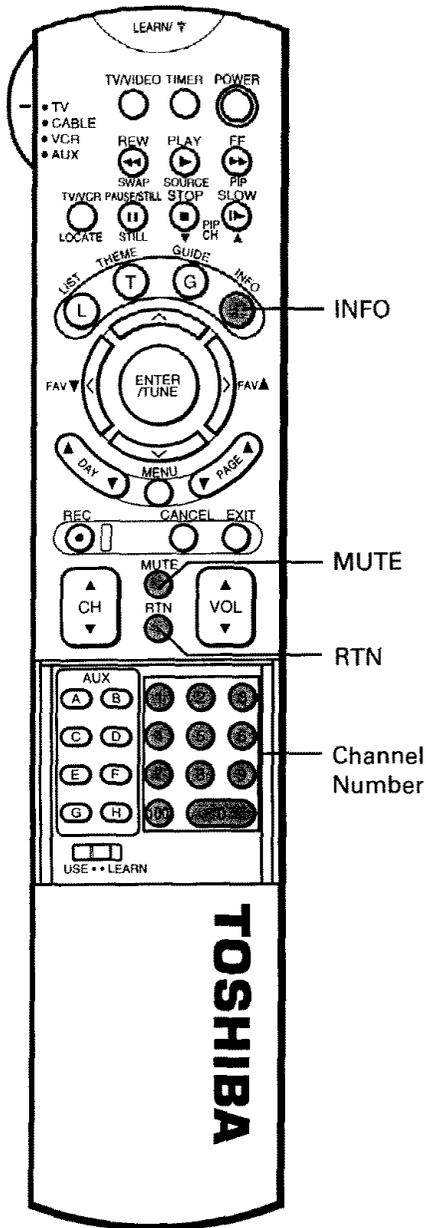
Last Mode Memory

If the power is cut off while you are viewing the TV and the power is resupplied, the TV is turned on automatically by the *Last Mode Memory* feature. If the power is going to be off or when you leave home for a long time, remove the power plug from the wall outlet to prevent the TV from turning on in your absence.

Notes:

- The **VOLUME ▼/▲** buttons on the TV function as the **</>** buttons while a menu is on the screen.
- The **ANT/VIDEO** button on the TV functions as the **ENTER/TUNE** button while a menu is on the screen.

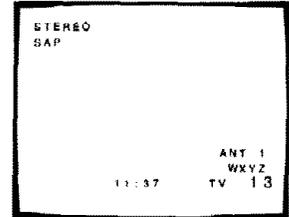
Convenient Remote Functions



Displaying on-screen information

Press **INFO** to display the following on-screen information.

- Antenna mode (when in TV mode)
- Channel number or VIDEO mode selected
- Channel label (if previously preset)
- Time (if clock has been set)
- Stereo or SAP audio status

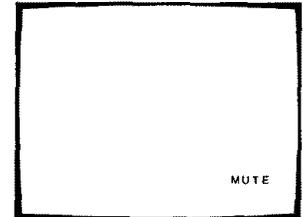


Muting the sound

Press **MUTE** to mute the sound. The word "MUTE" will be displayed on the screen as shown. This is useful during telephone calls or other interruptions.

To restore the sound, press **MUTE** again.

Note: When the MUTE button is pressed, the Closed-Captioned feature is activated. To deactivate, press the MUTE button again. (This feature only functions when the Closed Caption mode is set to "Off". See page 58.)



Changing quickly between two channels

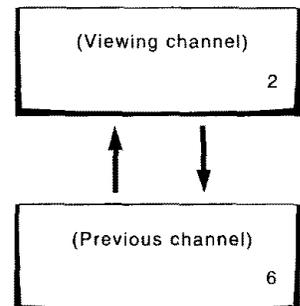
Press **RTN** to return to the last channel viewed.

This is useful should you want to view two channels. This allows you to view two programs without entering an actual channel number each time.

To operate this function

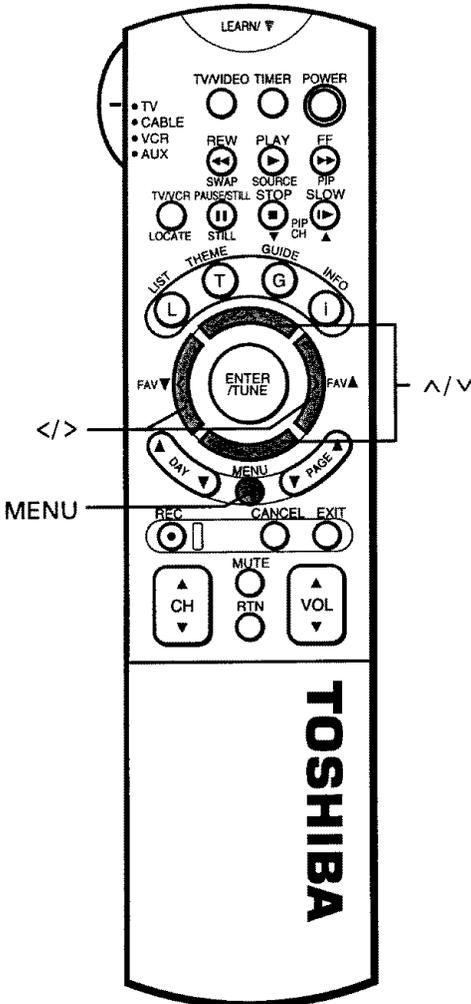
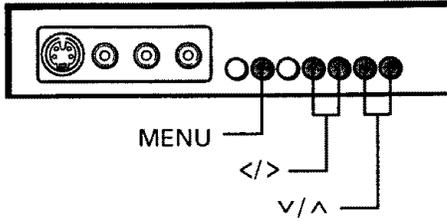
- 1 Select the first channel you want to view.
- 2 Select the other channel with the **Channel Number** buttons.
- 3 Press **RTN**.
The previous channel will return.

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



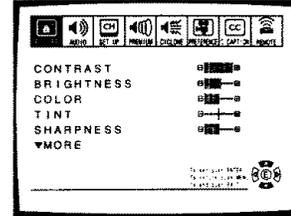
Adjusting the Picture

You can adjust the picture quality (CONTRAST, BRIGHTNESS, COLOR, TINT and SHARPNESS) to suit your taste.



Adjusting the picture quality

1 Press **MENU** then press **>** or **<** to display the PICTURE menu on the screen.

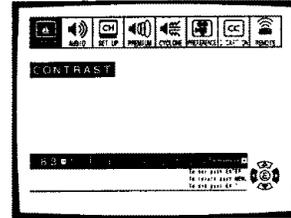


2 Press **v** (or **^**) until the item you want to adjust is highlighted.

Example: When adjusting "CONTRAST"



3 Press **>** or **<** to adjust the level.



| Selection | Pre-setting | |
|------------|-------------|----------|
| CONTRAST | lower | higher |
| BRIGHTNESS | darker | lighter |
| COLOR | paler | deeper |
| TINT | reddish | greenish |
| SHARPNESS | softer | sharper |

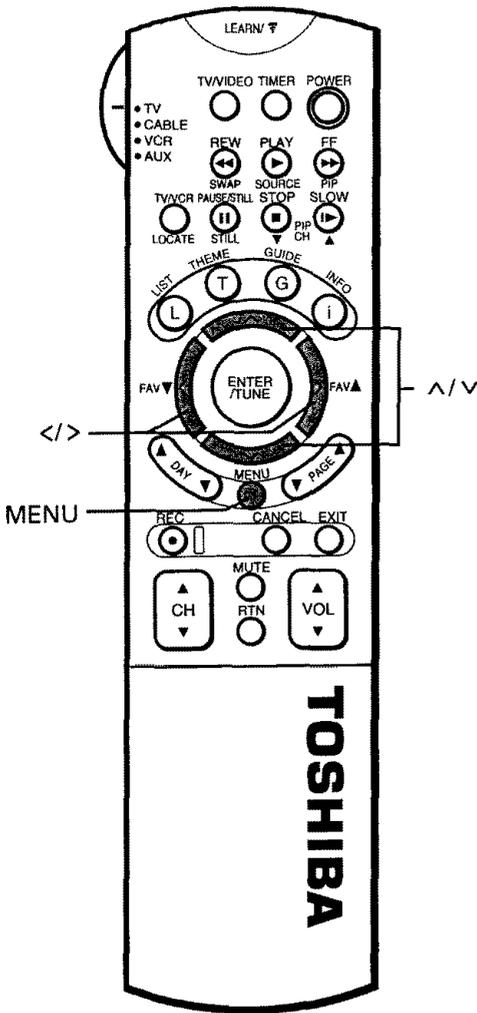
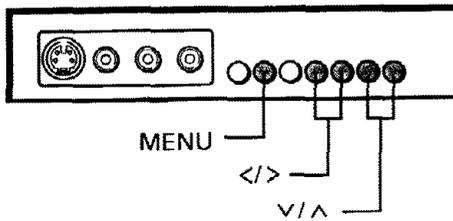
The above five PICTURE items you have adjusted will be stored into "Memory" automatically. To use this settings, see page 42.

To reset the picture adjustments to the factory-preset status

Select "RESET" in the SET UP menu, then press **>** or **<**. (See page 43 for details.)

Note: There are two more items in the PICTURE menu — FLESH TONE and NOISE REDUCTION. To use these functions, see page 60.

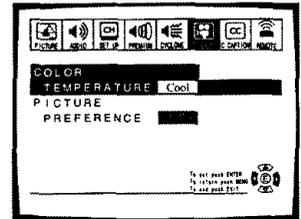
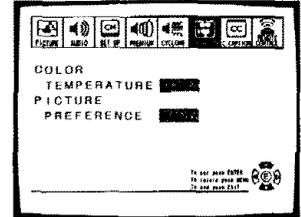
Adjusting the Picture (Continued)



Selecting the color temperature

These selections (Cool, Medium and Warm) change the overall tone of the picture.

- 1 Press **MENU**, then press **>** or **<** until the **PREFERENCE** menu appears.
- 2 Press **v** (or **^**) until "COLOR TEMPERATURE" is highlighted.
- 3 Press **>** or **<** to highlight the mode you want.

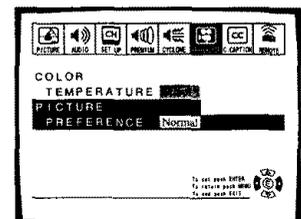
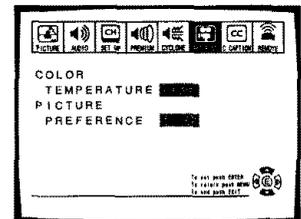


| Mode | Picture quality |
|--------|-----------------|
| Cool | Bluish |
| Medium | Normal |
| Warm | Reddish |

Selecting the picture preference function

You can select a desired picture setup from three picture preset modes (Normal, Theater and Memory) instantly.

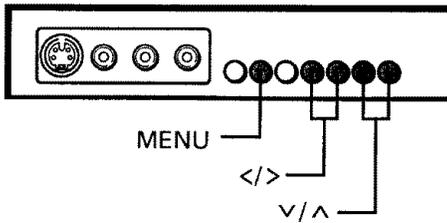
- 1 Press **MENU**, then press **>** or **<** until the **PREFERENCE** menu appears.
- 2 Press **^** (or **v**) until "PICTURE PREFERENCE" is highlighted.
- 3 Press **>** or **<** to highlight the mode you want.



| Mode | Picture quality |
|---------|---|
| Normal | The picture quality preset at the factory |
| Theater | Soft and moody picture |
| Memory | The picture quality you set (First follow page 41.) |

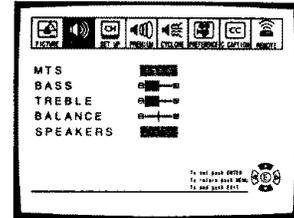
Adjusting the Sound

You can adjust the sound quality (BASS, TREBLE and BALANCE) to suit your taste.



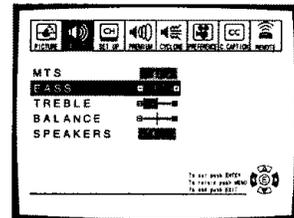
Adjusting the sound quality

1 Press **MENU**, then press **>** or **<** until the **AUDIO** menu appears.

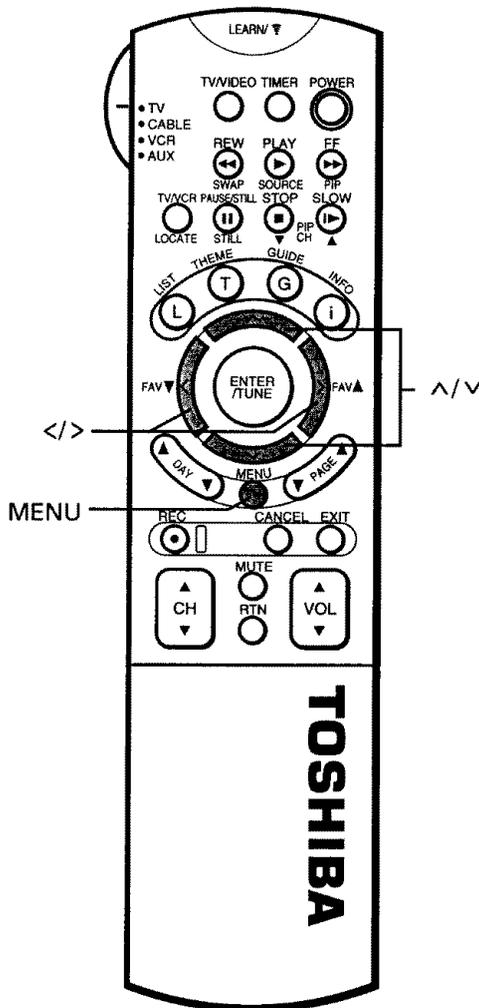
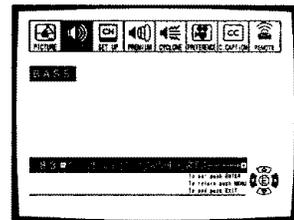


2 Press **v** (or **^**) until the item you want to adjust is highlighted.

Example: When adjusting "BASS"



3 Press **>** or **<** to adjust the level.



| Selection | Pressing | |
|-----------|-----------------------------|----------------------------|
| BASS | weaker | stronger |
| TREBLE | weaker | stronger |
| BALANCE | decreases the right channel | decreases the left channel |

To reinforce the bass, see also page 48.

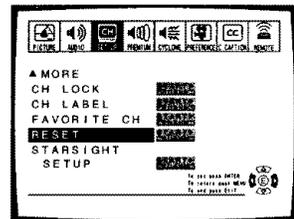
RESET function

To reset the **PICTURE** and **AUDIO** adjustments to the factory-preset level (maximum **CONTRAST** and all other adjustments centered)

1 Press **MENU**, then press **>** or **<** until the **SET UP** menu appears.

2 Press **^** (or **v**) until "RESET" is highlighted.

3 Press **>** or **<**.



Note: There are some other items in the **AUDIO** menu — **MTS** and **SPEAKERS**. To use these functions, see pages 44 and 66.

The **RESET** function also performs the following adjustments.

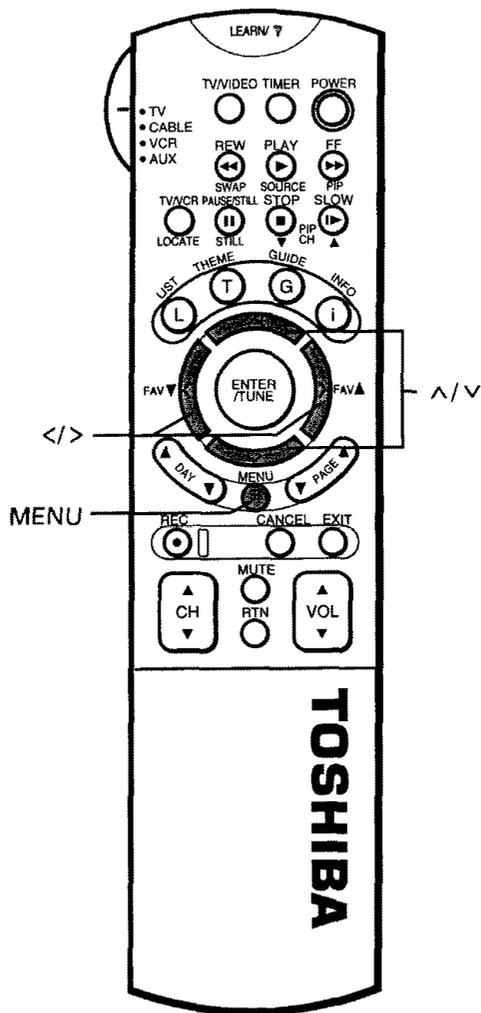
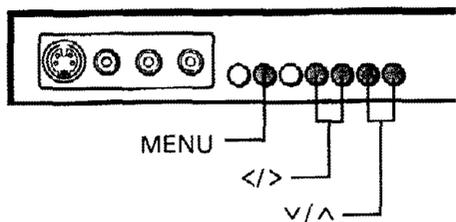
- **COLOR TEMPERATURE** Cool
- **PICTURE PREFERENCE** Normal
- **NOISE REDUCTION** Off

BASIC OPERATION

Adjusting the Picture/ Adjusting the Sound

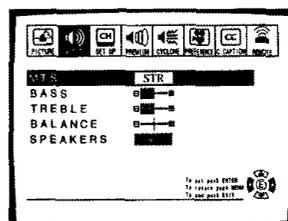
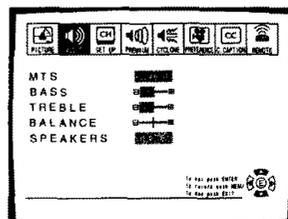
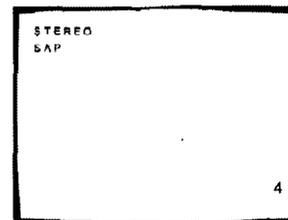
Selecting Stereo/SAP Broadcasts

The MTS (Multi-channel TV Sound) feature allows you to improve your TV viewing with high fidelity stereo sound. MTS also provides for an extra channel, SAP (Second Audio Program), used to transmit a second language or other audio information.



Listening to stereo sound

- 1 When the TV receives a stereo (or SAP) broadcast, the word "STEREO" (or "SAP") is displayed on the screen whenever the TV is turned on, a channel is selected, or the INFO button is pressed.
- 2 Press **MENU**, then press > or < until the **AUDIO** menu appears.
- 3 Press v (or ^) until "MTS" is highlighted.
- 4 Press > or < to highlight "STR". Normally leave this setting in the stereo mode (STR). Your TV will then automatically reproduce either stereo or monaural sound, whichever is broadcast.

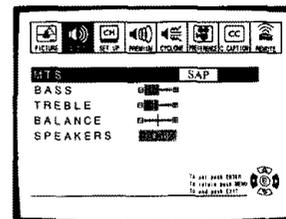


If the stereo sound is noisy

If a broadcast signal is not strong enough, and noise-free stereo sound is not available, select "MONO". The noise should be reduced.

Listening to second language

- 1 Follow steps 1 to 3 above.
- 2 Press > or < to highlight "SAP". You will hear only the second language from the left and right speakers.

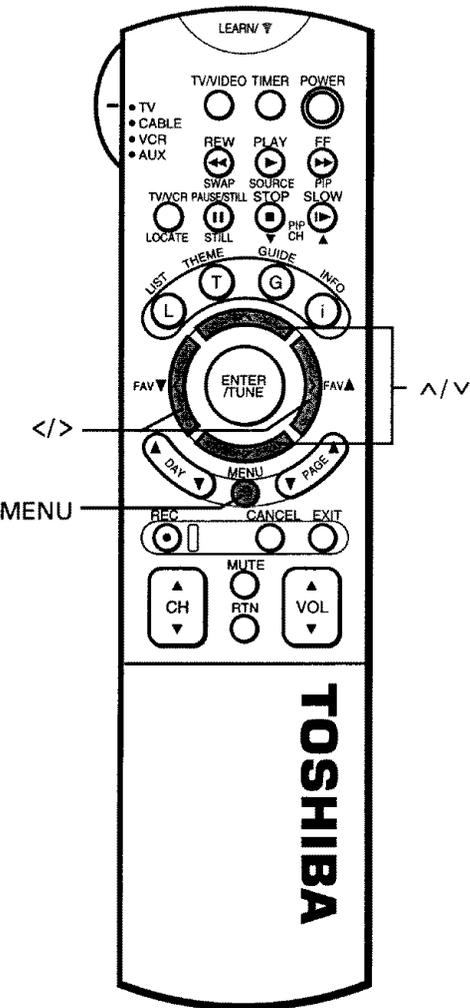
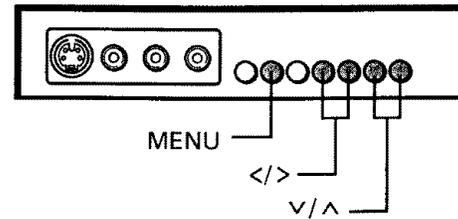


Notes:

- Be sure you have selected "STR" if broadcast is in stereo.
- "MTS" in the AUDIO menu does not function in the VIDEO mode.

Enhancing the Surround Sound Effect

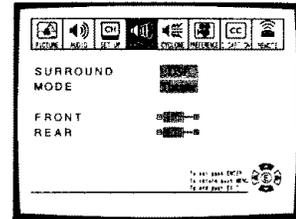
With Dolby Surround and Toshiba's Digital Sound Processor (DSP), the TV can simulate various surroundings. You can use the appropriate mode for the scene of TV program you are watching. To enjoy these surround modes completely, you need to connect surround speakers (not supplied). See page 68 to connect surround speakers.



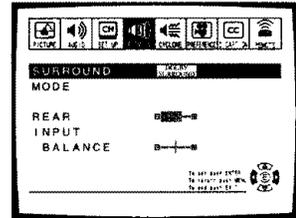
Using Dolby Surround

You can use this Dolby Surround to play back a program recorded with Dolby Surround*.

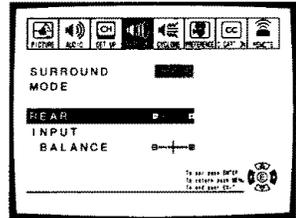
1 Press **MENU**, then press **>** or **<** until the **PREMIUM** menu appears.



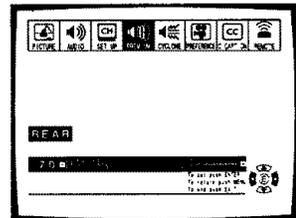
2 Press **v** (or **^**) until "SURROUND" is highlighted.



3 Press **>** or **<** to highlight "DOLBY SURROUND".



4 Press **v** (or **^**) button until "REAR" is highlighted.



5 Press **>** or **<** button to adjust the rear speaker (surround speaker) level.

To deactivate Dolby Surround
Select "OFF" in step 3 above.

*Dolby Surround

Manufactured under license from Dolby Laboratories Licensing Corporation. "Dolby" and the double-D symbol  are trademarks of Dolby Laboratories Licensing Corporation.

BASIC OPERATION

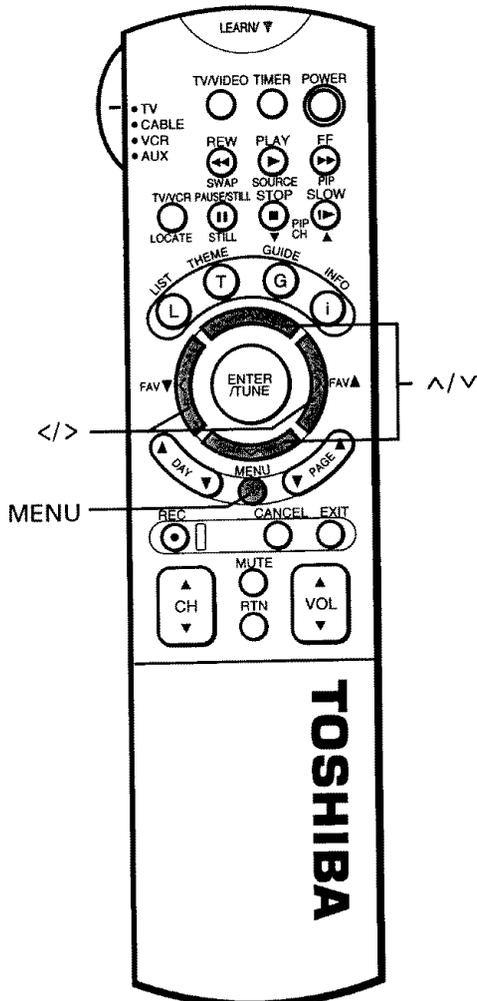
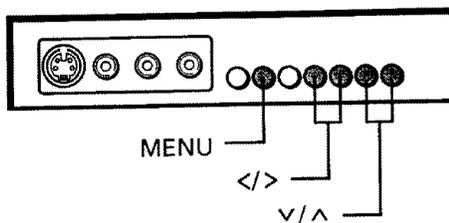
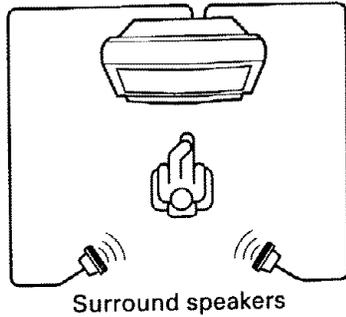
ADVANCED OPERATION

Selecting Stereo/SAP Broadcast/
Enhancing the Surround Sound Effect

Enhancing the Surround Sound Effect (Continued)

Adjusting the input balance

If direct speech is heard from the connected surround speakers while playing back a Dolby Surround program, adjust "INPUT BALANCE" to cancel it.

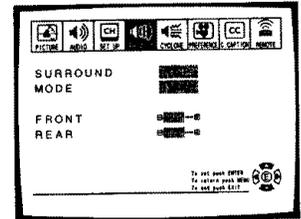


- 1 Set the **MAIN SPEAKER** switch on the TV rear panel to the "EXT" position to disconnect the main speakers.

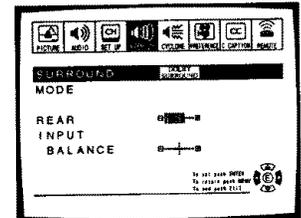


Note: If you are using the external speakers, disconnect both (L and R) positive leads temporarily. See page 67 for details.

- 2 Press **MENU**, then press > or < until the **PREMIUM** menu appears.

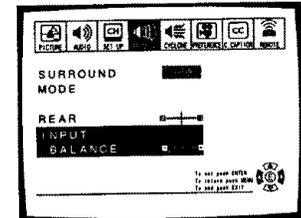


- 3 Press v (or ^) until "SURROUND" is highlighted.

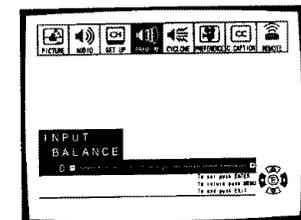


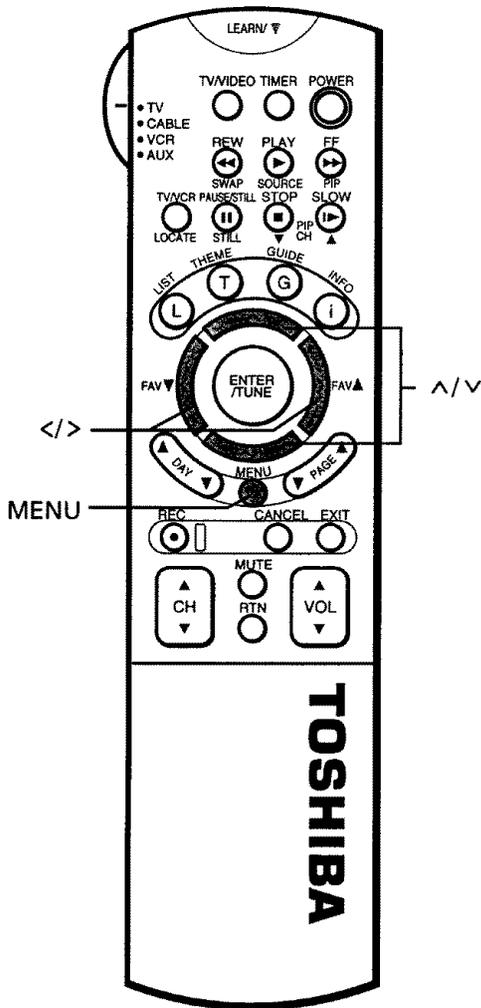
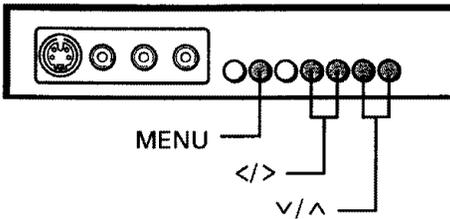
- 4 Press > or < to highlight "DOLBY SURROUND".

- 5 Press v (or ^) until "INPUT BALANCE" is highlighted.



- 6 Press > or < to adjust the input balance. Minimize the dialogue sound from the surround speakers.

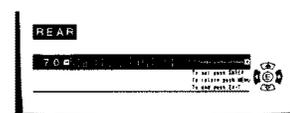
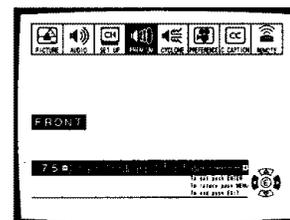
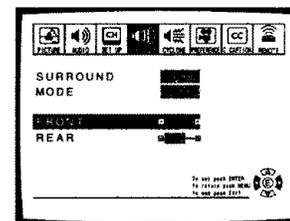
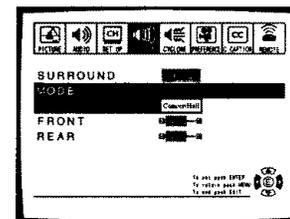
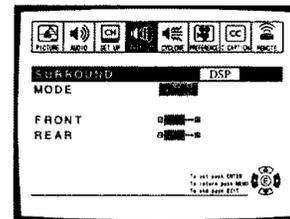




Selecting appropriate DSP modes

| Mode | Surround effect |
|--------------|--|
| Theater | A movie theater filled with a rich warm sound |
| Stadium | A large football or baseball stadium for a live game |
| Night Club | A nightclub room |
| Concert Hall | A concert hall having about 1500 seats |

- 1 Press **MENU**, then press > or < until the **PREMIUM** menu appears.
- 2 Press v (or ^) until "SURROUND" is highlighted.
- 3 Press > or < to highlight "DSP".
- 4 Press v (or ^) until "MODE" is highlighted.
- 5 Press > or < until the mode you want is highlighted.
Example: When selecting "Concert Hall"
- 6 Press v (or ^) until "FRONT" (or "REAR") is highlighted.



Press > or < to adjust the rear speaker (surround speaker) level.

Note: The DSP function processes only stereo signals input from a TV broadcast or video.

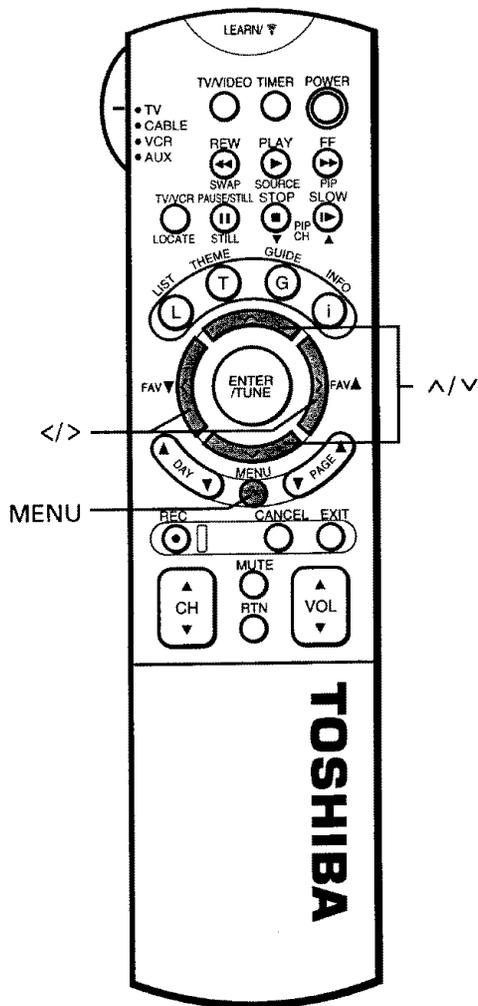
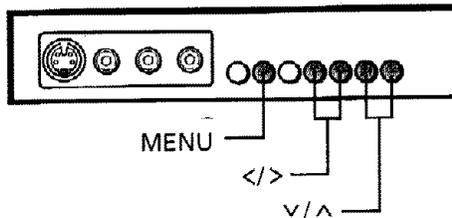
To deactivate the DSP modes
Select "OFF" in step 3 above.

Enhancing the Surround Sound Effect

ADVANCED OPERATION

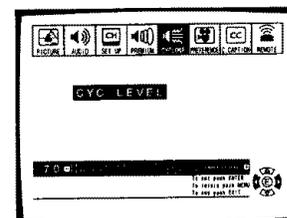
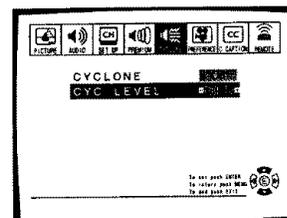
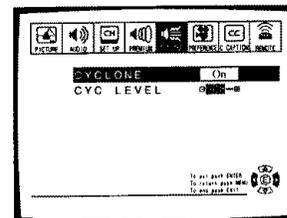
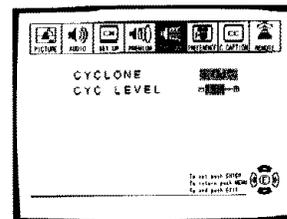
Operating Sub-Woofers System "CYCLONE™"

Toshiba's CYCLONE™ ABX (woofer speaker) is a deep bass reproduction system.



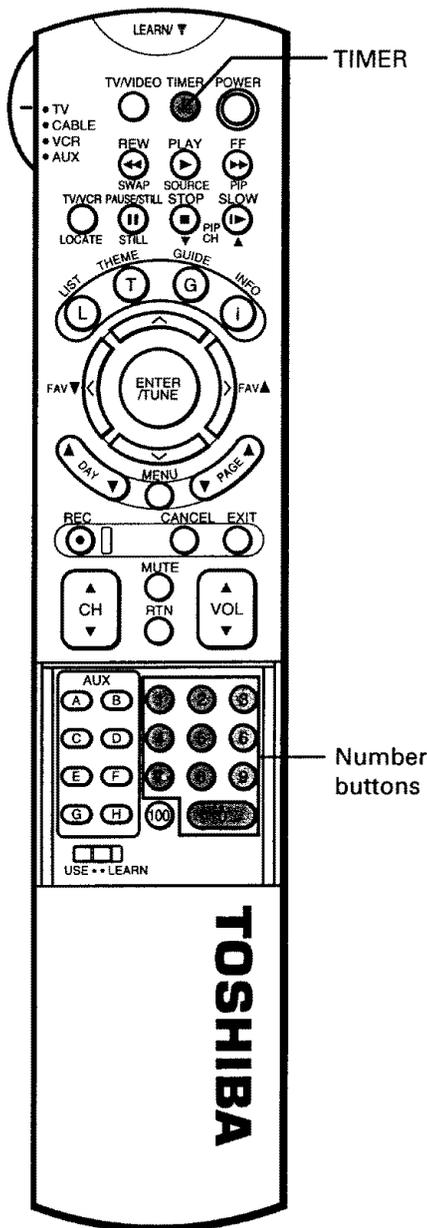
Activating the CYCLONE™ woofer (Sub-Woofers System)

- 1 Press **MENU**, then press **>** or **<** until the CYCLONE menu appears.
- 2 Press **v** (or **^**) until "CYCLONE" is highlighted.
- 3 Press **>** or **<** to highlight "On".
- 4 Press **v** (or **^**) until "CYC LEVEL" is highlighted.
- 5 Press **>** or **<** to adjust the CYCLONE LEVEL (volume).
To increase volume, press **>**.
To decrease volume, press **<**.



To deactivate the CYCLONE woofer
Select "Off" in step 3 above.

Setting the Off-Timer / Clock



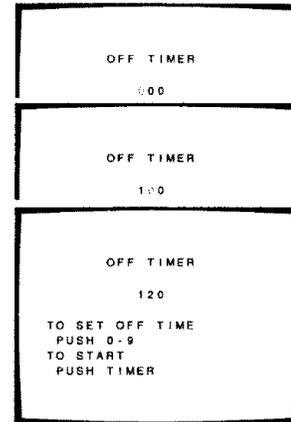
Setting the off-timer (sleep timer)

With the off-timer, you can set the TV to turn off automatically after a pre-determined period of time (up to 180 minutes = 3 hours, in 10-minute intervals).

- 1 Press **TIMER** once to select the **TIMER** mode.
- 2 Press two **Number** buttons to enter the length of time you want the TV to stay on after each number position starts to blink.

Example: 120 minutes
Press 1 and 2.

- 3 Press **TIMER** to start the timer. The display color will change from magenta to cyan, and then the display will go off.



To cancel the setting

Press **POWER** twice, once to turn the TV off and once to turn it on again.

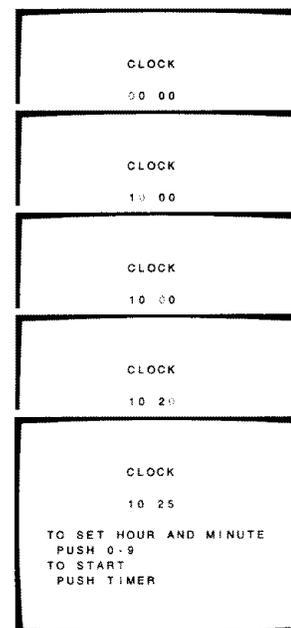
Setting the clock

- 1 Press **TIMER** twice to select the **CLOCK** mode.
- 2 Press four **Number** buttons to enter the correct time, after each number position starts to blink.

Example: To set 10:25 p.m.
Press 1, 0, 2 and 5.

- The clock operates on a 12-hour cycle.

- 3 Press **TIMER** to start the clock. The display color will change from magenta to cyan, and then the display will go off.



Note on the off-timer:

To display the time remaining until the shut-off time, press **TIMER** once. The remaining time will be displayed on the screen. To erase the display, press **TIMER** twice.

Note on the clock:

- If the power source for the TV is interrupted (i.e., AC cord unplugged or power failure), the clock will have to be reset. (The time display will show "00:00".)
- The clock function will not appear if you subscribe to StarSight.

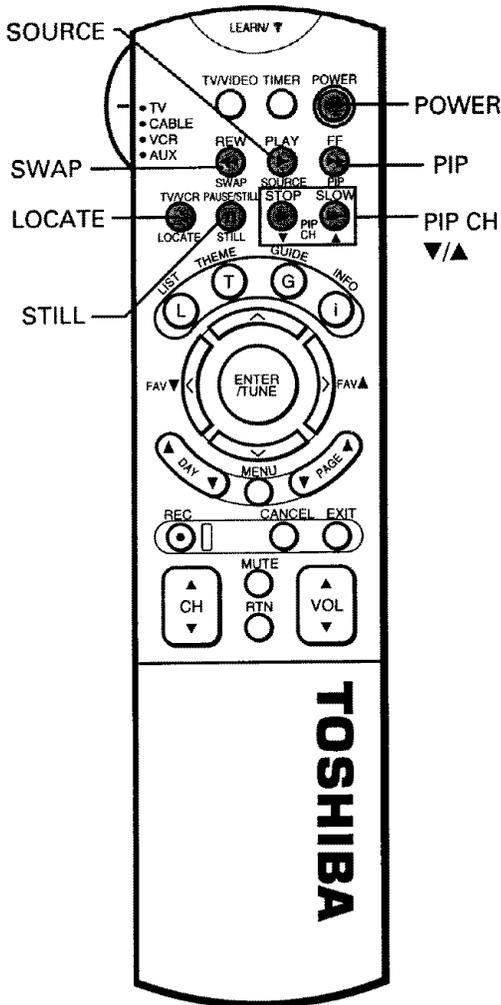
To monitor the time

Press **INFO**.

Watching Picture-in-Picture

This TV is capable of displaying two pictures simultaneously. This is called the Picture-in-Picture function. A TV broadcast picture, or a picture from external source equipment such as a VCR, can be displayed as a small picture.

Note: The signal sources from the ANT-2 terminal cannot be displayed as a small picture.

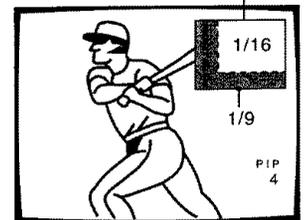


Displaying a small picture

To display a TV broadcast picture as a small picture

- 1 Press **POWER** to turn on the TV and select the desired program.
- 2 Press **PIP** once to display a small picture. The 1/9 size window picture will appear. If you press the button **twice**: The 1/16 size window picture will appear.
- 3 Press **PIP CH** ▼/▲ to select the desired program for the small picture.
- 4 To turn off the small picture, press **PIP** again.

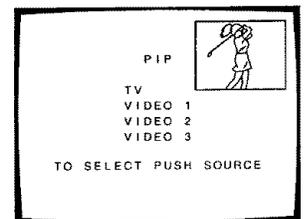
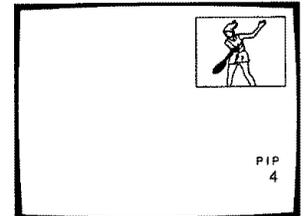
Small picture



To display a picture from an external source as a small picture

Connect external source equipment for the small picture. (For connection, see pages 62 to 64.)

- 1 Press **POWER** to turn on the TV and select the desired program.
- 2 Press **PIP** to display a small picture.
- 3 Press **SOURCE** repeatedly to select the input source (TV, VIDEO 1, VIDEO 2 or VIDEO 3) for the small picture. The selected source will be displayed in magenta.



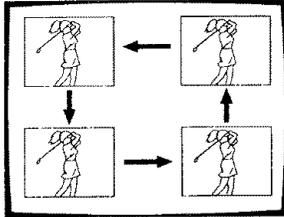
To turn off the small picture, press PIP

- **Twice**, if you watch the 1/9 size window picture.
- **Once**, if you watch the 1/16 size window picture.

Using advanced functions

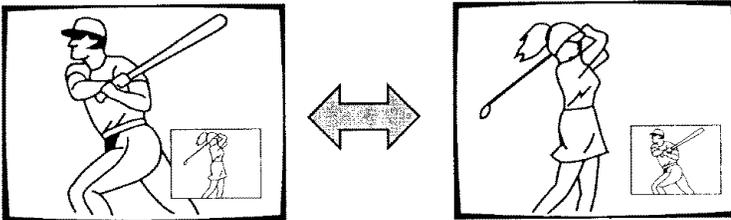
To change the position of the small picture

Press **LOCATE** repeatedly when a small picture is displayed. The display position of the small picture will change in order.



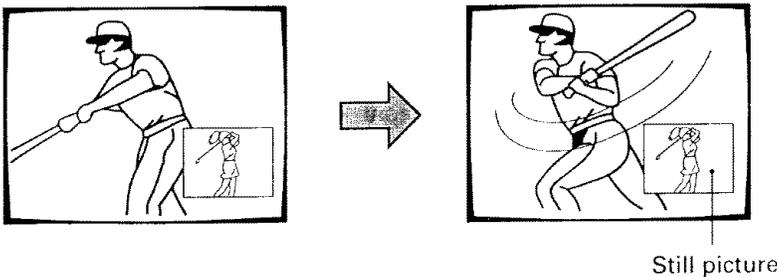
To switch the main and small picture

Press **SWAP** when a small picture is displayed. The main and small pictures will switch. To switch them again, press **SWAP** again.



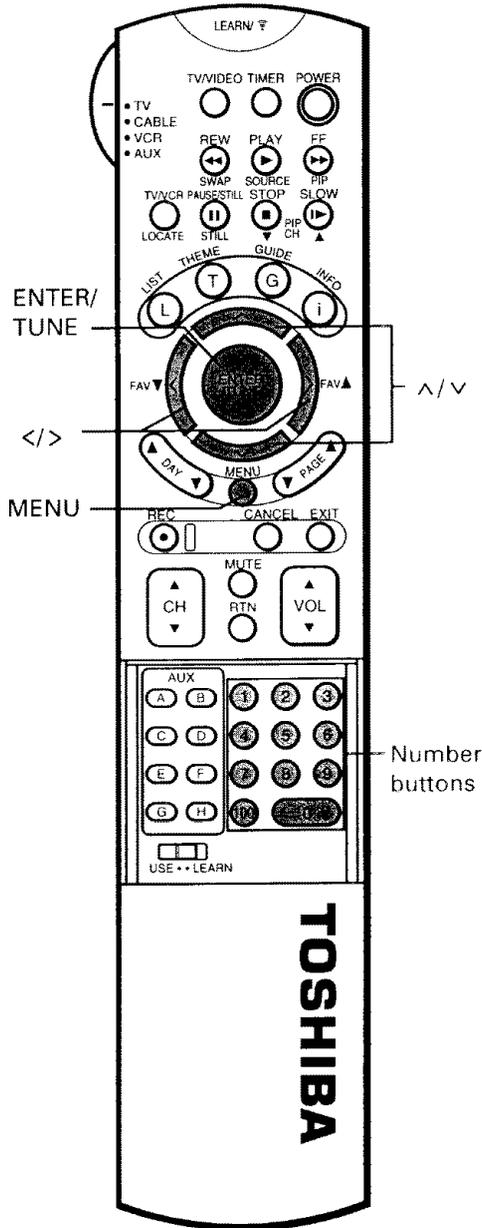
To freeze the small picture

Press **STILL** when a small picture is displayed. The small picture will become a still picture. To return to a moving picture, press **STILL** again.



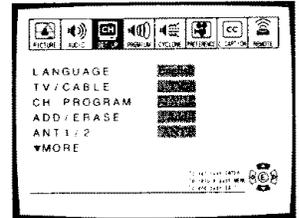
Locking Channels

With this function you can lock out specific channels by entering your own 4-digit password. The TV will not be able to tune them for the next 24 hours, unless you unlock channels. This TV has 8 memory spaces total, 4 each for the TV and CABLE mode.

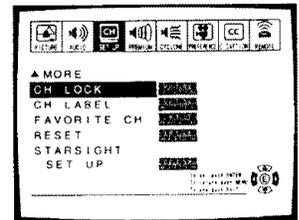


Locking out channels

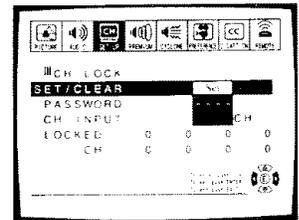
1 Press **MENU**, then press **>** or **<** until the **SET UP** menu appears.



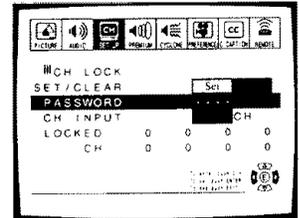
2 Press **^** (or **v**) until **"CH LOCK"** is highlighted.



3 Press **>** or **<** to display the **CH LOCK** menu. **"SET/CLEAR"** will be highlighted.



4 Press **>** or **<** to highlight **"Set"**.

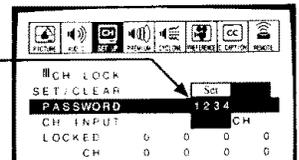


5 Press **v** to highlight **"PASSWORD"**.

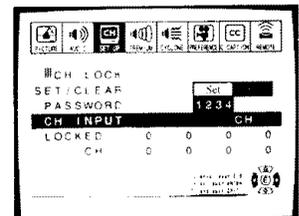
6 Press **Number** buttons (0 - 9) to enter a 4-digit password. The numbers you enter will replace the dashes in the display. **Pick a number that is easy to remember.**

Example: To enter "1234"
Press 1, 2, 3, and 4 in order.

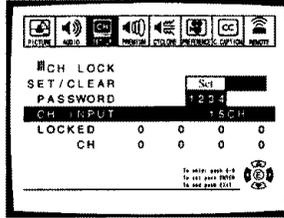
1 - - - → 1 2 - - → 1 2 3 - → 1 2 3 4



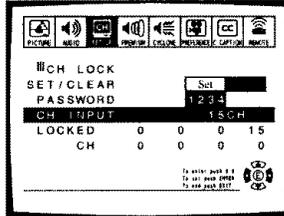
7 Press **v** to highlight **"CH INPUT"**.



- 8 Press **Number** buttons (0 - 9, and 100) to enter a channel number.



- 9 Press **ENTER/TUNE**.

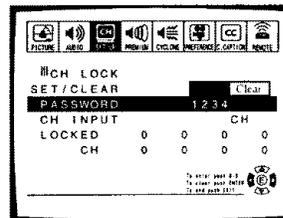
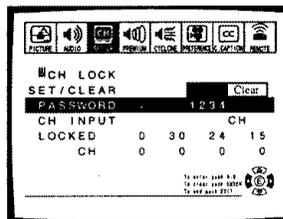
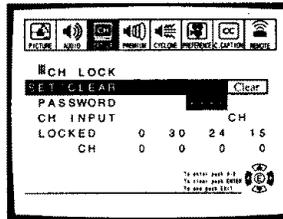


- 10 Repeat steps 8 and 9 for other channels.

Note: If a different code number is used whenever you lock out a channel, the last one has priority over the preceding ones.

Unlocking channels

- Follow steps 1 to 3 on the previous page.
- Press > or < to highlight "Clear".
- Press v to highlight "PASSWORD".
- Press the **Number** buttons (0 - 9) to enter the 4-digit password used to lock out the channels.
- Press **ENTER/TUNE**.



If a wrong password has been entered
The message to the right appears. Try to enter the correct code again.

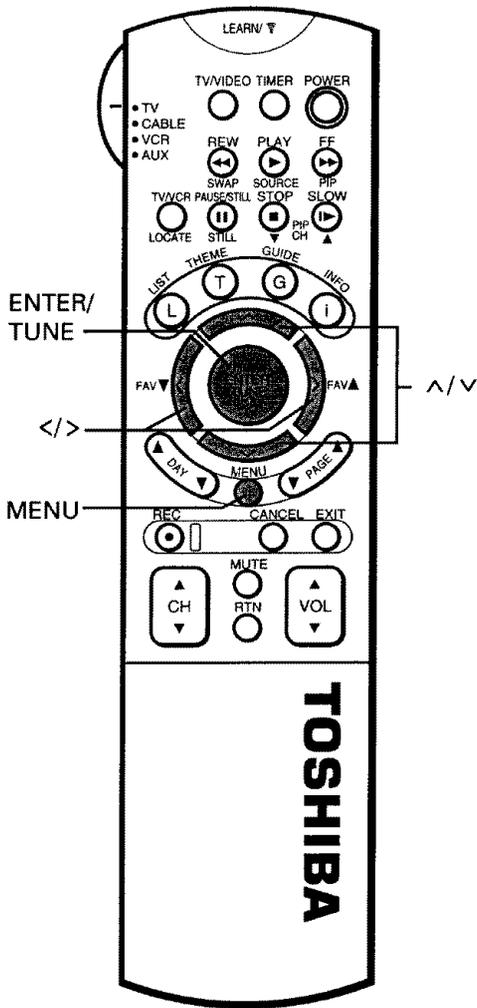
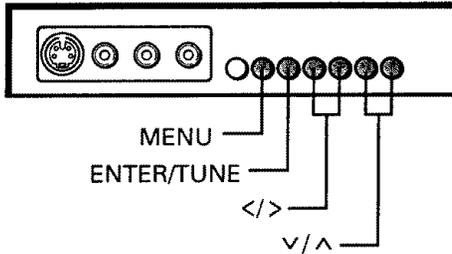


If you want to know the channels you have locked out
Call up the CH LOCK menu.



Labeling Channels

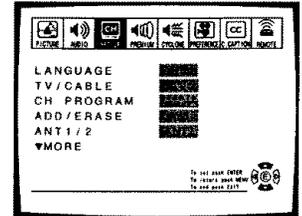
This feature allows you to enter a 4 letter channel identifier of your choice that will appear over the channel number display. The labeling can be anything you want (for example the station call letters).



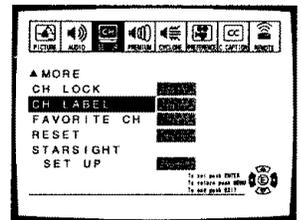
Programming the channel labels

Example: To assign "ABCD" to channel 4.

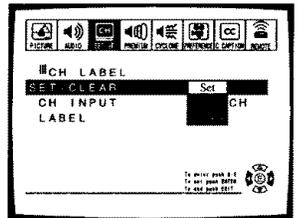
1 Press **MENU**, then press **>** or **<** until the **SET UP** menu appears.



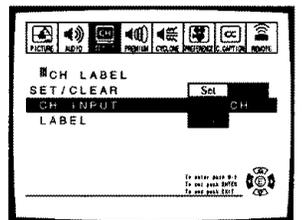
2 Press **^** (or **v**) to highlight **"CH LABEL"**.



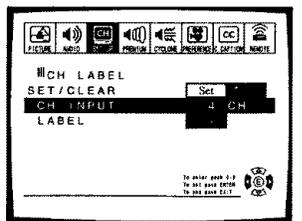
3 Press **>** or **<** to display the **CH LABEL** menu. **"SET/CLEAR"** will be highlighted.



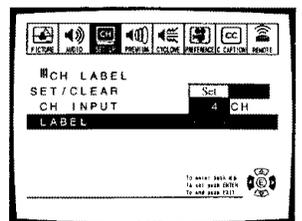
4 Press **>** or **<** to highlight **"Set"**.



5 Press **v** to highlight **"CH INPUT"**.



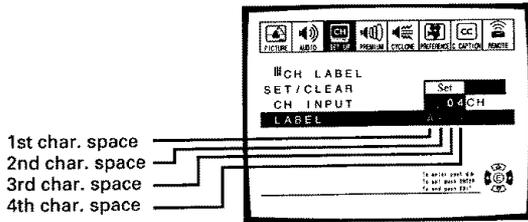
6 Now select a channel you want to label. In this example, press **4** to select Channel 4.



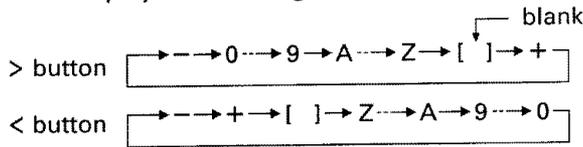
7 Press **v** to highlight **"LABEL"**.

Note: The CH LABEL function does not operate if you subscribe to StarSight.

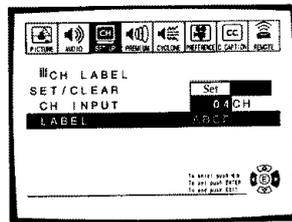
- 8** Now assign the label (in this example, "ABCD") to the channel.
 Press > or < to put a character "A" in the 1st character space.
 Press the button until the character you want appears on the screen.



Letters of alphabet, numbers and other graphic symbols are available for labeling.
 Each time you press the > or < button, the character to be displayed will change in the following order.



- 9** Press **ENTER/TUNE**.
10 Repeat steps 8 and 9 to enter the 2nd, 3rd and 4th characters "B", "C", "D".

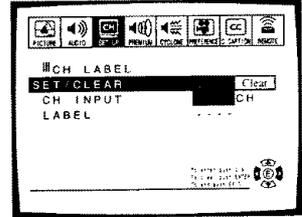


- 11** Repeat steps 6 to 10 for other channels.
 You will be able to assign up to 32 labels.

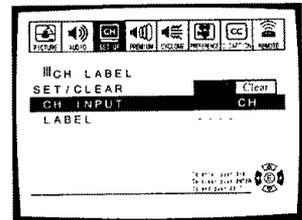
The label will appear when you turn the TV on, select a channel, or press the INFO button.

Erasing channel labels

- 1** Follow steps 1 to 3 on the previous page.
2 Press > or < to highlight "Clear".

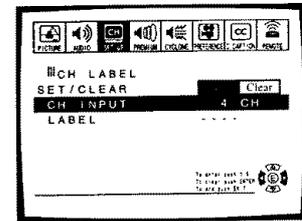


- 3** Press v to highlight "CH INPUT".

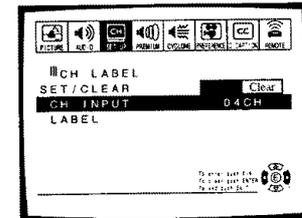


- 4** Select the channel having the label you want to erase.

Example: To erase the label of channel 4.



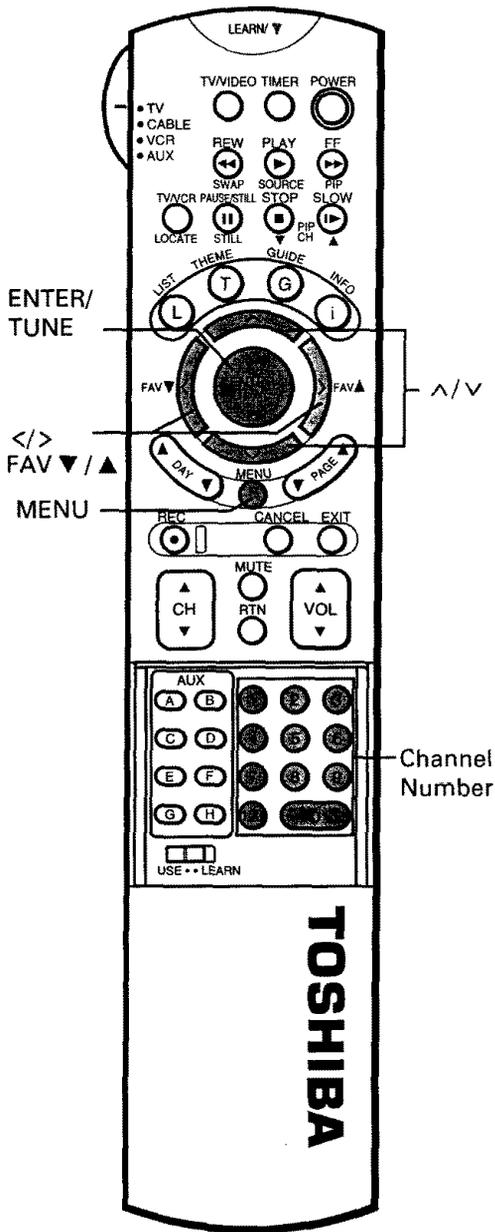
- 5** Press **ENTER/TUNE**.



- 6** Repeat steps 4 and 5 for other channel.

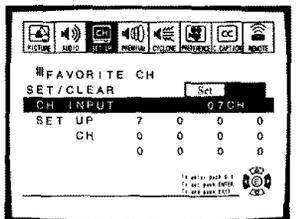
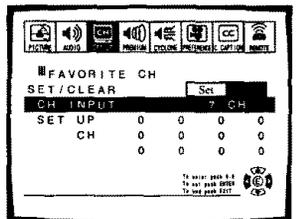
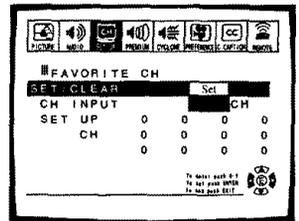
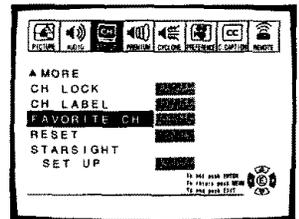
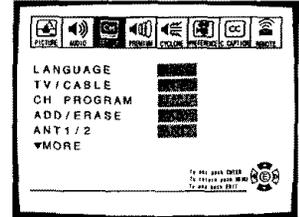
Programming Your Favorite Channels

The Favorite Channel Programming feature allows you to program up to 12 of your favorite channels. Once programmed, you can use the FAV ∇/\blacktriangle buttons on the Remote Control to scan through only your favorite channels, skipping other channels you do not normally view. You can use the CHANNEL \blacktriangle/∇ buttons to scan through all the channels you programmed in the TV's memory.



Programming your favorite channels

- 1 Press **MENU**, then press **>** or **<** until the **SET UP** menu appears.
- 2 Press **^** (or **v**) until "**FAVORITE CH**" is highlighted.
- 3 Press **>** or **<** to display the **FAVORITE CH** menu. "**SET/CLEAR**" will be highlighted.
- 4 Press **>** or **<** to highlight "**Set**".
- 5 Press **v** to highlight "**CH INPUT**".
- 6 Press **Channel Number** buttons (0 - 9, and 100) to enter a channel number.
- 7 Press **ENTER/TUNE**.
- 8 Repeat steps 6 and 7 for other channels.



Note: The FAVORITE CH function does not operate if you subscribe to StarSight.

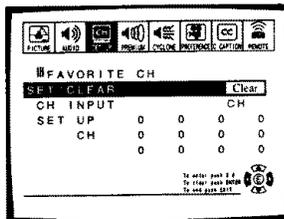
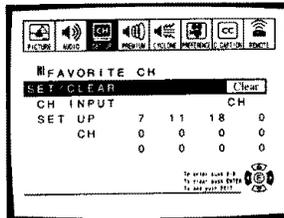
Selecting your favorite channels

To select your favorite channels you have programmed, use the **FAV** **▼/▲** buttons on the Remote Control instead of using the **CHANNEL ▲/▼** buttons.

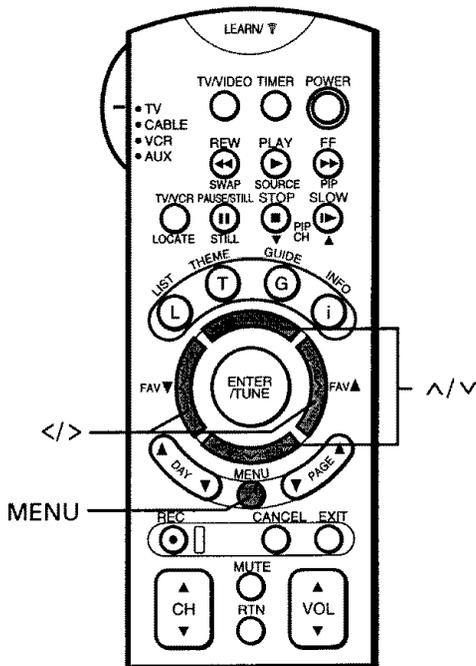
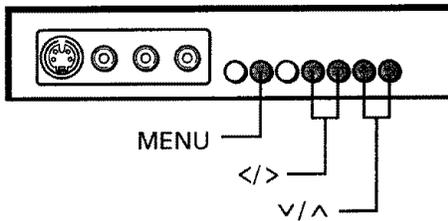
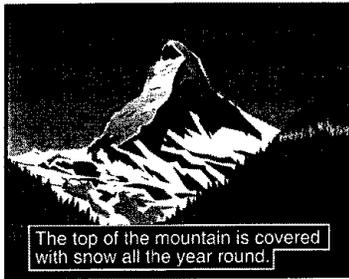
Note: The **FAV ▼/▲** buttons cannot function if you have not programmed your favorite channels.

Clearing your favorite channels

- 1 Follow steps 1 to 3 on the previous page.
- 2 Press **>** or **<** to highlight "Clear".
- 3 Press **ENTER/TUNE**.



Using Closed-Captioned Function



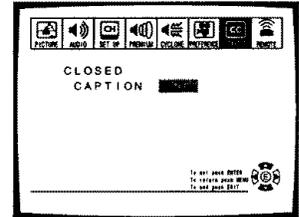
Viewing captions

Closed-captioning is a printed version of the dialogue, narration, and/or sound effects of a TV program.

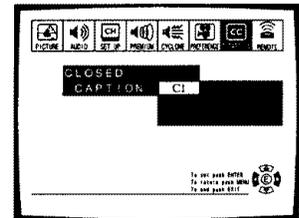
Captions will appear at either the top or bottom of the screen during captioned broadcasts as shown.

Captioning is especially helpful for hearing impaired individuals.

- 1 Select the desired program.
- 2 Press **MENU**, then press **>** or **<** until the **CLOSED CAPTION** menu appears.



- 3 Press **v** (or **^**) to highlight "CLOSED CAPTION".



- 4 Press **>** or **<** to select the caption you want— C 1 (Caption 1), C 2 (Caption 2), C 3 (Caption 3), or C 4 (Caption 3). Select "C 1" for translation of the primary language in your area. Select "C 3" for captioning information usually of secondary languages. "C 2" or "C 4" carries Closed Captioning but not necessarily in the same time frame as the sound from the program.

To deactivate this feature
Select "Off" in step 4 above.

Note:

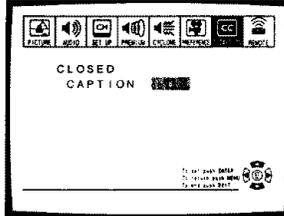
- A closed-captioned signal may not be decoded in the following situations.
- When a video tape has been dubbed.
 - When the signal reception is weak.
 - When the signal reception is non-standard.

Viewing text

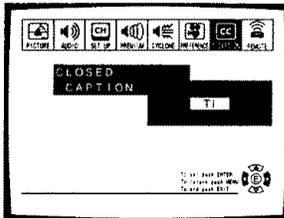
Text is information that is presented using the full television screen. It is usually not related to the program.

For example, it could be a listing of the closed-captioned programs, news, weather information or stock market reports.

- 1 Select the desired program.
- 2 Press **MENU**, then press **>** or **<** until the **CLOSED CAPTION** menu appears.



- 3 Press **∨** (or **∧**) to highlight "CLOSED CAPTION".



- 4 Press **>** or **<** to select the text you want
— T 1 (Text 1), T 2 (Text 2), T 3 (Text 3),
or T 4 (Text 4).

To deactivate this feature

Select "Off" in step 4 above.

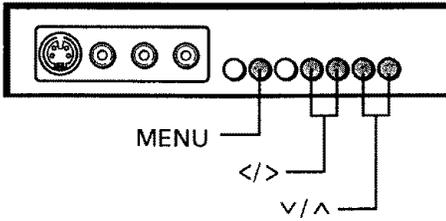
Note: If you select a closed-captioned channel and the text mode, the text screen always appears.

However, text characters are not displayed when no signal is aired.

| WORLD WEATHER | | | |
|---------------|-------|----|---------|
| | Temps | | Current |
| | F | C | Weather |
| LONDON | 51 | 11 | Clear |
| MOSCOW | 57 | 14 | Cloudy |
| PARIS | 53 | 12 | Clear |
| ROME | 66 | 19 | Cloudy |
| TOKYO | 65 | 18 | Rain |

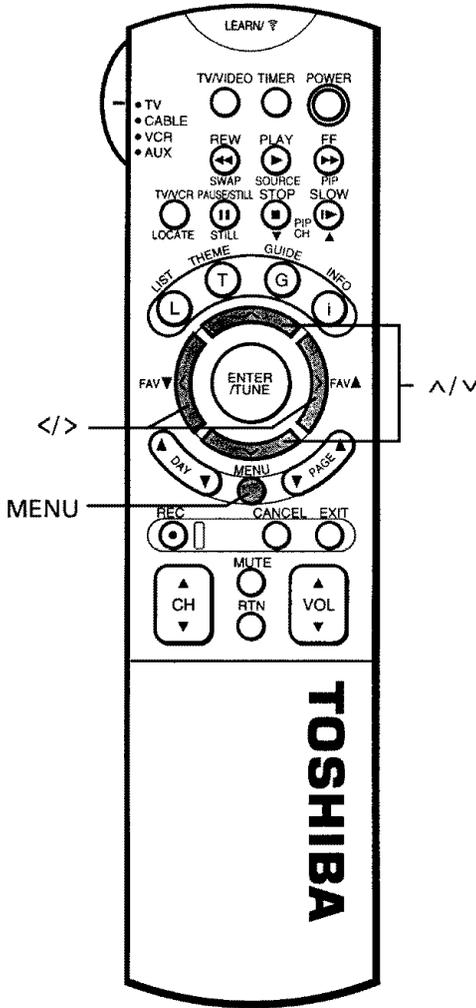
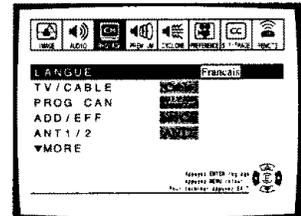
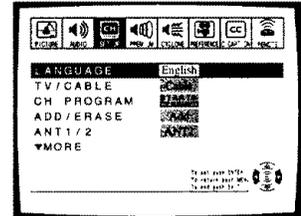
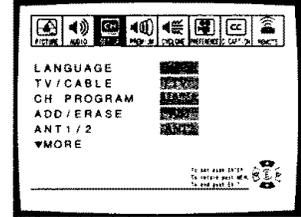
Changing On-Screen Display Language

Three different languages (English, French and Spanish) are available for the on-screen displays (adjustment menus, and messages), and you can choose the desired one.

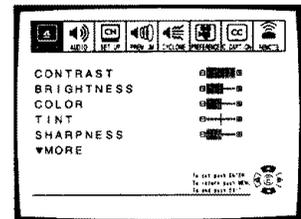


Selecting a language

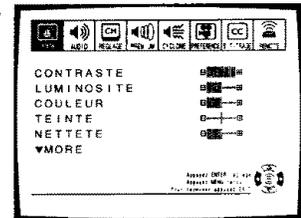
- 1 Press **MENU**, then press **>** or **<** button until the SET UP menu appears.
- 2 Press **v** (or **^**) to highlight "LANGUAGE".
- 3 Press **>** or **<** until the desired language is highlighted.



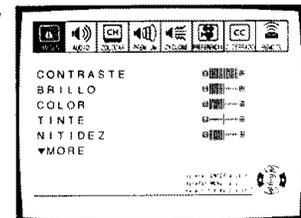
Example: PICTURE menu display "English"



"French"



"Spanish"

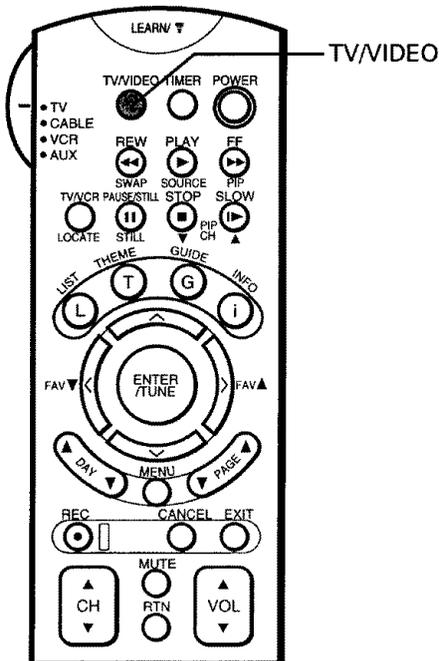
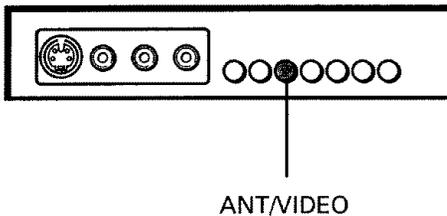
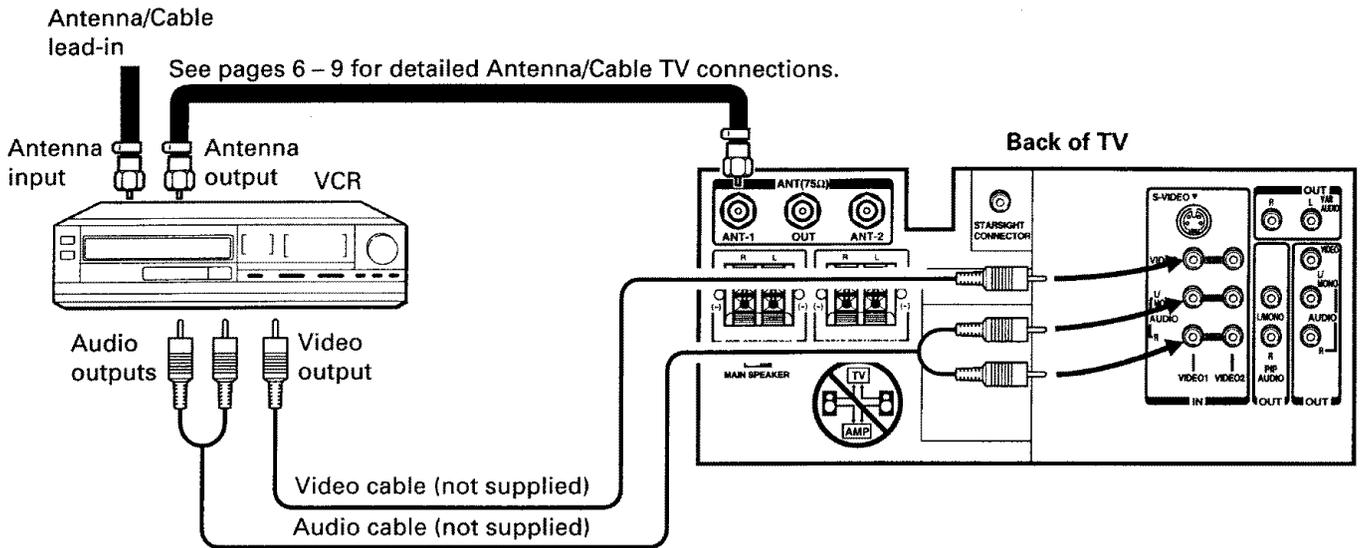


Activating Flesh Tone/Noise Reduction Functions/
Changing On-Screen Display Language

ADVANCED
OPERATION

Connecting a Standard VCR

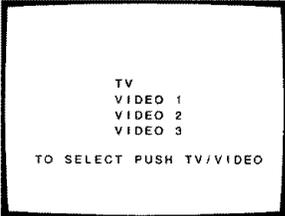
Connect the VIDEO 1 or VIDEO 2 IN jacks on the back of the TV to the video/audio output jacks of an installed VCR, Laser disk player, etc. for playback of video material.



Selecting video input source

To operate your TV and video equipment properly, refer to the instructions supplied with the video equipment.

- 1 Turn the TV and VCR on.
- 2 Press **TV/VIDEO** on the Remote Control (or **ANT/VIDEO** on the TV) to select the appropriate source. Each time you press the button, "TV", "VIDEO 1", "VIDEO 2" or "VIDEO 3" will be selected in order as the source to watch.



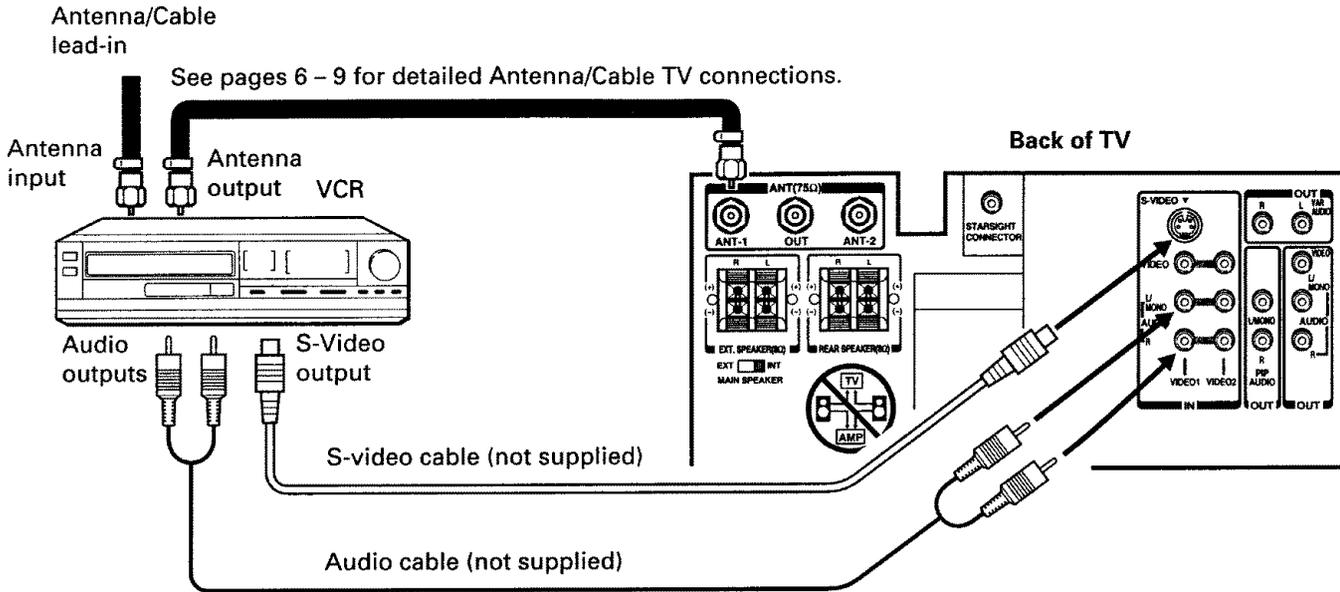
- 3 Operate your VCR normally.

Notes:

- The VIDEO 2 IN jacks can also be used for connecting a second piece of video equipment with video/audio outputs. To view video from equipment connected to the VIDEO 2 IN jacks, select "VIDEO 2".
- If you connect a monaural VCR, connect the audio output of the VCR to the L/MONO jack of the VIDEO 1/2/3 IN jacks on the TV.

Connecting a VCR with an S-Video Jack

If you connect a VCR with an S-video jack to the S-VIDEO jack on the back of the TV, you must also connect the audio cables to the AUDIO jacks of the VIDEO 1 IN jacks on the back of the TV. The S-video cable only carries the video signal. Audio signals are separate.



Selecting video input source

- 1 Turn the TV and VCR on.
- 2 Press **TV/VIDEO** on the Remote Control (or **ANT/VIDEO** on the TV) to select "VIDEO 1".
- 3 Operate your VCR normally.

Notes:

- If you connect a monaural VCR, connect the audio output of the VCR to the L/MONO jack of the VIDEO 1 IN jacks on the TV set.
- When the S-video cable is connected to the S-VIDEO IN jack, the video cable (phono-type) should not be connected.
- The S-VIDEO jack accepts SEPARATED Luminance/Chrominance (Y-C) signals conforming to the NTSC standard.

Connecting a Standard VCR/ Connecting a VCR with an S-Video Jack

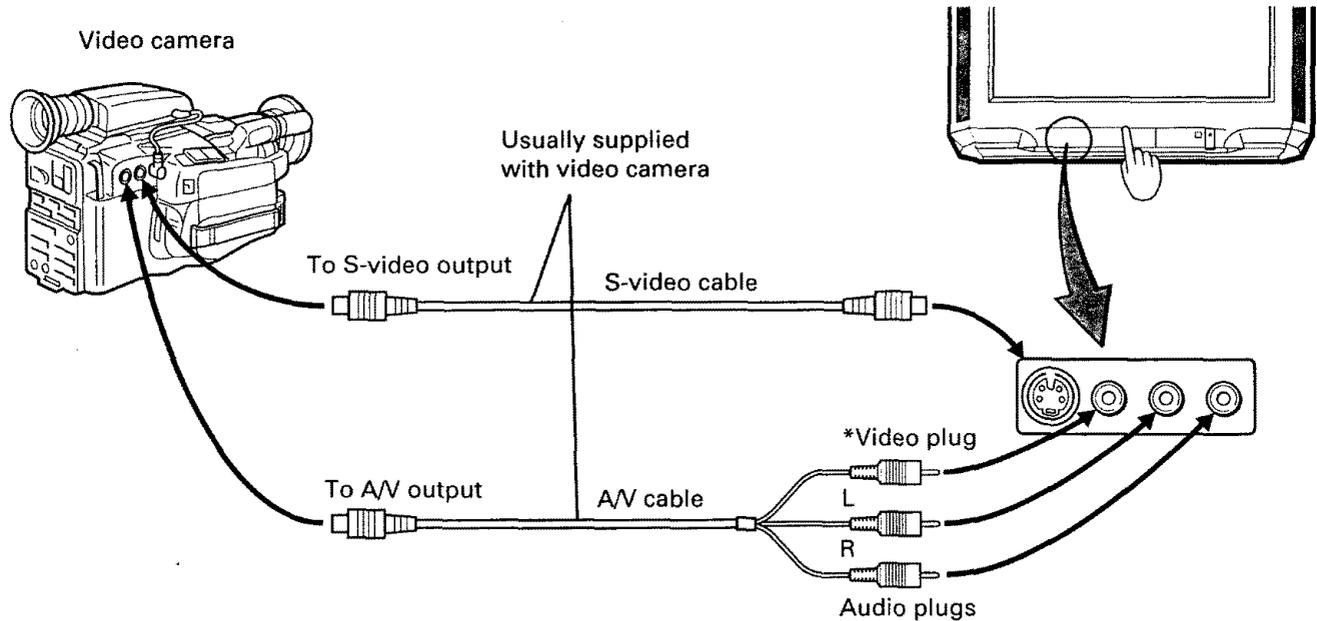
EQUIPMENT CONNECTIONS

Connecting a Video Camera

This connection allows you to play back tapes in the video camera and watch them on the TV.

- If you have a video camera with an S-video jack, connect the S-video cable to the S-VIDEO jack of the VIDEO 3 IN jacks.
- If you have a standard video camera, connect the video cable to the VIDEO jack of the VIDEO 3 IN jacks.

With either video cable connection, connect an audio cable.



Selecting video sources

To operate your TV and video camera properly, refer to the instructions supplied with the connected video camera.

- 1 Turn the TV and the video camera on.
- 2 Press **TV/VIDEO** on the Remote Control (or **ANT/VIDEO** on the TV) to select "VIDEO 3".
- 3 Operate your video camera normally.

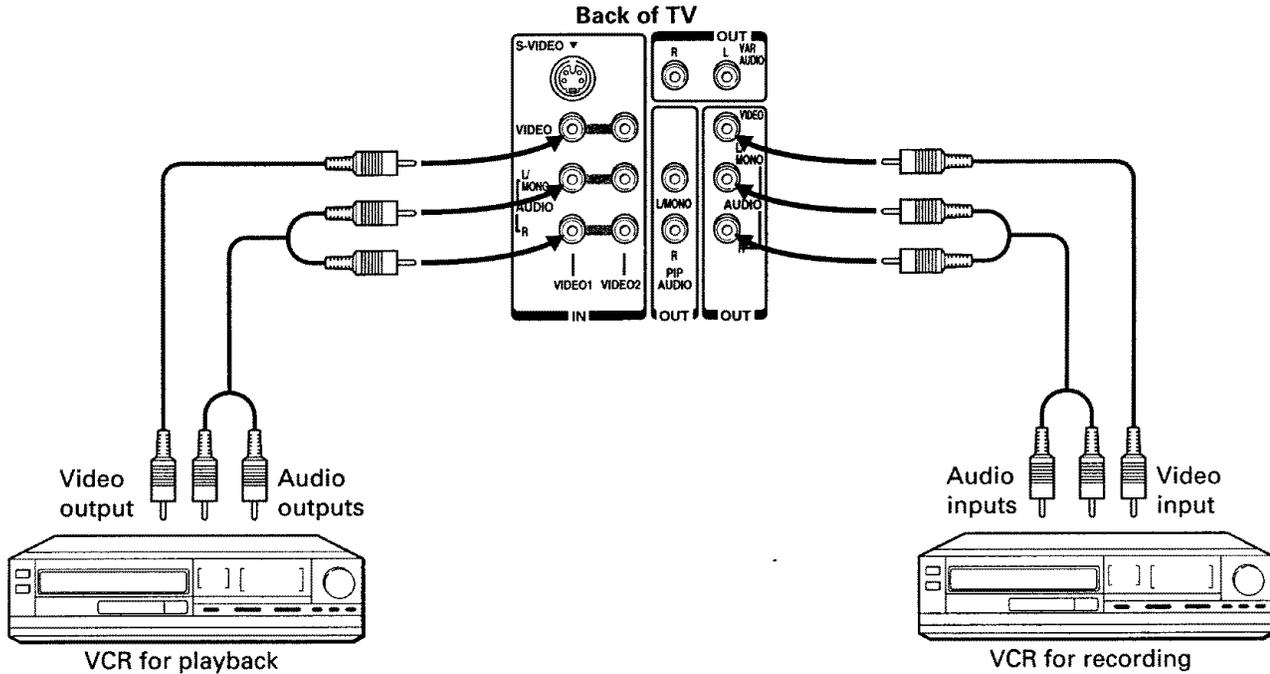
Notes:

- * When the S-video cable is connected to the S-VIDEO IN jack, the video plug should not be connected.
- If you connect a monaural video camera, connect the audio output of the video camera to the L/MONO jack of the VIDEO 3 IN jacks.

Dubbing/Editing Video Tapes Using 2 VCR's

To dub or edit your own video tapes between one VCR and another, connect the VCR that will play to the input jacks (VIDEO 1, VIDEO 2 or VIDEO 3) on the TV. Then connect the output jacks on the back of the TV to the input jacks on the recording VCR.

Note: Do not connect one VCR to the output and input jacks on the back of the TV at the same time.



Monitoring your dubbing/editing

- 1 Turn the TV and both VCR's on.
- 2 Press **TV/VIDEO** on the Remote Control (or **ANT/VIDEO** on the TV) to select "VIDEO 1" (or "VIDEO 2", "VIDEO 3" depending on which input jacks are used for connecting the VCR for playback).
- 3 Set the VCR for recording to record mode and the VCR for playback to playback mode.
- 4 You can view the video tape from the VCR for playback on the TV screen while dubbing it with the VCR for recording.

CAUTION:

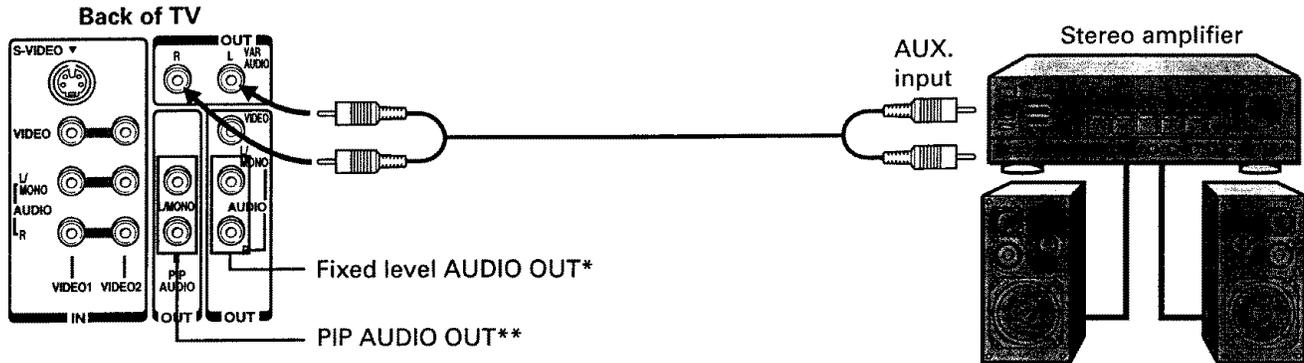
The unauthorized recording of television programs, video tapes and other materials may infringe upon the provisions of the copyright laws.

Notes:

- The input switch of VCR is normally in the TV position. Change the input switch of recording VCR to the external input position such as LINE or CAMERA when using the video/audio inputs of the VCR as above. Some VCR's automatically switch when the cables are plugged into the video/audio inputs.
- The PIP picture cannot be output from the VIDEO OUT jack.

Connecting an Audio Amplifier

Connect the VAR (variable) AUDIO OUT jacks to the auxiliary input jacks on a stereo amplifier. You can control the audio level using the TV's Remote Control.



Notes:

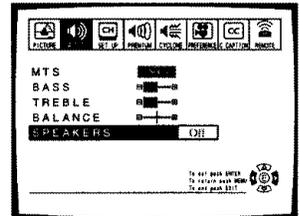
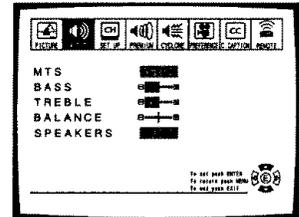
- * The "fixed level" audio signal through the AUDIO jacks of output jacks is also ideal for connecting an audio cassette recorder (or amplifier) to record sound from the TV. This constant audio signal is not affected by pressing the VOLUME ▼/▲ buttons on the TV or the TV's Remote Control.
- **The "fixed level" audio signal through the PIP AUDIO OUT jacks is ideal for connecting wireless headphones, an audio cassette recorder, or amplifier to receive the sound of the program displayed on the PIP window screen.

Preparing for use

- 1 Turn the TV and the stereo amplifier on.
- 2 Adjust the VOLUME ▼/▲ buttons on the TV for a moderate listening level.
- 3 Disconnect the built-in speakers following the instructions to the right.
- 4 Adjust the volume control on the stereo amplifier for a moderate listening level.
- 5 Control of the sound can now be done using the VOLUME ▼/▲ and MUTE buttons on the TV's Remote Control, and using the AUDIO menu.

Disconnecting the built-in speakers

- 1 Press **MENU**, then press > or < until the **AUDIO** menu appears.
- 2 Press ▼ or ▲ until **"SPEAKERS"** is highlighted.
- 3 Press > or < to highlight **"Off"**.



To use the built-in speakers again

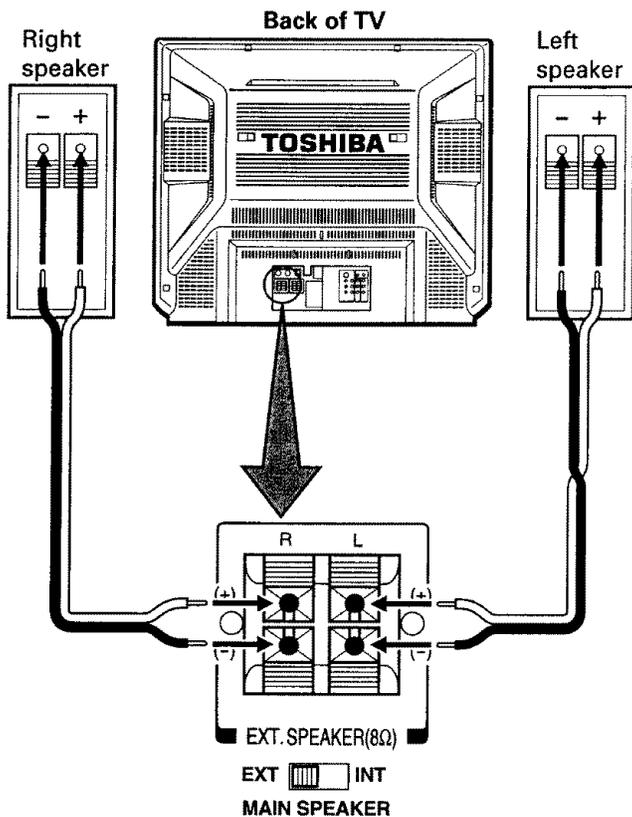
Select "On" in step 3 above.

Note: The CYCLONE woofer is not affected by this "SPEAKERS" setting in the AUDIO menu. If necessary, deactivate the CYCLONE. See page 48.

Connecting External Speakers

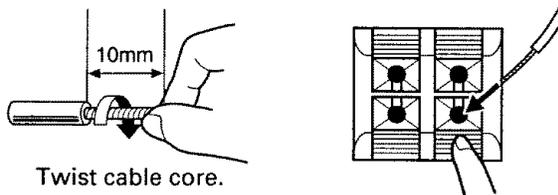
You can connect separate speakers to the EXT. (external) SPEAKER terminals on the back of the TV to enhance sound from the TV.

Before connecting the speakers, turn the TV off.



Preparing for use

- 1 Connect the speaker cables. While depressing the clamp, insert the cable core. Then, release the clamp. Match the right and left channels and +/- polarities of the TV speaker terminals and external speakers.

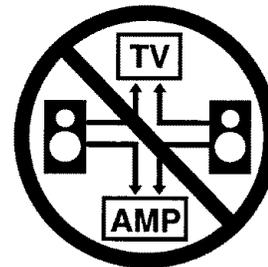


- 2 Set the **MAIN SPEAKER** switch to the "EXT" position. The built-in TV speakers are disconnected.



CAUTIONS:

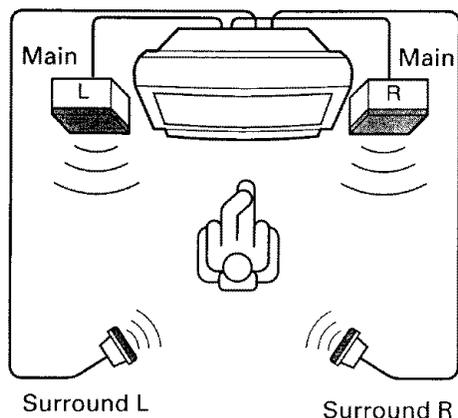
- Do not connect external speakers to more than one audio source at a time. You will damage your equipment if you connect the same speaker system to both the TV and amplifier.
- Use only external speakers with an impedance rating of 8 ohms and input power of 10 W or greater.



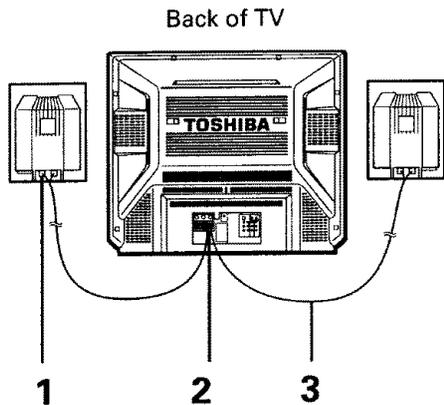
Note: The CYCLONE woofer is not affected by the MAIN SPEAKER switch. If necessary, deactivate the CYCLONE. See page 48.

Speaker positioning

To enjoy the sound of the 4-channel surround, locate the external (main) speakers and surround speakers. See page 45 for details on using the surround feature.

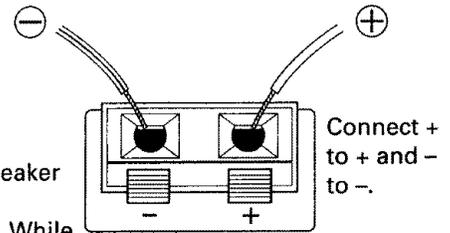


Connecting External Speakers (Continued)



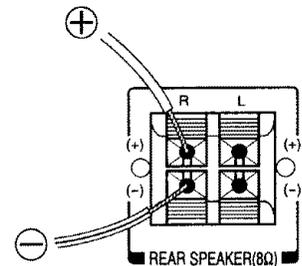
Setting up the surround speakers

- 1 Connect one end of the speaker cable to the terminals on a surround speaker.
- 2 Connect the other end of the speaker cable to the "REAR SPEAKER" terminals on the back of the TV. While depressing the clamp, insert the cable. Then, release the clamp.
- 3 Connect another surround speaker following steps 1 and 2 above.



CAUTION:

Use only surround speakers with an impedance rating of 8 ohms and input power of 5 W or greater.

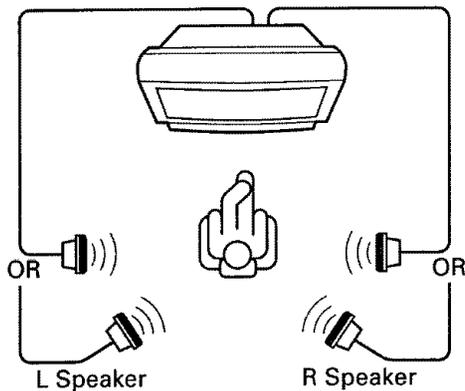


Mounting position

To enjoy the sound of the 4-channel surround, you must mount surround speakers to the left and right, on a shelf or on a wall behind your normal viewing position. See page 45 for details on using the surround feature.

Note: You can get the best surround performance when you install surround speakers slightly above your viewing position while watching TV.

CAUTIONS: If the surround speakers are mounted on a wall, Care should be taken when choosing speaker mounting hardware to insure compatibility with the material of the wall. Do not use mounting hardware with thin and/or soft wall materials, as surround speakers may fall and cause personal injury or be damaged.



Cleaning and Care

WARNING: TV sets use High Voltage. Do not try to remove the cabinet back. Refer servicing to qualified service personnel.

■ To clean the TV screen:

1. First remove the plug from the power outlet to avoid possible shock hazard.
2. Use a clean cellulose sponge or chamois cloth dampened with a solution of mild detergent and warm water to clean TV screen and trim. Do not use too much water on the TV screen. Water spills into the cabinet and may cause damage to the TV. Avoid excess water.
3. Remove any extra moisture with the same cloth or a dry one.

- To maintain the finish and appearance of the cabinet, polish it from time to time with a quality furniture polish.

Caution: Never use strong solvents such as thinner, benzene or other chemicals on or near cabinet, as they might damage the finish of the cabinet.

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: | 120V AC, 60Hz |
| POWER CONSUMPTION: | CN35F90: 137W (average) CN35F95: 137W (average) |
| AUDIO POWER: | Main; 10W + 10W Sub-woofer; 13W Rear; 5W + 5W |
| SPEAKER TYPE: | Main; Two 3 x 5 inches (80 x 120mm) oval Sub-woofer; One 4 inches (100mm) round |
| VIDEO/AUDIO TERMINALS: | S-VIDEO IN (VIDEO 1/VIDEO 3) jacks Y-INPUT: 1V(p-p), 75 ohm, negative sync. C-INPUT: 0.286V(p-p) (burst signal), 75 ohm VIDEO 1/VIDEO 2/VIDEO 3 IN jacks VIDEO: 1V(p-p), 75 ohm, negative sync. AUDIO: 150mV(rms) (30% modulation equivalent, 47k ohm) VIDEO/AUDIO OUT jacks VIDEO: 1V(p-p), 75 ohm, negative sync. AUDIO: 150mV(rms) (30% modulation equivalent, 4.7k ohm) VAR (variable): AUDIO OUT jacks 0-350mV(rms) (30% modulation equivalent, 4.7k ohm) PIP AUDIO OUT jacks 150mV(rms) (30% modulation equivalent, 4.7k ohm) EXT. (external) SPEAKER terminals Accept speakers of impedance 8 ohm, input power 10W or greater REAR SPEAKER terminals Accept speakers of impedance 8 ohm, input power 5W or greater |
| DIMENSIONS: | CN35F90; Width 36-39/64 inches (930mm) Height 30-47/64 inches (781mm) Depth 25-19/32 inches (650mm) CN35F95; Width 35-1/2 inches (901mm) Height 49-13/32 inches (1255mm) Depth 26-1/2 inches (674mm) |
| MASS: | CN35F90; 175.7lbs (79.7kg) CN35F95; 293lbs (132.9kg) |
| OPTIONAL TV STAND: | CN35F90; ST3504 |

Design and specifications are subject to change without notice.

Before Calling Service Personnel

Before calling service personnel, please check the following chart for a possible cause of the problem you are experiencing. A minor adjustment on your part may eliminate the problem and restore your TV reception.

| Symptoms | Check | Adjustments |
|--|--|---|
| <ul style="list-style-type: none"> No picture, no sound | <ul style="list-style-type: none"> Be sure power cord is plugged in. May be station trouble. Check antenna connections. Check antenna for broken wires. | <ul style="list-style-type: none"> Press POWER. Try another channel. |
| <ul style="list-style-type: none"> No sound, picture OK | <ul style="list-style-type: none"> May be station trouble. Check if "SPEAKERS" in AUDIO menu (page 66) or MAIN SPEAKER switch (page 67) is properly set. | <ul style="list-style-type: none"> Try another channel. Adjust VOLUME. |
| <ul style="list-style-type: none"> Poor sound, picture OK | <ul style="list-style-type: none"> May be station trouble. Check antenna connections. May be local interference from appliance. Check if "SPEAKERS" in AUDIO menu (page 66) or MAIN SPEAKER switch (page 67) is properly set. | <ul style="list-style-type: none"> Try another channel. Adjust VOLUME. Adjust BASS, TREBLE, or BALANCE. Re-orient antenna. |
| <ul style="list-style-type: none"> Poor picture, sound OK Snowy picture Lines in picture Distorted picture Weak picture | <ul style="list-style-type: none"> May be local interference from appliance. Check antenna connections. Check antenna for broken wires. May be station trouble. | <ul style="list-style-type: none"> Try another channel. Adjust BRIGHTNESS. Adjust CONTRAST. Adjust SHARPNESS. Re-orient antenna. |
| <ul style="list-style-type: none"> Poor reception of broadcast channels | <ul style="list-style-type: none"> Check antenna connections. Check antenna for broken wires. If VCR is connected, check TV/VCR switch. | <ul style="list-style-type: none"> Try another channel. Re-orient antenna. |
| <ul style="list-style-type: none"> No UHF, VHF OK | <ul style="list-style-type: none"> Be sure TV/CABLE function (page 37) is in "TV" mode. | |
| <ul style="list-style-type: none"> Unable to select a certain channel | <ul style="list-style-type: none"> That channel may be locked out with CH LOCK function (page 52), or erased with the ADD/ERASE function (page 38). | |
| <ul style="list-style-type: none"> Multiple images (ghosts) | <ul style="list-style-type: none"> May be station trouble. Check antenna connections. | <ul style="list-style-type: none"> Try another channel. Re-orient antenna. |
| <ul style="list-style-type: none"> Poor color or No color | <ul style="list-style-type: none"> May be station trouble. Check antenna connections. Check antenna for broken wires. May be local interference from appliance. Check if station is broadcasting in color. If you change the direction of the TV while the TV is activated, the picture may suffer from color shading. If so, turn off the TV and allow to cool for about 30 minutes, then turn on the TV again. The picture should improve. | <ul style="list-style-type: none"> Try another channel. Re-orient antenna. Adjust TINT. Adjust COLOR. |
| <ul style="list-style-type: none"> No stereo or SAP sound from a known MTS broadcast | <ul style="list-style-type: none"> Check if MTS function (page 44) is properly set. | |
| <ul style="list-style-type: none"> Remote Control does not work | <ul style="list-style-type: none"> Check if TV/CABLE/VCR/AUX switch is properly set. Be sure power cord is plugged in. Check battery in Remote Control. | <ul style="list-style-type: none"> Replace batteries. |

For questions regarding StarSight setup, see page 21.

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 a defective product or part, without charge to you. "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 authorized TACP/THI 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 replace a defective 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.

Owner's Manual and Registration Card

You should read this owner's manual thoroughly before operating this product. You should also insure that your name and address are on file as owner of a TACP/THI product by completing and mailing the enclosed registration 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 card will not affect your rights under this warranty so long as you retain other proof of purchase such as a bill of sale.

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.**
- (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 altered or modified without authorization of TACP/THI or to damage to products or parts thereof which have had the serial number removed, altered, defaced or rendered illegible.

Step-By-Step Procedures – How to Obtain Warranty Service

If, after following all of the operating instructions in this manual and checking the section "BEFORE CALLING SERVICE PERSONNEL", you find that service is needed;

- (1) Contact one of the TACP/THI Service Centers listed below for warranty service or call the TACP toll free number **800-631-3811** within thirty (30) days after you find a defective product or part to find the nearest TOSHIBA Authorized Service Station or any authorized TOSHIBA dealer.
- (2) Please 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 authorized TACP/THI service station for repair and returned to your home at no cost to you."
- (3) If you have any question about service, please contact one of the following TACP/THI Service Centers:

IN THE CONTINENTAL UNITED STATES
Should your unit require service, Call



| NORTHEAST | MIDWEST | WEST | SOUTHWEST | SOUTHEAST | HAWAII |
|---|---|--|--|--|--|
| 82 Totowa Road, Wayne, New Jersey 07470 | 1010 Johnson Drive, Buffalo Grove, Ill 60089-6900 | 5490 E. Francis St., Ontario, California 91761 | 1421 Champion Drive Suite 304, Carrollton, Texas 75006 | 6115 Jimmy Carter Blvd., Suite C2, Norcross, Georgia 30071-4607 | 327 Kamakee Street, Honolulu, Hawaii 96814 |

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 product or 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 statute, 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.

TOSHIBA AMERICA CONSUMER PRODUCTS, INC.

HEAD OFFICE/82 TOTOWA ROAD, WAYNE, NEW JERSEY 07470

FACTORY SERVICE CENTERS/NORTHEAST: 82 TOTOWA ROAD, WAYNE, NEW JERSEY 07470

MIDWEST: 1010 JOHNSON DRIVE, BUFFALO GROVE, ILLINOIS 60089-6900

WEST: 5490 E. FRANCIS ST., ONTARIO, CA 91761

SOUTHWEST: 1421 CHAMPION DRIVE, SUITE 304 CARROLLTON, TEXAS 75006

SOUTHEAST: 6115 JIMMY CARTER BLVD., SUITE C2, NORCROSS, GA 30071-4607

TOSHIBA HAWAII, INC.

HEAD OFFICE/327 KAMAKEE STREET, HONOLULU, HAWAII 96814, U.S.A.

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) 332-6860

VANCOUVER: 3870 JACOMBS ROAD, RICHMOND, B.C., V6V 1Y6, CANADA TEL: (604) 270-8481

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