

SAFETY PRECAUTIONS

WARNING

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



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 NOTTRY TO SERVICE THIS PRODUCT YOURSELF.



The exclamation mark 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.

PRECAUCIONES

PARA EVITAR DESCARGAS ELÉCTRICAS, NO UTILICE ESTE ENCHUFE POLARIZADO CON UN RECEPTÁCULO DE CABLE DE EXTENSIÓN U OTRA TOMA SALVO QUE LA CLAVIJA ESTÉ COMPLETAMENTE INSERTADA EN LA TOMA PARA EVITAR CUALQUIER EXPOSICIÓN DE LOS VÁSTAGOS DEL ENCHUFE POLARIZADO.

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.

ADVERTENCIA

Para evitar daños personales:

- No se ponga de pie en el TV ni suba a él.
- No coloque el vídeo (p. ej. VCR) ni otro objeto pesado en la parte superior del TV.

Avoid displaying stationary images on your TV screen for extended periods of time. Stationary patterns generated by a picture-in-picture (PIP) display, computer displays, video games, stock market reports, etc., can become permanently engrained on the picture tube. This damage is not protected by your warranty because it is the result of misuse. If you wish to use your TV to display still images, reduce brightness and contrast settings. Never leave a PIP, computer, or video game display unattended.

This TV set may be used with the Toshiba stand listed on page 28. Use with other stands may result in instability, causing possible injury.

Note to CATV system installers in the USA

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

IMPORTANT SAFETY INSTRUCTIONS

INSTRUCCIONES DE SEGURIDAD

CAUTION

PLEASE READ AND OBSERVE ALL WARNINGS AND INSTRUCTIONS CONTAINED IN THIS SECTION AND THOSE ON YOUR TV SET.

RETAIN THIS SECTION FOR REFERENCE.

PRECAUCIÓN

LEA Y TENGA EN CUENTA TODAS LAS ADVERTENCIAS E INSTRUCCIONES QUE SE ENCUENTRAN EN ESTE PANFLETO Y LAS DE LOS APARATOS DE TELEVISIÓN.

MANTENGA ESTE PANFLETO PARA FUTURAS REFERENCIAS.

Electrical energy can perform many useful functions. This TV set has been engineered and manufactured to assure your personal safety. However, improper use can result in potential electrical shock or fire hazards. In order not to defeat the safeguards incorporated in this TV set, observe the following basic rules for antenna/TV installation, use and servicing.

Do not remove the cabinet cover. This may expose you to dangerous voltages. Refer all servicing to qualified service personnel.

La energía eléctrica puede realizar funciones muy útiles. Este televisor ha sido diseñado y fabricado para asegurar su seguridad personal. Sin embargo, la utilización inadecuada del mismo puede resultar en descargas eléctricas o en el riesgo de incendios. Para no anular las protecciones incotporadas en este televisor, tenga en cuenta las reglas básicas de instalación de la antena/televisor, y en caso de proplemas póngase en contacto con un centro de reparaciones.

No extraiga de la cubierta de la caja. Esto podría dejarle expuesto a tensiones peligrosas. En caso de averia, consulte los servicios de personal cualificado.

INSTALLATION / INSTALACIÓN

Power Sources — The TV set should be operated only from the type of power source indicated on the TV set or as indicated in the Owner's Manual. If you are not sure of the type of power supply in your home, consult your sales person or your local power company. For TV sets designed to operate from battery power, refer to the operating instructions.

Fuentes de alimentación — Este televisor solamente deberá alimentarse con la fuente de alimentación indicada en la etiqueta de características. Si no está seguro del tipo de fuente de alimentación de su hogar, consulte al proveedor de su televisor o a la compañia eléctrica local. Para productos destinados a alimentarse con pilas, u otras fuentes, consulte las instrucciones de operación.

Grounding or Polarization — The TV set is equipped with one of the following type plugs. If the plug should fail to fit the power outlet, contact your electrician to replace your obsolete outlet. DO NOT defeat the safety purpose of the type plug on the TV set.

Puesta a tierra o polarización — Este televisor puede poseer un enchufe de los tipos siguinetes. Si el enchufe no entra en la toma de la red, póngase en contacto con un electricista para que le cambie la toma anticuada. NO anule el fin de seguirdad de sete tipo de enchufe del televisor.

A polarized alternating current line plug — having one blade wider than the other. This plug will fit into the power outlet only one way. If you are unable to insert the plug into the outlet, try reversing the plug.

Un enchufe de linea de corriente alterna polarizado — posee una cuchilla más ancha que la otra. Este enchufe entrará en la toma de la red de una sola forma. Si no puede inertar el enchufe en la toma de la red, trate de invertirlo.

Alternate Warnings — A three-wire grounding-type plug — a plug having a third (grounding) pin. This plug will only fit into grounding-type power outlet.

Advertencias alternativas — Enchufe de tippo puesta a tierra de tres conductores — enchufe que posee un tercer terminal (de puesta a tierra). Este enchufe solamente encajará en una toma de la red de tipo puesta a tierra.

Water and Moisture — Do not use the TV set near water — for example, near a bath tub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool; and the like.

Agua y humedad — No utilice el televisor cerca del agua — por ejemplo, cerca de una bañera, un lavabo, un fregadero, una lavadora, en un sótano húmedo, cerca de una piscina, ni lugares por el estilo.

Ventilation — The slots and openings in the cabinet and in the back or bottom are provided for necessary ventilation. Never block or cover these slots and openings to ensure reliable operation of the TV set and to protect it from overheating.

Ventilación — Las ranuras y aberturas de la caja y de la parte posterior o de la base son para proporcionar la ventilación necesaria. Para asegurar la operación fiable del televisor para protegerlo contra el recalentamiento. No bloquee ni cubra nunca estas ranuras y aberturas.

- a. Never cover the slots and openings with a cloth or other materials.
- a. No cubra nunca las ranuras ni las aberturas con paños ni otros materiales.
- b. Never block the slots and openings by placing the TV set on a bed, sofa, rug or other similar surface.
- No bloquee nunca las ranuras ni las aberturas colocando el televisor sobre una cama, un sofá, una alfombra, ni demás superficies similares.
- c. Never place the TV set in a confined space such as a bookcase, builtin cabinet, or any other place of poor ventilation.
- c. No coloque nunca el televisor en un espacio cubierto, como una librería o un estante empotrados, nien un lugar de mala ventilación.

Heat — Do not place the TV set near or over a radiator or heat register, or where it is exposed to direct sunlight.

Calor — No coloque el televisor cerca ni sobre un radiador ni un registro de calor, ni expuesto a la luz solar directa.

Power-Cord Protection — Do not allow anything to test on or roll over the power cord, and do not place the TV set where the power cord is subject to wear or abuse.

Protección del cable de alimentación — No coloque ni pase sobre el cable de alimentación, ni coloque el telivisor donde su cable de alimentación pueda sufir cualquier tipo de daños.

Accessories — Do not place the TV set on an unstable cart, stand, tripod, bracket, or table. The TV set may fall, causing serious injury to a child or adult, and serious damage to the TV set. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the TV set, and should use a mounting accessory recommended by the manufacturer.

Accesorios — No coloque el televisor sobre un carrito, una base, un trípode, un soporte ni una mesea inestable. El televisor podría caerse, causando serios daños a niños o adultos, o al propio televisor. Utilice solamente el carrito, la base, el trípode, el soporte, o la mesa que recomiende el fabricante, o que se venda con el televisor, y utilice un accesorio de montaje recomendado por el fabricante.

A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.

La combinación de un producto y un carrito deberá moverse con cuidado. Las paradas repentinas, la fuerza excesiva, y las superficies desiguales pondrían hacer que volcase la combinación del carrito y del producto.



USE / UTILIZACIÓN

Overloading — Do not overload wall outlets, extension cords or convenience receptacles beyond their capacity, since this can result in fire or electric shock.

Sobrecarga — No sobrecargue las tomas de la red, los cables prolongadores, ni los adaptadores para múltiples tomas, ya que esto supondría el riesgo de incendios o de descargas eléctricas.

During lightning storms, or when the TV set will be left unattended and unused for a long period of time, unplug the power cord from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the TV set due to lightning and power-line surges.

Durante tormentas eléctricas, o cuando no vaya a utilizar el televisor durante mucho tiempo, desenchufe el cable de alimentación de la toma de la red y desconecte la antena o el sistema de cablevisión. Esto evitará que se dañe el televisor debido a rayos y a sobretensiones repentinas en la red.

Object and Liquid Entry — Never push objects of any kind into the TV set through the cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the TV set.

Entrada de objetos y líquidos — No introduzca nunca objetos de ningún tipo en este televisor a través de las aberturas, ya que podrían tocar puntos de tensión peligrosa o cortocircuitar piezas, lo que podría resultar en incendio o descarga eléctrica. No vierta nunca liquidos de ningún tipo sobre este televisor.

Cleaning — Unplug the TV set from the wall outlet before cleaning or polishing it. Do not use liquid cleaners or aerosol cleaners. Use a cloth lightly dampened with water for cleaning the exterior of the TV set.

Limpieza — Desenchufe el televisor de la toma de la red antes de limpiarlo. No utilice limpiadores líquidos ni aerosoles. Para limpiar el exterior del televisor, utilice un paño ligeramente humedecido en agua.

Attachments — Never add accessories that have not been specifically designed for the TV set. Never remodel the TV set by yourself as this can result in a fire hazard or electric shock.

Aditamentos — No utilice aditamentos no recomendados por el fabricante del televisor, ya que podrían suponer un peligro. No remodele nunca el televisor usted mismo, ya que esto podría causar el riesgo de incendios o descargas eléctricas.

If a snapping or popping sound from a TV set is heard continuously or frequently while the TV set is operated, unplug the TV set and consult your dealer or service technician. It is normal for some TV sets to make occasional snapping or popping sounds, particularly when being turned on or off.

Si se oye un sonido seco de un televisor continuo o frecuente mientras el televisor esté funcionando, desenchúfelo y consulte a su proveedor o a un técnico de servicio. Es normal que algunos televisores produzcan sonidos secos, particularmente cuando conecte o desconecte su alimentación.

SERVICE / SERVICIO DE REPARACIÓN

Damage Requiring Service — Unplug the TV set from the wall outlet and refer servicing to qualified service personnel under the following conditions:

Daños que requieren el servicio de reparación — En los casos siguientes, desenchufe el televisor de la toma de la red y solicite los servicios de personal de reparación especializado:

- a. When the power cord or plug is damaged or frayed.
- a. Cuando se haya dañado el cable de alimentación o el enchufe.
- b. When liquid has been spilled into the TV set.
- b. Cuando se haya vertido líquido dentro del televisor.
- c. When the TV set has been exposed to rain or water.
- c. Cuando el televisor haya estado expuesto a la lluvia o al agua.
- d. When the TV set has been subject to excessive shock by being dropped, or the cabinet has been damaged.
- d. Cuando el televisor haya estado expuesto a golpes excesivos o haya caído, o su caja se haya dañado.
- e. When the TV set does not operate normally even though you follow the operating instructions. Adjust only those controls that are specified in the operating instructions. Improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the TV set to normal operation.

When the TV set exhibits a distinct change in performance. This indicates a need for service.

e. Cuando el televisor no funcione normalmente incluso al seguir las instrucciones de operación. Ajuste solamente los controles indicados en las instrucciones de operación, ya que un ajuste inadecuado de otros controles podría resultar en daños y a menudo requetirán un trabajo difícil por un técnico cualificado para devolver el televisor a su funcionamiento normal.

Cuando el funcionamiento del televisor haya cambiado notablemente — esto indica la necesidad del servicio de reparación.

Servicing — Do not attempt to service the TV set yourself. To open or remove the covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

Reparación — No intente nunca reparar el televisor por sí mismo. La apertura o extracción de cubiertas podría exponerle a tensiones peligrosas u otros peligros. En caso de avería solicite los servicios de personal de reparación cualificado.

Replacement Parts — When replacement parts are required, be sure the service technician certifies in writing that he has used replacement parts specified by the manufacturer that have the same characteristics as the original parts. Unauthorized substitutions may result in fire, electric shock, or other hazards.

Reemplazo de piezas — Cuando sea necesario reemplazar piezas, cerciórese de que el técnico de reparación utilice las piezas de reemplazo especificadas por el fabricante u otras que posean las mismas características que las originales. Las substituciones no autorizadas podrían resultar en incendios, descargas eléctricas, u otros peligros.

Safety Check — Upon completion of any service or repairs to the TV set, ask the service technician to perform routine safety checks (as specified by the manufacturer) to determine that the TV set is in safe operating condition, and to so certify.

Comprobación de seguridad — Al finalizar cualquier reparación de este televisor, solicite al técnico de reparación que realice las comprobaciones de sguridad (especificadas por el fabricante) para determinar y certificar si el producto se encuentra en las condiciones de operación apropiadas.

When the TV set reaches the end of its useful life, improper disposal could result in a picture tube implosion. Ask a qualified service technician to dispose of the TV set.

Cuando el televisor llegue al final de su vida útil, si se deshace de él de forma inapropiada, el tubo de imagen puede explotar. Cuando desee deshacerse de un televisor, solicite este servicio a un técnico de reparación especializado.

ANTENNA / ANTENA

Outdoor Antenna Grounding — If an outdoor antenna is installed, follow the precautions below.

An outdoor antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can come in contact with such power lines or circuits.

WHEN INSTALLING AN OUTDOOR ANTENNA SYSTEM, EXTREME CARE SHOULD BE TAKEN TO KEEP FROM CONTACTING SUCH POWER LINES OR CIRCUITS AS CONTACT WITH THEM IS ALMOST INVARIABLY FATAL.

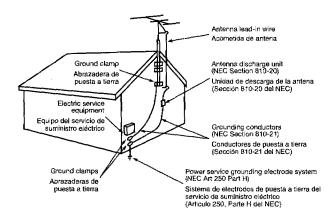
Be sure the antenna system is grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code in the USA and Section 54 of the Canadian Electrical Code in Canada provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

Puesta a tierra de la antena exterior — Cuando instale una antena exterior, tenga en cuenta las precauciones siguientes.

Un sistema de antena esterior no deberá colocarse cerca de líneas de alta tensión ni otros circuitos de iluminación o alimentación, ni donde pueda entrar en contacto con tales líneas o circuitos.

CUANDO INSTALE UN SISTEMA DE ANTENA EXTERIOR, TENGA EXTREMADO CUIDADO PARA EVITAR QUE ENTRE EN CONTACTO CON TALES LÍNEAS DE ALIMENTACIÓN O CIRCUITOS, YA QUE TAL CONTACTO PODRÍA RESULTAR INVARIABLEMENTE FATAL.

Cerciórese de que el sistema de antena esté puesto a tierra a fin de que proporcione cierta protección contra sobretensiones y cargas estáticas. La Sección 810 del Código Eléctrico Nacional (NEC) de EE.UU. y la Sección 54 del Código Eléctrico Canadiense ofrecen informacón con respecto a la puesta a tierra adecuada de una unidad de descarga de antena, el tamaño de los conductores de puesta a tierra, la ubicación de la unidad de descarga de la antena, la conexión de los electrodos de puesta a tierra, y los requisitos de tales electrodos.



Welcome to Toshiba	1
Exploring your new TV	1
Selecting a location for the TV	1
Connecting your TV	
Connecting a VCR	
Connecting a cable converter box	
Connecting a cable converter box and a VCR	
Connecting a DVD/satellite receiver and a VCR	
Connecting a DVD with ColorStream TM and a VCR	
Connecting two VCRs	
Connecting a camcorder	
Connecting an audio amplifier	6
Using the remote control	7
Preparing the remote control for use	7
Installing the remote control batteries	
Using the remote control with a VCR or a cable TV converter	7
Programming the remote control for use with a VCR or a cable TV converter	
VCR code table	9
Cable TV converter code table	10
Learning about the remote control	11
Setting up your TV	12
Changing the on-screen display language	12
Selecting the antenna input	
Using the ANT/VIDEO button	
Adding channels to the TV's memory	13
Programming channels automatically	13
Adding and erasing channels manually	14
Changing channels	14
Using the TV's features	15
Adjusting the channel settings	15
Switching between two channels	15
Programming your favorite channels	
Locking channels	16
Labeling channels	18
Watching picture-in-picture (PIP)	19
Switching the main and small pictures	20
Changing the position of the small picture	20
Freezing the small picture	20

Adjusting the picture	21
Adjusting the picture quality	21
Selecting the color temperature	21
Adjusting the picture preferences	22
Watching video input	22
Displaying on-screen information	22
Setting the off-timer	22
Auto power off	22
Using the closed caption feature	23
Adjusting the sound	24
Muting the sound	24
Selecting stereo/SAP broadcasts	24
Adjusting the sound quality	25
Using the surround sound feature	25
Viewing the demonstration mode	26
Understanding the last mode memory feature	26
Appendix	27
Cleaning and care	27
Troubleshooting	27
Specifications	28
Limited United States warranty	29
Attention Canadian customers	30
Indov	01

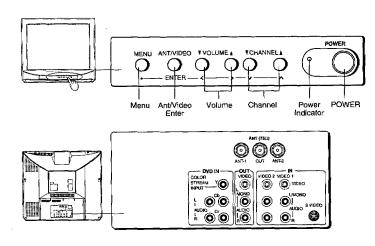
Welcome to Toshiba

Congratulations! You have purchased one of the finest color TVs on the market. The goal of this manual is to guide you through setting up and operating your Toshiba TV as quickly as possible. Please make sure you've received the following items: TV, remote control, batteries, manual, registration card, and extended service plan literature. If you did not receive all of the items, or any of the items are damaged or broken, please contact your Toshiba dealer. In addition, you may need to purchase other audio or video cables to connect your equipment. See "Connecting your TV" on page 2 for more information.

Please read all the safety and operating instructions carefully before you begin.

Exploring your new TV

You can operate your TV by using the buttons on the front panel or the remote control. The back panel provides all the terminal connections you will need to connect other equipment to your TV.



Selecting a location for the TV

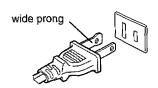
- Place the TV on the floor or on a sturdy platform in a location where light does not directly hit the screen.
- Place the TV far enough from the walls to allow proper ventilation. Inadequate ventilation may cause overheating, which may damage the TV.

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

Model number: CX32H60 or CX36H60
Serial number:

Caution:

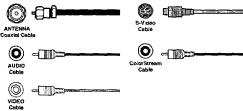
The plug has one prong wider than the other and will fit only one way into a standard electrical outlet (120 volt AC, 60 Hz). If the plug does not fit into the outlet, try turning it around. If the plug still does not fit, the outlet is probably non-standard and must be replaced by a qualified electrician.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



Connecting your TV

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

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



from one channel while watching another channel.

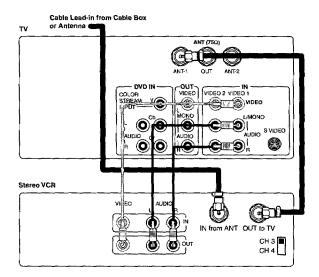
This connection allows you to watch local channels and video programs, play or record on the VCR while watching TV, and to record

You will need:

· one coaxial cable

Connecting a VCR

- one pair of audio cables (only one cable for a mono VCR)
- · one video cable



Caution:

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

Caution:

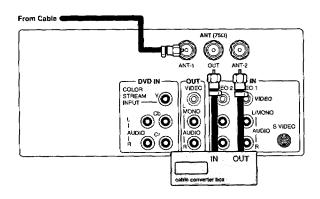
If using a mono VCR, connect L/Mono to VCR Audio OUT using only one audio cable. If you have a S-VHS VCR, use the S-video connections and remove the video cable.

Do not connect the video cable and the S-video cable to Video-1 simultaneously.

Connecting a cable converter box

This connection allows you to watch cable and premium channels. You should keep your TV selected to ANT-1 so that you can use the TV features. When viewing premium channels, select ANT-2 and tune the TV to channel 3 or 4 (whichever channel is vacant in your area), then use the converter box to change channels.

You will need two coaxial cables.

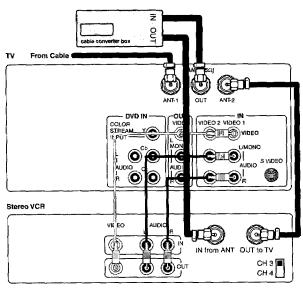


Connecting a cable converter box and a VCR

This connection allows you to watch and record basic and premium cable channels, as well as watch videotapes. You should keep your TV selected to ANT-1 so that you can use the TV's features. When viewing premium channels or recording with the VCR, select ANT-2 and change the TV channel to 3 or 4 (whichever channel is vacant in your area), then use the converter box to change channels.

You will need:

- three coaxial cables
- one pair of audio cables (only one cable for a mono VCR)
- · one video cable



Note:

When you use a converter box with your TV, there may be features that you cannot program using the remote control, such as labeling channels, locking channels, and programming your favorite channels.

Caution:

If you want to record one channel while watching another channel, a splitter (not included) must be added between the cable and ANT-1. One output of the splitter goes to ANT-1 and the second output is connected to IN on the cable converter box.

If you have a mono VCR, connect L/Mono to VCR Audio OUT using only one audio cable. If you have a S-VHS VCR, use the S-video connections and remove the video cable. Do not connect the video cable and the S-video cable to Video-1 simultaneously.

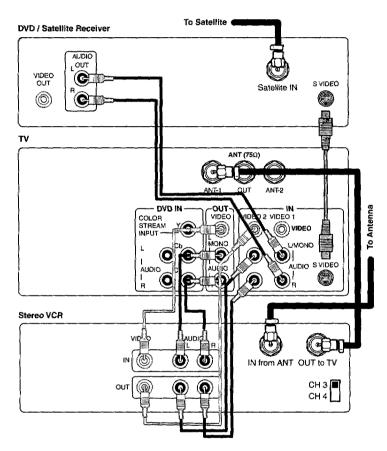
When you use a converter box with your TV, there may be features that you cannot program using the remote control, such as labeling channels, locking channels, and programming your favorite channels.

Connecting a DVD/satellite receiver and a VCR

This connection allows you to watch DVD/satellite, video and TV programs. You can record from the DVD/satellite receiver and TV, as well as record one TV channel while watching another channel.

You will need:

- one coaxial cable
- three pairs of audio cables (only one cable for a mono VCR)
- two video cables
- one S-video cable



Caution:

You can use a video cable instead of the S-video cable, but the picture quality will decrease. If you use a S-video cable between the TV and DVD/satellite receiver, make the audio connections only and remove the video connection.

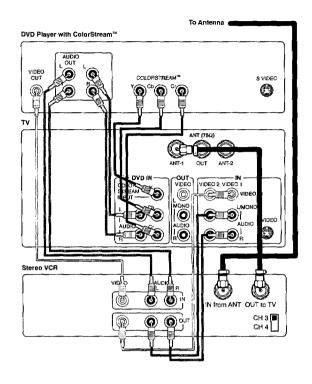
Do not connect the video cable and the S-video cable to Video-1 simultaneously.

Connecting a DVD with ColorStream™ and a VCR

This connection allows you to watch DVD, video or TV programs and to record DVD or TV programs. You can record from one source and watch a program from another source. Your TV is capable of using ColorStream (color difference). Connecting your TV to a ColorStream compatible DVD, such as a Toshiba DVD, can greatly enhance picture quality and performance.

You will need:

- · one coaxial cable
- three pairs of audio cables (only one cable for a mono VCR)
- · two video cables
- · one set of ColorStream video cables



Caution:

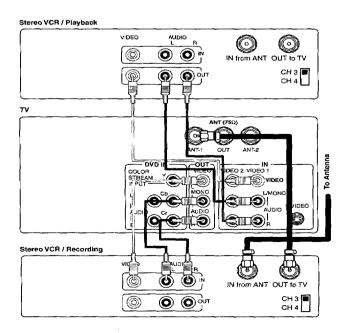
To play from the DVD, the DVD and TV must use ColorStream connections. To record from the DVD, the DVD and TV must select Video.

Connecting two VCRs

This connection allows you to record from one VCR to another VCR while watching a video program. You will also be able to record from one TV channel while watching another channel.

You will need:

- one coaxial cable
- two pairs of audio cables (only two cables for mono VCRs)
- two video cables



Caution:

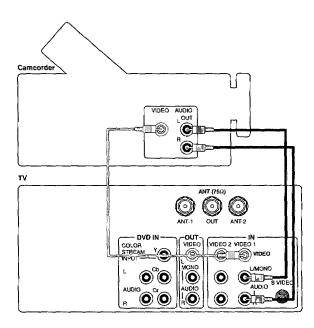
Do not connect one VCR to the output and input jacks on the TV at the same time. If you are using a S-VHS VCR, use the S-video connections and remove the video cable. Do not connect the video cable and the S-video cable to Video-1 simultaneously.

Connecting a camcorder

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

You will need:

- · one pair of audio cables
- · one video cable



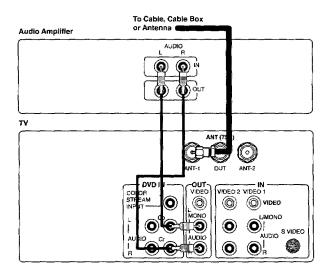
Caution:

If you are using a S-VHS carncorder with a S-video output, connect this to the S-video input on the TV and remove the video cable. Do not connect the video cable and the S-video cable to Video-1 simultaneously.

Connecting an audio amplifier

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

To control the audio, turn on the TV and the stereo amplifier. You will need one pair of audio cables.



Using the remote control

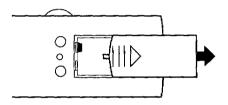
Preparing the remote control for use

With the remote control, you can operate your TV, most VCR models, and cable TV converters together, even if they are different brands. If you will be using your TV with a Toshiba VCR, your remote control is already programmed and ready to use. If you own different brands of VCRs and/or converters, you first have to program your remote control. (See "Programming the remote control for use with a VCR or a cable TV converter" on page 8.)

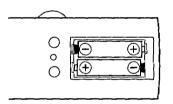
Installing the remote control batteries

To install the batteries:

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



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



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

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

To control a Toshiba VCR:

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

To control a cable TV converter:

Program the remote control to recognize the brand of your converter (see "Programming the remote control for use with a VCR or cable TV converter," page 8). The shaded buttons shown on the right will control the cable TV converter.

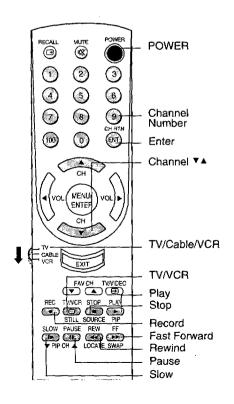
Set the TV/CABLE/VCR switch to the CABLE position.

Note:

This remote control's functions may or may not operate your VCR or cable TV converter. Refer to the owner's manuals supplied with the equipment to see which features are available. In addition, the original controllers may have features not available on this remote control. If you would like to continue to use these features, you may want to use the original remote control.

Caution:

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



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

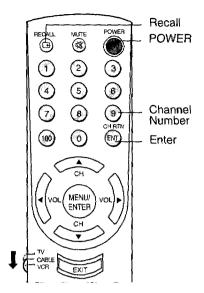
This remote control is pre-programmed to operate Toshiba VCRs. To use VCRs or cable converters other than Toshiba models, you must follow the steps below before you operate your remote control.

- 1. Refer to the "VCR code table" or "Cable TV converter code table" on pages 9-10 to find the number that corresponds to the brand name of your VCR or converter.
 - If more than one number is listed, try each one separately until you find the one that works.
- 2. If you are reprogramming the remote control to operate your:
 - VCR, set the TV/CABLE/VCR switch on the remote control to VCR.
 - cable converter, set the TV/CABLE/VCR switch on the remote control to CABLE.
- Hold down the RECALL button while using the Channel Number buttons to enter the three-digit code number of your brand of VCR or converter.
- Point the remote control at the VCR or converter and press POWER to test the code number.

If the VCR or converter turns on, you have entered the right number.

If the VCR or converter does not respond to the remote control, you may have entered the wrong number. Repeat steps 1-4 with another code number.

For future rel	ference, write down the code numbers you used:
VCR code	
Cable code	



Note:

- Each time you replace the batteries, you must reprogram the remote control.
- Some newer VCRs are capable of working on either of two remote codes. These VCRs have a switch labeled "VCR1/VCR2." If your VCR has this kind of switch, it may not respond to any of the code numbers for your VCR brand name. In this case, set the switch to the other position (VCR1 or VCR2) and reprogram the remote control.

VCR code table

Brand name	Code number				
Adventura	019	Fidelity	019	Magnin	259
Aiko	297	Finlandia	100, 123, 129	Manesth	064, 091
Aiwa	019	Finlux	019, 061, 100, 123,	Marantz	054, 057, 081, 100
Akai	060, 068, 080, 125,		124	Marta	056
	261	Firstline	056, 062, 064, 091,	Masushita	054
Akiba	091		228	Matsui	227, 228, 314
Alba	039, 228, 297, 314	Fisher	065, 066, 073, 085,	MEI	054
American High	054		123	Memorex	019, 054, 056, 058,
Amstrad	019	Frontech	039		065, 066, 067, 123,
Anam	181	Fuji	052, 054	3.5 ()	259
Anitech	091	Funai	019	Memphis	091 181
ASA	056, 100	Garrard	019	Metz	062, 080
Asha	259	GE	054, 079, 084, 221	MGA MGN Technology	259
Asuka	056	GEC	100	Minolta	061, 124
Audiovox	056	General	071	Mitsubishi	062, 080, 086, 094,
Baird	019, 123	Go Video	251, 298	MICHOISM	100, 192, 233, 261,
Basic Line	039, 091, 297	Goldstar Goodmans	037, 056, 057 019, 039, 056, 081,	Motorola	054, 067
Beaumark	259	Goodinaiis	091, 297	MTC	019, 259
Bell & Howell	123	Gradiente	011, 27/	Multitech	019, 091
Blaupunkt	053, 181 206	Graetz	060, 123	Murphy	019
Brandt	140, 203, 230, 380	Granada	065, 100, 123	NEC	057, 059, 060, 069,
Broksonic Bush	091, 228, 297	Grandin	019, 056, 091	1	086
Calix	056	Grundig	100	Neckermann	100
Canon	054	Harley Davidson	019	Nesco	091
Capehart	039	Harman/Kardon	057, 094	Nikko	056
Carver	100	Harwood	087, 091	Noblex	259
CCE	091, 297	Hcm	091	Nokia	060, 065, 123, 125,
CGE	019	Headquarter	065		259
Cimline	091	HI-Q	066	Nordmende	060
Citizen	056, 297	Hinari	091, 227	Oceanic	019
Clatronic	039	Hitachi	019, 060, 061, 084,	Olympus	054
Colt	091		124, 254	Optimus	056, 067
Condor	039	Hypson	091	Optonica	067, 081
Craig	056, 066, 091, 259	Imperial	019	Orion	140, 227, 228, 314
Crown	091, 297	Interfunk	100	Osaki	019, 056, 091
Curtis Mathes	054, 079	ITT	060, 065, 123, 125	Otto Versand	100
Cybernex	259	ITV	056, 297	Palladium	056, 091 054, 096, 115, 181,
Daewoo	039, 064, 065, 297	JCL	054	Panasonic	244
Dansai	091	Jensen	060	Penney	054, 056, 057, 059,
Daytron	039	JVC Kaisui	027, 060, 086 091	Territey	061, 073, 259
De Graff	061	Kendo	125, 228	Pentax	061, 084, 124
Decca	019, 100 060	Kenwood	057, 060, 065, 086	Perdio	019
Dual Dumont	019, 100, 123, 124	KLH	091	Philco	054
Dynatech	019, 100, 123, 124	Kodak	054, 056	Philips	054, 081, 100, 129
Elcatech	091	Korpel	091	Phonola	100
Electrohome	056	Leyco	091	Pilot	056
Electronic	019	Lloyd	019	Pioneer	086, 100
Electrophonic	056	Loewe	056	Portland	039
Emerex	051	Loewe Opta	100	Profitronic	259
Emerson	019, 021, 056, 062,	Logik	091, 259	Proline	019
	080, 087, 140, 203,	Luxor	062, 065, 123, 125	Protec	091
[227, 228, 230, 231,	LXI	056	Pulsar	058
	313, 314, 380	M-Electronic	019	Pye	100
ESC	297	Magnavox	019, 054, 058, 100,	Quarter	065
Ferguson	060		129, 168	Quartz	065
1		1		ı	

Quasar	054, 096, 115	Teleavia	060	Jerrold	022, 030, 031, 033,
Quelle	100	Telefunken	060, 206		034, 043, 045, 066,
Radio Shack	019, 056	Tenosal	091		295
Radiola	100	Tensai	019	Macom	052
Radix	056	Thomson	060	Magnavox	046
Randex	056	Thorn	060, 123	Memorex	019
RCA	054, 061, 079, 084,	TMK	227, 259	Movietime	175
	096, 115, 124, 125,	Toshiba	060, 062, 064, 085,	NSC	089, 175
	168, 221		229, 231, 385	Oak	026, 038, 267
RCA Unified	079	Totevision	056, 259	Panasonic	040, 126
Realistic	019, 054, 056, 065,	Triumph	227	Paragon	019
ļ	066, 067, 081, 085,	Unitech	259	Philips	044, 046, 047, 048,
	123, 259	Universum	019, 056, 068, 100,		049, 050, 079, 172
Rex	060		125	Pioneer	042, 163
Ricoh	053	Vector	064	Popular Mechanics	419
Roadstar	056, 091, 259, 297	Vector Research	057, 059	Pulsar	019
Runco	058	Victor	027, 060, 086	PVP Stereo	
Saba	060	Video Concepts	059, 064, 080	Visual Matrix	022
Saisho	227, 228	Videosonic	259	RCA	040
Salora	062, 065, 125	Wards	019, 054, 061, 066,	Regal	039, 278, 292
Samsung	064, 259	†	067, 081, 091, 168,	Regency	021
Sanky	058, 067	İ	231, 259	Rembrandt	030, 089
Sansui	060, 086	XR-1000	019, 054, 091	Runco	019
Sanyo	065, 066, 123, 259	Yamaha	057, 060	Samsung	059, 163
SBR	100	Yamishi	091	Scientific Atlanta	025, 027, 036, 296,
Schaub Lorenz	019, 060	Yokan	091		346
Schneider	019, 091, 100, 129	Yoko	039, 259	Signal	034, 059
Scott	062, 064, 140, 203,	Zenith	052, 053, 058	Signature	030
Scott		Zamin	0,12, 0,0,0,0		
	229, 230, 231			SL Marx	059
Sears	229, 230, 231 054, 056, 061, 065,	Cable TV con		SL Marx Sprucer	
	229, 230, 231 054, 056, 061, 065, 066, 073, 085, 123,			SL Marx Sprucer Standard	059 040
Sears	229, 230, 231 054, 056, 061, 065, 066, 073, 085, 123, 124	Cable TV con	verter	SL Marx Sprucer Standard Components	059 040 174
Sears SEG	229, 230, 231 054, 056, 061, 065, 066, 073, 085, 123, 124 259	Cable TV con code table Brand name	verter Code number	SL Marx Sprucer Standard Components Starcom	059 040 174 022, 034, 066
Sears SEG SEI	229, 230, 231 054, 056, 061, 065, 066, 073, 085, 123, 124 259 100	Cable TV con	Code number 020, 022, 026, 030,	SL Marx Sprucer Standard Components Starcom Stargate	059 040 174 022, 034, 066 034, 059
Sears SEG SEI Seleco	229, 230, 231 054, 056, 061, 065, 066, 073, 085, 123, 124 259 100 060	Cable TV con code table Brand name ABC	Code number 020, 022, 026, 030, 032, 033, 036, 066	SL Marx Sprucer Standard Components Starcom Stargate Starquest	059 040 174 022, 034, 066 034, 059 034
Sears SEG SEI Seleco Sentra	229, 230, 231 054, 056, 061, 065, 066, 073, 085, 123, 124 259 100 060 039	Cable TV con code table Brand name ABC	Code number 020, 022, 026, 030, 032, 033, 036, 066 041	SL Marx Sprucer Standard Components Starcom Stargate Starquest STS	059 040 174 022, 034, 066 034, 059 034 175
SEG SEI Seleco Sentra Sharp	229, 230, 231 054, 056, 061, 065, 066, 073, 085, 123, 124 259 100 060 039 067, 081	Cable TV con code table Brand name ABC Antronix Archer	Code number 020, 022, 026, 030, 032, 033, 036, 066 041 041, 058, 172	SL Marx Sprucer Standard Components Starcom Stargate Starquest STS Sylvania	059 040 174 022, 034, 066 034, 059 034 175 020
SEG SEI Seleco Sentra Sharp Shíntom	229, 230, 231 054, 056, 061, 065, 066, 073, 085, 123, 124 259 100 060 039 067, 081	Cable TV con code table Brand name ABC Antronix Archer Belcor	Code number 020, 022, 026, 030, 032, 033, 036, 066 041 041, 058, 172 075	SL Marx Sprucer Standard Components Starcom Stargate Starquest STS Sylvania Teleview	059 040 174 022, 034, 066 034, 059 034 175 020 059
Sears SEG SEI Seleco Sentra Sharp Shintom Shogun	229, 230, 231 054, 056, 061, 065, 066, 073, 085, 123, 124 259 100 060 039 067, 081 091 259	Cable TV con code table Brand name ABC Antronix Archer Belcor Cable Star	Code number 020, 022, 026, 030, 032, 033, 036, 066 041 041, 058, 172 075 075	SL Marx Sprucer Standard Components Starcom Stargate Starquest STS Sylvania Teleview Texscan	059 040 174 022, 034, 066 034, 059 034 175 020 059 020
Sears SEG SEI Seleco Sentra Sharp Shintom Shogun Siemens	229, 230, 231 054, 056, 061, 065, 066, 073, 085, 123, 124 259 100 060 039 067, 081 091 259 056, 123	Cable TV con code table Brand name ABC Antronix Archer Belcor	Code number 020, 022, 026, 030, 032, 033, 036, 066 041 041, 058, 172 075	SL Marx Sprucer Standard Components Starcom Stargate Starquest STS Sylvania Teleview Texscan Tocom	059 040 174 022, 034, 066 034, 059 034 175 020 059 020 031, 032, 078
Sears SEG SEI Seleco Sentra Sharp Shintom Shogun Siemens Silva	229, 230, 231 054, 056, 061, 065, 066, 073, 085, 123, 124 259 100 060 039 067, 081 091 259 056, 123	Cable TV con code table Brand name ABC Antronix Archer Belcor Cable Star Cabletenna Cableview	Code number 020, 022, 026, 030, 032, 033, 036, 066 041 041, 058, 172 075 075 041	SL Marx Sprucer Standard Components Starcom Stargate Starquest STS Sylvania Teleview Texscan Tocom Toshiba	059 040 174 022, 034, 066 034, 059 034 175 020 059 020 031, 032, 078 019
Sears SEG SEI Seleco Sentra Sharp Shintom Shogun Siemens Silva Singer	229, 230, 231 054, 056, 061, 065, 066, 073, 085, 123, 124 259 100 060 039 067, 081 091 259 056, 123 056	Cable TV con code table Brand name ABC Antronix Archer Belcor Cable Star Cabletenna Cableview Century	Code number 020, 022, 026, 030, 032, 033, 036, 066 041 041, 058, 172 075 075 041 041	SL Marx Sprucer Standard Components Starcom Stargate Starquest STS Sylvania Teleview Texscan Tocom Toshiba Tusa	059 040 174 022, 034, 066 034, 059 034 175 020 059 020 031, 032, 078 019 034
Sears SEG SEI Seleco Sentra Sharp Shintom Shogun Siemens Silva Singer Sinudyne	229, 230, 231 054, 056, 061, 065, 066, 073, 085, 123, 124 259 100 060 039 067, 081 091 259 056, 123 056 091 100	Cable TV con code table Brand name ABC Antronix Archer Belcor Cable Star Cabletenna Cableview Century Citizen	Code number 020, 022, 026, 030, 032, 033, 036, 066 041 041, 058, 172 075 075 041 041 172 172	SL Marx Sprucer Standard Components Starcom Stargate Starquest STS Sylvania Teleview Texscan Tocom Toshiba Tusa Unika	059 040 174 022, 034, 066 034, 059 034 175 020 059 020 031, 032, 078 019 034 041, 172
Sears SEG SEI Seleco Sentra Sharp Shintom Shogun Siemens Silva Singer Sinudyne Sontec	229, 230, 231 054, 056, 061, 065, 066, 073, 085, 123, 124 259 100 060 039 067, 081 091 259 056, 123 056 091 100 056	Cable TV con code table Brand name ABC Antronix Archer Belcor Cable Star Cabletenna Cableview Century	Code number 020, 022, 026, 030, 032, 033, 036, 066 041 041, 058, 172 075 075 041 041 172 172 172 044, 050	SL Marx Sprucer Standard Components Starcom Stargate Starquest STS Sylvania Teleview Texscan Tocom Toshiba Tusa Unika United Artists	059 040 174 022, 034, 066 034, 059 034 175 020 059 020 031, 032, 078 019 034 041, 172
Sears SEG SEI Seleco Sentra Sharp Shintom Shogun Siemens Silva Singer Sinudyne Sontec Sony	229, 230, 231 054, 056, 061, 065, 066, 073, 085, 123, 124 259 100 060 039 067, 081 091 259 056, 123 056 091 100 056 051, 052, 053, 054	Cable TV con code table Brand name ABC Antronix Archer Belcor Cable Star Cabletenna Cableview Century Citizen Colour Voice	Code number 020, 022, 026, 030, 032, 033, 036, 066 041 041, 058, 172 075 075 041 041 172 172 172 044, 050 059, 079	SL Marx Sprucer Standard Components Starcom Stargate Starquest STS Sylvania Teleview Texscan Tocom Toshiba Tusa Unika United Artists United Cable	059 040 174 022, 034, 066 034, 059 034 175 020 059 020 031, 032, 078 019 034 041, 172 026 022
Sears SEG SEI Seleco Sentra Sharp Shintom Shogun Siemens Silva Singer Sinudyne Sontec Sony STS	229, 230, 231 054, 056, 061, 065, 066, 073, 085, 123, 124 259 100 060 039 067, 081 091 259 056, 123 056 091 100 056 051, 052, 053, 054 061	Cable TV con code table Brand name ABC Antronix Archer Belcor Cable Star Cabletenna Cableview Century Citizen Colour Voice Comtronics	Code number 020, 022, 026, 030, 032, 033, 036, 066 041 041, 058, 172 075 075 041 041 172 172 172 044, 050	SL Marx Sprucer Standard Components Starcom Stargate Starquest STS Sylvania Teleview Texscan Tocom Toshiba Tusa Unika United Artists	059 040 174 022, 034, 066 034, 059 034 175 020 059 020 031, 032, 078 019 034 041, 172 026 022 041, 058, 075, 096,
Sears SEG SEI Seleco Sentra Sharp Shintom Shogun Siemens Silva Singer Sinudyne Sontec Sony	229, 230, 231 054, 056, 061, 065, 066, 073, 085, 123, 124 259 100 060 039 067, 081 091 259 056, 123 056 091 100 056 051, 052, 053, 054 061 019	Cable TV con code table Brand name ABC Antronix Archer Belcor Cable Star Cabletenna Cableview Century Citizen Colour Voice Comtronics Contec Eastern Garrard	Code number 020, 022, 026, 030, 032, 033, 036, 066 041 041, 058, 172 075 075 041 041 172 172 172 044, 050 059, 079 038	SL Marx Sprucer Standard Components Starcom Stargate Starquest STS Sylvania Teleview Texscan Tocom Toshiba Tusa Unika United Artists United Cable Universal	059 040 174 022, 034, 066 034, 059 034 175 020 059 020 031, 032, 078 019 034 041, 172 026 022 041, 058, 075, 096, 172, 210
Sears SEG SEI Seleco Sentra Sharp Shintom Shogun Siemens Silva Singer Sinudyne Sontec Sony STS Sunstar	229, 230, 231 054, 056, 061, 065, 066, 073, 085, 123, 124 259 100 060 039 067, 081 091 259 056, 123 056 091 100 056 051, 052, 053, 054 061	Cable TV con code table Brand name ABC Antronix Archer Belcor Cable Star Cabletenna Cableview Century Citizen Colour Voice Comtronics Contec Eastern	Code number 020, 022, 026, 030, 032, 033, 036, 066 041 041, 058, 172 075 075 041 041 172 172 172 044, 050 059, 079 038 021	SL Marx Sprucer Standard Components Starcom Stargate Starquest STS Sylvania Teleview Texscan Tocom Toshiba Tusa Unika United Artists United Cable Universal	059 040 174 022, 034, 066 034, 059 034 175 020 059 020 031, 032, 078 019 034 041, 172 026 022 041, 058, 075, 096, 172, 210 046, 079, 230
Sears SEG SEI Seleco Sentra Sharp Shintom Shogun Siemens Silva Singer Sinudyne Sontec Sony STS Sunstar	229, 230, 231 054, 056, 061, 065, 066, 073, 085, 123, 124 259 100 060 039 067, 081 091 259 056, 123 056 091 100 056 051, 052, 053, 054 061 019 019, 054, 062, 100,	Cable TV con code table Brand name ABC Antronix Archer Belcor Cable Star Cabletenna Cableview Century Citizen Colour Voice Comtronics Contec Eastern Garrard	Code number 020, 022, 026, 030, 032, 033, 036, 066 041 041, 058, 172 075 075 041 041 172 172 172 044, 050 059, 079 038 021 172	SL Marx Sprucer Standard Components Starcom Stargate Starquest STS Sylvania Teleview Texscan Tocom Toshiba Tusa Unika United Artists United Cable Universal	059 040 174 022, 034, 066 034, 059 034 175 020 059 020 031, 032, 078 019 034 041, 172 026 022 041, 058, 075, 096, 172, 210
Sears SEG SEI Seleco Sentra Sharp Shintom Shogun Siemens Silva Singer Sinudyne Sontec Sony STS Sunstar Sylvania	229, 230, 231 054, 056, 061, 065, 066, 073, 085, 123, 124 259 100 060 039 067, 081 091 259 056, 123 056 091 100 056 051, 052, 053, 054 061 019 019, 054, 062, 100, 129	Cable TV con code table Brand name ABC Antronix Archer Belcor Cable Star Cabletenna Cableview Century Citizen Colour Voice Comtronics Contec Eastern Garrard GC Electronics	Code number 020, 022, 026, 030, 032, 033, 036, 066 041 041, 058, 172 075 075 041 041 172 172 172 044, 050 059, 079 038 021 172 035, 075 034, 089	SL Marx Sprucer Standard Components Starcom Stargate Starquest STS Sylvania Teleview Texscan Tocom Toshiba Tusa Unika United Artists United Cable Universal	059 040 174 022, 034, 066 034, 059 034 175 020 059 020 031, 032, 078 019 034 041, 172 026 022 041, 058, 075, 096, 172, 210 046, 079, 230
Sears SEG SEI Seleco Sentra Sharp Shintom Shogun Siemens Silva Singer Sinudyne Sontec Sony STS Sunstar Sylvania Symphonic	229, 230, 231 054, 056, 061, 065, 066, 073, 085, 123, 124 259 100 060 039 067, 081 091 259 056, 123 056 091 100 056 051, 052, 053, 054 061 019 019, 054, 062, 100, 129 019	Cable TV con code table Brand name ABC Antronix Archer Belcor Cable Star Cabletenna Cableview Century Citizen Colour Voice Comtronics Contec Eastern Garrard GC Electronics Gemini	Code number 020, 022, 026, 030, 032, 033, 036, 066 041 041, 058, 172 075 075 041 041 172 172 172 044, 050 059, 079 038 021 172 035, 075 034, 089	SL Marx Sprucer Standard Components Starcom Stargate Starquest STS Sylvania Teleview Texscan Tocom Toshiba Tusa Unika United Artists United Cable Universal	059 040 174 022, 034, 066 034, 059 034 175 020 059 020 031, 032, 078 019 034 041, 172 026 022 041, 058, 075, 096, 172, 210 046, 079, 230
Sears SEG SEI Seleco Sentra Sharp Shintom Shogun Siemens Silva Singer Sinudyne Sontec Sony STS Sunstar Sylvania Symphonic Tandy	229, 230, 231 054, 056, 061, 065, 066, 073, 085, 123, 124 259 100 060 039 067, 081 091 259 056, 123 056 091 100 056 051, 052, 053, 054 061 019 019, 054, 062, 100, 129 019 019, 123	Cable TV con code table Brand name ABC Antronix Archer Belcor Cable Star Cabletenna Cableview Century Citizen Colour Voice Comtronics Contec Eastern Garrard GC Electronics Gemini General Instrument Hamlin	Code number 020, 022, 026, 030, 032, 033, 036, 066 041 041, 058, 172 075 075 041 041 172 172 172 044, 050 059, 079 038 021 172 035, 075 034, 089	SL Marx Sprucer Standard Components Starcom Stargate Starquest STS Sylvania Teleview Texscan Tocom Toshiba Tusa Unika United Artists United Cable Universal	059 040 174 022, 034, 066 034, 059 034 175 020 059 020 031, 032, 078 019 034 041, 172 026 022 041, 058, 075, 096, 172, 210 046, 079, 230
Sears SEG SEI Seleco Sentra Sharp Shintom Shogun Siemens Silva Singer Sinudyne Sontec Sony STS Sunstar Sylvania Symphonic Tandy Tashiko	229, 230, 231 054, 056, 061, 065, 066, 073, 085, 123, 124 259 100 060 039 067, 081 091 259 056, 123 056 091 100 056 051, 052, 053, 054 061 019 019, 054, 062, 100, 129 019 019, 123 019	Cable TV con code table Brand name ABC Antronix Archer Belcor Cable Star Cabletenna Cableview Century Citizen Colour Voice Comtronics Contec Eastern Garrard GC Electronics Gemini General Instrument	Code number 020, 022, 026, 030, 032, 033, 036, 066 041 041, 058, 172 075 075 041 041 172 172 172 044, 050 059, 079 038 021 172 035, 075 034, 089 030 028, 039, 053, 278,	SL Marx Sprucer Standard Components Starcom Stargate Starquest STS Sylvania Teleview Texscan Tocom Toshiba Tusa Unika United Artists United Cable Universal	059 040 174 022, 034, 066 034, 059 034 175 020 059 020 031, 032, 078 019 034 041, 172 026 022 041, 058, 075, 096, 172, 210 046, 079, 230
Sears SEG SEI Seleco Sentra Sharp Shintom Shogun Siemens Silva Singer Sinudyne Sontec Sony STS Sunstar Sylvania Symphonic Tandy Tashiko Tarung	229, 230, 231 054, 056, 061, 065, 066, 073, 085, 123, 124 259 100 060 039 067, 081 091 259 056, 123 056 091 100 056 051, 052, 053, 054 061 019 019, 054, 062, 100, 129 019 019, 123 019 019, 060, 100 019, 060 054, 181	Cable TV con code table Brand name ABC Antronix Archer Belcor Cable Star Cabletenna Cableview Century Citizen Colour Voice Comtronics Contec Eastern Garrard GC Electronics Gemini General Instrument Hamlin	Code number 020, 022, 026, 030, 032, 033, 036, 066 041 041, 058, 172 075 075 041 041 172 172 172 044, 050 059, 079 038 021 172 035, 075 034, 089 030 028, 039, 053, 278, 292 030 026	SL Marx Sprucer Standard Components Starcom Stargate Starquest STS Sylvania Teleview Texscan Tocom Toshiba Tusa Unika United Artists United Cable Universal	059 040 174 022, 034, 066 034, 059 034 175 020 059 020 031, 032, 078 019 034 041, 172 026 022 041, 058, 075, 096, 172, 210 046, 079, 230
Sears SEG SEI Seleco Sentra Sharp Shintom Shogun Siemens Silva Singer Sinudyne Sontec Sony STS Sunstar Sylvania Symphonic Tandy Tashiko Tarung Teac	229, 230, 231 054, 056, 061, 065, 066, 073, 085, 123, 124 259 100 060 039 067, 081 091 259 056, 123 056 091 100 056 051, 052, 053, 054 061 019 019, 054, 062, 100, 129 019 019, 123 019 019, 060, 100 019, 060	Cable TV con code table Brand name ABC Antronix Archer Belcor Cable Star Cabletenna Cableview Century Citizen Colour Voice Comtronics Contec Eastern Garrard GC Electronics Gemini General Instrument Hamlin	Code number 020, 022, 026, 030, 032, 033, 036, 066 041 041, 058, 172 075 075 041 041 172 172 172 044, 050 059, 079 038 021 172 035, 075 034, 089 030 028, 039, 053, 278, 292 030	SL Marx Sprucer Standard Components Starcom Stargate Starquest STS Sylvania Teleview Texscan Tocom Toshiba Tusa Unika United Artists United Cable Universal	059 040 174 022, 034, 066 034, 059 034 175 020 059 020 031, 032, 078 019 034 041, 172 026 022 041, 058, 075, 096, 172, 210 046, 079, 230

Learning about the remote control

POWER turns the TV on and off (pages 8 and 22)

TV/Video selects video input source (page 22)

Channel ▲ ▼ cycles through programmed channels (page 13)

TV/Cable/VCR switches between TV, Cable and VCR (page 8)

Channel Numbers allow direct access to channels (page 14)

Volume ◄▶ adjusts the volume level

Channel Return returns to the last viewed channel (page 15)

Menu allows access to programming menus (page 12)

Favorite Channels ▲ ▼ cycles through favorite channels (page 15)

Enter sets programmed menu information (pages 15, 16, 17 and 18)

Exit exits programming menus (page 12)

PIP Functions allow access to PIP functions (page 19)

STILL press to freeze the small PIP

SOURCE press to display a PIP from an external source

PIP press to start picture-in-picture (PIP)

PIP CH ▲▼ press to choose the program to be displayed as the small PIP

LOCATE press to change the position of the small PIP **SWAP** press to switch between the main and small PIP

STOP press to stop a videotape

REC press to start recording a videotape

PLAY press to play a videotape

FF press to fast forward a videotape

REW press to rewind a videotape

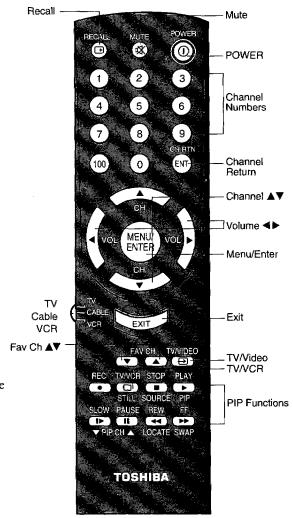
SLOW press to slow the playback of a videotape

PAUSE press to temporarily freeze the playback of a videotape

TV/VCR toggles between TV and VCR when viewing while recording

Mute mutes the sound (page 24)

Recall displays screen information (page 22)



Setting up your TV

After you've installed the batteries and programmed the remote control, you need to set some preferences on the TV using the menu. You can access the menu with the buttons on your TV or by using the remote control.

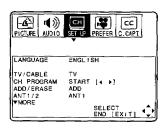
- When you make a menu selection, your changes occur immediately.
 You do not have to press MENU or EXIT to see your changes.
- After fifteen seconds, the menu screen will automatically disappear if you do not make a selection. Your changes will still be saved.
- When you are finished programming the menus, press EXIT.

Changing the on-screen display language

You can choose from three different languages (English, French and Spanish) for the on-screen displays. Adjustment menus and messages will appear in the language of your choice.

To select a language:

1. Press MENU, then press ◀ or ▶ until the SET UP menu appears.





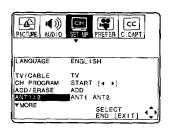
- 2. Press ▲ or ▼ to highlight LANGUAGE.
- 3. Press ◀ or ▶ to highlight your desired language.

Selecting the antenna input

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

To select the antenna input:

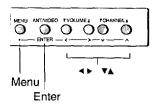
- 1. Press MENU, then use ◀ or ▶ to highlight the SET UP menu.
- 2. Press ▲ or ▼ to highlight ANT 1/2.

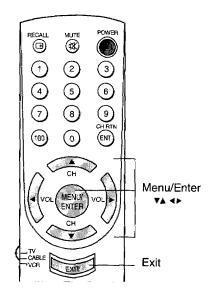


3. Press ◀ or ▶ to highlight either ANT 1 or ANT 2, depending on the antenna terminal you wish to use.

Using the ANT/VIDEO button

You can monitor or change the signal source that is connected to the TV. By pressing the ANT/VIDEO button on your TV, you can select the VIDEO 1, VIDEO 2, ColorStream, ANT 1 or ANT 2 mode. The signal source you are currently connected to will be displayed in purple.





To select the antenna input:

1. Press the ANT/VIDEO button. The signal source you are connected to is displayed in purple.



2. Press the button until ANT 1 or ANT 2 is displayed in purple, indicating the antenna terminal you wish to use.

Adding channels to the TV's memory

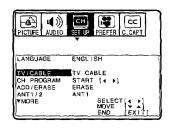
Your TV will stop on specific channels that are stored in the TV's channel memory when you press Channel ▲ or ▼. Use the steps below to set all active channels in your area automatically.

Programming channels automatically

Your TV can automatically detect all active channels and store them in its memory. After the TV has stored the channels in its memory, you can erase channels or add your favorite channels. If you use both ANT-1 and ANT-2 terminals, you must program channels for each input source.

To add channels:

- 1. Press MENU, then press ◀ or ▶ to highlight the SET UP menu.
- 2. Press ▲ or ▼ until the TV/CABLE selection is highlighted.
- 3. Press ◀ or ▶ to highlight either TV or CABLE, depending on which you use.

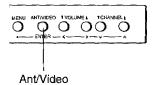


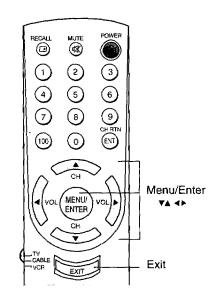
If you use an antenna, choose TV. If you use cable, choose CABLE.

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

While the TV is cycling through the channels, the message "Programming Now Please Wait" appears.

- 6. When channel programming is complete, the message "Completed (channel or cable number)" appears.
- 7. Press Channel ▲ or ▼ to view the programmed channels.



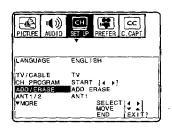


Adding and erasing channels manually

After you've programmed the channels, you can add or erase specific channels.

To add or erase channels:

- 1. Select the channel you want to add or erase using Channel ▲ or ▼. If adding channels, you must select the channel to add by using the Channel Number buttons.
- 2. Press MENU, then press ◀ or ▶ to highlight the SET UP menu.
- 3. Press ▲ or ▼ to highlight ADD/ERASE.



- 4. Press do r ► to select ADD or ERASE, whichever function you want to perform.
- 5. Repeat steps 1-4 for other channels you want to add or erase.

Changing channels

To change the channel, you can:

- · change the programmed channels using the remote control
- · select a channel directly using the remote control
- scan the channels using the TV buttons

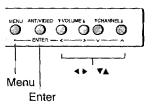
To change to the next programmed channel:

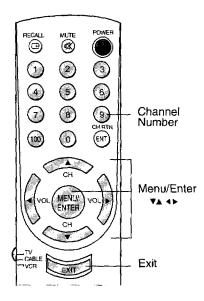
Press Channel ▲ or ▼ on the TV or remote control.

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

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

For example, to select channel 125, press the 100 button, the 2 button, and the 5 button.





Using the TV's features

Adjusting the channel settings

Switching between two channels

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

To switch between two channels:

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

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

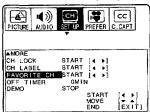
Programming your favorite channels

You can preset up to 12 of your favorite channels using the Favorite Channel Programming feature. Because this feature scans through only your favorite channels, it allows you to skip other channels you do not normally watch.

You can still use Channel ▲▼ to scan through all the channels you programmed in the TV's memory.

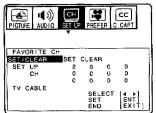
To program your favorite channels:

- 1. Select a channel you want to program.
- 2. Press MENU, then press ◀ or ▶ to highlight the SET UP menu.
- 3. Press ▲ or ▼ to highlight FAVORITE CH.



4. Press \blacktriangleleft or \blacktriangleright to display the FAVORITE CH menu.

SET/CLEAR will be highlighted.

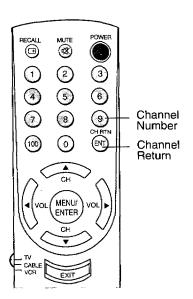


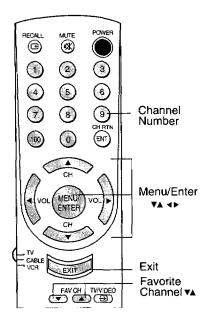
- 5. Press ◀ or ▶ to highlight SET and press ENTER.
- 6. Press EXIT to clear the screen.
- 7. Repeat steps 1 through 6 for up to 11 other channels.

To select your favorite channels:

Press the FAV CH ▲▼ buttons on the remote control to select your favorite channels.

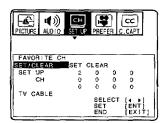
The FAV CH ▲▼ buttons will not work until you have programmed your favorite channels.



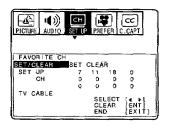


To clear your favorite channels:

- 1. Select a channel you want to clear.
- 2. Press MENU, then press ◀ or ▶ to highlight the SET UP menu.
- 3. Press ▲ or ▼ to highlight FAVORITE CH.
- 4. Press ◀ or ▶ to display the FAVORITE CH menu. SET/CLEAR will be highlighted.



5. Press the ◀ or ▶ to highlight CLEAR.



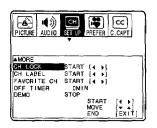
- Press ENTER until "0" replaces the channel number you want to erase.
- 7. Press EXIT to clear the screen.
- 8. Repeat steps 1 through 6 for the other channels.

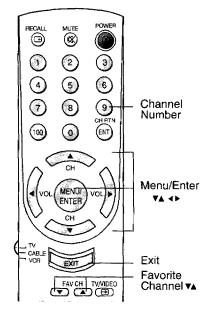
Locking channels

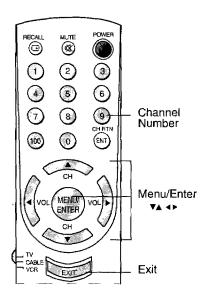
You can lock out specific channels by entering a four-digit password. You can lock out up to four channels in the TV mode and four channels in the Cable mode. The TV will automatically unlock the channels after 24 hours.

To lock out channels:

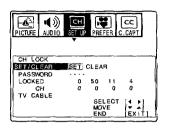
- 1. Select the channel you want to lock out.
- 2. Press MENU, then press ◀ or ▶ until the SET UP menu appears.
- 3. Press ▲ or ▼ to highlight CH LOCK.



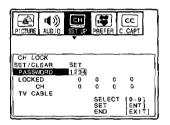




- 4. Press ◀ or ▶ to display the CH LOCK menu. SET/CLEAR will be highlighted.
- 5. Press **◄** or **▶** to highlight SET.



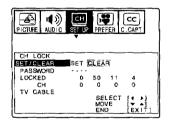
- 6. Press ▼ to highlight PASSWORD.
- 7. Use the Channel Number buttons (0-9) to enter your four-digit password. Be sure to enter a number that is easy to remember. Press ENTER.



- 8. Press EXIT to clear the screen.
- 9. Repeat steps 1 through 7 for other channels.
- 10. Select another channel before turning off the TV.

To unlock channels:

- 1. Press MENU, then press ◀ or ▶ until the SET UP menu appears.
- 2. Press ▲ or ▼ to highlight CH LOCK.
- 3. Press ◀ or ▶ to display the CH LOCK menu. SET/CLEAR will be highlighted.
- 4. Press ◀ or ▶ to highlight CLEAR.

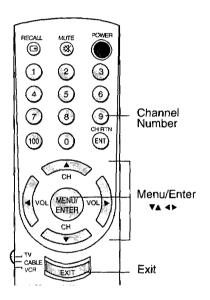


- 5. Press ▼ to highlight PASSWORD.
- 6. Use the Channel Number buttons (0-9) to enter the four-digit password you used to lock out the channels. Press ENTER.

If you want to know which channels are locked out, select the CH LOCK menu.

Note:

The locking channels feature only allows one password. If you have used different passwords to lock out channels, the last one you enter is your current password. All the channels you have entered will remain locked, but you must use the new password to unlock them.



Note:

If you enter the wrong password, the message below appears. Enter the correct password.

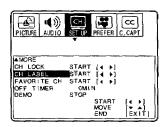
WRONG PASSWORD ENTER CORRECT ONE

Labeling channels

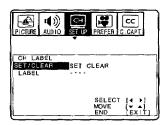
Channel labels will appear over the channel number display each time you turn on the TV, select a channel, or press the Recall button. You can choose any four characters to identify the channels.

To create channel labels:

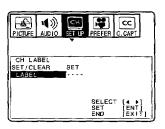
- 1. Select a channel you want to label.
- 2. Press MENU then press ◀ or ▶ until the SET UP menu appears.
- 3. Press ▲ or ▼ to highlight CH LABEL.



- 4. Press or to display the CH LABEL menu. SET/CLEAR will be highlighted.
- 5. Press ◀ or ▶ to highlight SET.



6. Press ▼ to highlight LABEL.



- Assign the label to the channel. Press

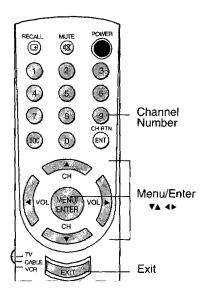
 or

 to enter a character
 in the first space. Press the button repeatedly until the character
 you want appears on the screen. Press ENTER.
- 8. Repeat step 7 to enter the rest of the characters.

 If you would like a blank space in the label name, you must choose an empty space from the list of characters. Otherwise, a dash will appear in that space.
- 9. Press EXIT to clear the screen.
- 10. Repeat steps 1 through 8 for other channels. You can assign up to 32 labels.

To erase channel labels:

- 1. Select a channel with a label.
- 2. Press MENU then press ◀ or ▶ until the SET UP menu appears.



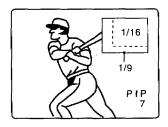
- 3. Press ▲ or ▼ to highlight CH LABEL.
- 4. Press ◀ or ▶ to display the CH LABEL menu. SET/CLEAR will be highlighted.
- 5. Press ◀ or ▶ to highlight CLEAR.
- 6. Press ENTER.
- 7. Repeat steps 1 through 6 to erase other channel labels.

Watching picture-in-picture (PIP)

The picture-in-picture (PIP) feature allows you to watch two pictures at the same time. The smaller picture can be a TV broadcast or come from an external source, such as a VCR.

To display a TV broadcast as a small picture:

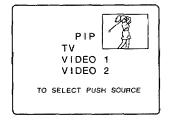
- 1. Turn on the TV and select the program you want to watch.
- 2. Press the PIP button once to display a small picture. A window 1/9 the size of the screen will appear. Press PIP a second time to display a 1/16 size window.



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

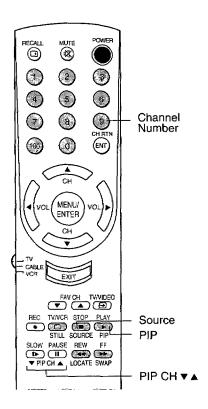
To display a picture from an external source as a small picture:

- Make sure you have connected the external source equipment properly. For more information, see the "Connecting your TV" on page 2.
- 2. Turn on the TV and select the program you want to watch.
- 3. Press the PIP button once to display a small picture. A window 1/9 the size of the screen will appear. Press PIP a second time to display a 1/16 size window.
- 4. Press SOURCE repeatedly to select the input source (VIDEO 1 or VIDEO 2) for the small picture. The selected source will be displayed in purple. ColorStream cannot be selected.



To turn PIP off:

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



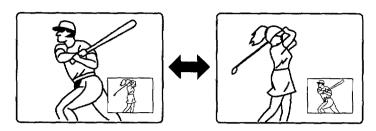
Note:

PIP cannot be turned on when the ColorStream input is being viewed.

You cannot display the signal sources input through the ANT-2 terminal as a small picture.

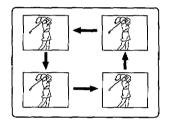
Switching the main and small pictures

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



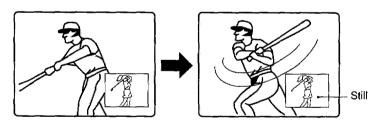
Changing the position of the small picture

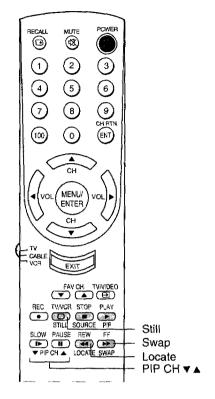
Press LOCATE repeatedly while you are watching a small picture. The display position of the small picture will change in the following order:



Freezing the small picture

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





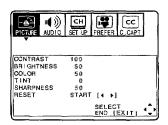
Adjusting the picture

Adjusting the picture quality

You can adjust the picture quality to your personal preferences, including the contrast, brightness, color, tint, and sharpness. The qualities you choose will be stored automatically in your TV's memory so you can recall them at any time.

To adjust the picture quality:

1. Press MENU, then press ◀ or ▶ to highlight the PICTURE menu.



- 2. Press ▲ or ▼ until the item you want to adjust is highlighted.
- 3. Press ◀ or ▶ to adjust the level.

The PICTURE items you have adjusted will be stored in the TV's memory automatically. You can keep these settings or choose preset options under the PREFERENCES menu. (See "Selecting the color temperature" and "Adjusting the picture preferences" on pages 21-22.)

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

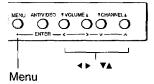
Selecting the color temperature

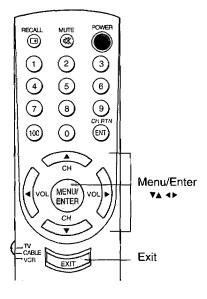
You can change the quality of the picture by selecting from three preset color temperatures: cool, medium, and warm.

To select the color temperature:

- 1. Press MENU, then press ◀ or ▶ to highlight the PREFERENCES menu.
- 2. Press ▲ or ▼ to highlight COLOR TEMPERATURE.
- 3. Press ◀ or ▶ to highlight the mode you want.

Mode	Picture Quality
cool	blueish
medium	neutral
warm	reddish





Note:

To reset the picture adjustments to the factory settings, select RESET from the PICTURE menu.

Adjusting the picture preferences

You can select your desired picture type from three preset picture modes: Normal, Theater, and Memory.

To select the picture preferences:

- Press MENU, then press ◀ or ▶ to highlight the PREFERENCES menu.
- 2. Press ▲ or ▼ to highlight PICTURE PREFERENCES.
- 3. Press ◀ or ▶ to highlight the mode you want.

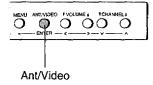
The table below describes the effects of the different preferences.

Mode	Picture Quality
normal	picture quality set at factory
theater	movie-like picture setting
memory	your personal preference*

^{*(}see "Adjusting the picture quality" on page 21)

Watching video input

You can use the TV/VIDEO button on the remote control or the ANT/VIDEO button on the TV to view a signal coming from other devices, such as VCRs or video disc players that may be connected to your TV. (See "Connecting your TV" on page 2.)



Displaying on-screen information

Press RECALL to display the following on-screen information:

- Antenna mode (when in TV mode)
- Channel number or VIDEO mode selected
- Channel label (if preset)
- · Stereo or SAP (second audio program) audio status

Setting the off-timer

You can set the TV so it turns off automatically.

To set the off-timer:

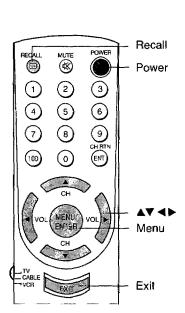
- 1. Press MENU, then press ◀ or ▶ to select the SET UP menu.
- 2. Press ▲ or ▼ to select the OFF TIMER.
- 3. Press ◀ or ▶ to select the off time (10-180 minutes, in 10-minute increments).
- 4. Press EXIT to exit the menu.

To cancel the off-timer:

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

Auto power off

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

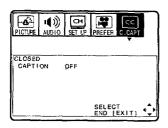


Using the closed caption feature

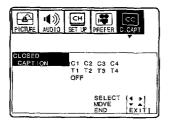
You have two options with the closed caption feature: captions or text. A caption is a printed version of the dialogue, narration and/or sound effects of a TV program. Text is information not related to the program that appears on half or full screen of the TV.

To view captions or text:

- 1. Select the desired program. The captioned programs are usually marked in your local TV listing by "CC."
- 2. Press MENU, then press or ▶ until the C.CAPT menu appears.



3. Press ▲ or ▼ to highlight CLOSED CAPTION.



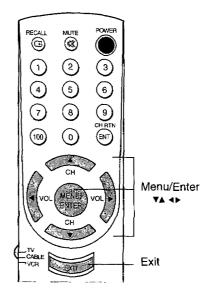
- 4. Press ◀ or ▶ to select the closed caption mode.
 - Select C1, C2, C3, or C4 to view captions. Select C1 for translation of the primary language in your area.



• Select T1, T2, T3, or T4 to view Text.



5. To turn off the closed-captioned feature, select OFF in step 4.



Note:

A closed caption 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 nonstandard

When you choose a closed captioned channel and the text mode, the text screen always appears. When there is no signal, however, the text screen will not display text characters.

Adjusting the sound

Muting the sound

Press MUTE to temporarily turn off the sound. While the sound is off, the screen will display the word MUTE in the lower right-hand corner. To restore the sound, press MUTE again.

When you press the MUTE button, you automatically activate the closed caption feature. To deactivate this feature, press the MUTE button again. This feature only works when the closed caption mode is set to off. See "Using the closed captioned feature" on page 23 for more information.

Selecting stereo/SAP broadcasts

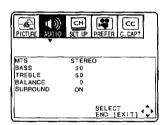
You can enjoy watching TV while you listen to high-fidelity stereo sound with the Multi-channel TV Sound (MTS) feature. MTS can also transmit a second audio program (SAP) containing a second language or other audio information.

When the TV receives a stereo or SAP broadcast, the word STEREO or SAP appears on the screen when the TV is on, you change the channel, or press the RECALL button.

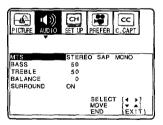
The MTS feature is not available while in the VIDEO mode.

To listen to stereo sound:

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



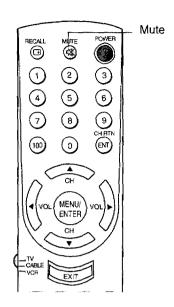
- 2. Press ▲ or ▼ to highlight MTS.
- 3. Press ◀ or ▶ to highlight STEREO.

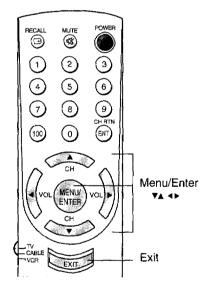


When you are watching a stereo broadcast, the word STEREO is displayed in yellow. You should leave your TV set to STEREO so you can automatically receive stereo or monaural sound, depending on the broadcast type. If the stereo sound is noisy, select MONO to reduce the noise. The word STEREO or SAP is displayed in yellow when the TV receives the signal, and in magenta when you have selected the feature.

To listen to a second audio program:

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



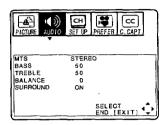


Adjusting the sound quality

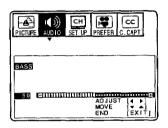
You can change the sound quality of your TV by adjusting the bass, treble, and balance.

To adjust the sound quality:

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



- 2. Press ▲ or ▼ to highlight the item you want to adjust.
- 3. Press ◀ or ▶ to adjust the level.



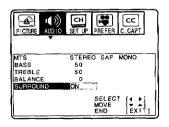
- Imakes the sound quality weaker or decreases the balance in the right channel, depending on the item selected.
- • makes the sound quality stronger or decreases the balance in the left channel, depending on the item selected.

Using the surround sound feature

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

To turn on the surround sound feature:

- 1. Select the STEREO mode following the steps under "Selecting stereo/SAP broadcasts" on page 24.
- 2. Press MENU, then press ◀ or ▶ until the AUDIO menu appears.
- 3. Press ▲ or ▼ to highlight SURROUND.
- 4. Press ◀ or ▶ to highlight ON.



Note:

To reset the audio adjustments to the factory settings, select RESET from the PICTURE menu.

To turn off the surround sound feature:

Choose OFF in step 4 above.

In general, you should leave your TV set to SURROUND so it can automatically produce surround stereo or monaural sound, depending on the broadcast type.

Viewing the demonstration mode

The demonstration mode (DEMO) is an option available on the SET UP menu. If you select this mode, the TV will demonstrate several of the TV's features.

To stop the demonstration mode:

Select DEMO STOP in the SET UP menu, or press the RECALL, EXIT, or POWER buttons.

Understanding the last mode memory feature

If the power is cut off while you are viewing the TV and the power is resupplied, the last mode memory feature will turn the TV on automatically.

If the power is going to be off for a long time or you are going to be away from home for a long time, remove the power plug from the wall outlet to prevent the TV from turning on in your absence.

Appendix

Cleaning and care

WARNING:

TV sets use high voltage. Do not try to remove the cabinet back. Refer servicing to qualified service technicians.

To clean the TV screen:

- 1. Unplug the TV 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 the TV screen and trim. Do not use too much water because water spills into the cabinet can cause damage to the TV.
- 3. Wipe off any excess moisture with a clean dry cloth.
- 4. Polish the cabinet with a quality furniture polish to maintain the finish and appearance of the cabinet.

Never use strong solvents such as thinner, benzene, or other chemicals on or near the cabinet. These chemicals can damage the finish of the cabinet.

Troubleshooting

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

Problem	Solution
TV will not turn on	 Make sure the power cord is plugged in, then press POWER. The remote control batteries may be dead. Replace the batteries.
No picture, no sound	• Check the antenna/cable connections.
110 picture, no ocume	
No sound, picture OK	 The sound may be muted. Press VOLUME.
	The station may have broadcast difficulties. Try another channel.
Poor sound, picture OK	• The station may have broadcast difficulties. Try another channel.
Poor picture, sound OK	Check the antenna connections.
	• The station may have broadcast difficulties. Try another channel.
	Adjust the PICTURE menu.
Poor reception of broadcast channels	The station may have broadcast difficulties. Try another channel.
	Check the antenna connections.
	 If you are using a VCR, make sure the TV/VCR button is set correctly.
Cannot receive above channel 13	Make sure TV/CABLE is set to TV mode.
Unable to select a certain channel	 The channel may be locked out with the channel lock feature, or erased with the add/erase feature.
Multiple images	The station may have broadcast difficulties. Try another channel.
. ~	Use a highly directional outdoor antenna.

Poor color or no color Adjust the TINT and/or COLOR in the PICTURE menu.

• The station may have broadcast difficulties. Try another channel.

• If you change the direction of the TV while it is turned on, the picture could suffer from color shading. If so, turn off the TV and allow it to cool down for several hours before turning it on again.

No stereo or SAP sound from a known MTS broadcast

Make sure the MTS feature is set properly.

The remote control does not operate

• Check if the TV/CABLE/VCR switch is properly set.

• There may be an obstruction between the remote control and the remote control sensor.

The remote control batteries may be dead. Replace the batteries.

Specifications

Television system Channel coverage NTSC standard VHF: 2 through 13 UHF: 14 through 69

Cable TV: mid band (A-8 through A-1, A through 1)

super band (J through W)

hyper band (AA through ZZ, AAA, BBB) ultra band (65 through 94, 100 through 125)

Power source

120 AC, 60 Hz

Power consumption

CX32H60: 103 W; CX36H60: 106 W

Audio power Speaker type

5 W + 5 W

Video/Audio terminals

2-3/8 x 4-3/4 inches (60 x 120 mm)

S-VIDEO INPUT

Y-INPUT: 1 V (p-p), 75 ohm, negative sync. C-INPUT: 0.286 V (p-p) (burst signal), 75 ohm

VIDEO/AUDIO INPUT

VIDEO: 1 V (p-p), 75 ohm, negative sync.

AUDIO: 150 mV (rms) (30% modulation equivalent, 47 k ohm)

VIDEO/AUDIO OUTPUT

VIDEO: 1 V (p-p), 75 ohm, negative sync.

AUDIO: 150 mV (rms) (30% modulation equivalent, 47 k ohm)

CX32H60:

CX36H60:

Width: 30-13/16 inches (783 mm)

34-9/16 inches (878 mm)

Height: 27-5/16 inches (694 mm)

30-1/2 inches (775 mm)

Depth: 23-1/8 inches (587 mm)

·25-3/4 inches (654 mm)

Weight

Dimensions

CX32H60: 123 lbs. (55.8 kg); CX36H60: 158 lbs. (71.7 kg)

Supplied accessories

Remote control with two size "AA" alkaline batteries

Optional TV stand

CX32H60: ST-3215; CX36H60: ST-3615

Design and specifications are subject to change without notice.

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-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-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.

Rental units

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

Commercial units

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

Owner's manual and registration card

You should read this owner's manual thoroughly before operating this product. You should complete and mail 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 registration card will not affect your rights under this warranty.

Your responsibility

The above warranties are subject to the following conditions:

- You must retain your bill of sale or provide other proof of purchase.
- All warranty servicing of this product must be made by an Authorized TACP/THI Service Station.
- These warranties are effective only if the product is purchased and operated in the U.S.A. or Puerto Rico.
- 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.
- 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 had the serial number removed, altered, defaced or rendered illegible.

How to obtain warranty service

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

- Call the TACP toll free number 1-800-631-3811 after you find a defective product or part to find the nearest Toshiba Authorized Service Station.
- 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 TACP/THI Authorized service station for repair and returned to your home at no cost to you.

In the Continental U.S.

If your TV requires service, call toll free: 1-800-631-3811



In Hawaii

If your TV requires service, call: (808) 521-5377

327 Kamakee Street, Honolulu, HI 96814

Limitations

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

No person, agent, distributor, dealer or company is authorized to change, modify or extend the terms of these warranties in any manner whatsoever. The time within which action must be commenced to enforce any obligation of TACP or THI arising under this warranty or under any 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 customers



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

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

Index

A	connecting
••	audio amplifier6
adding and erasing channels manually14	cable converter box3
adding channels to the TV's memory13	cable converter box and a VCR3
adjusting	camcorder 6
channel settings15	DVD with ColorStream and a VCR 4
picture preferences22	DVD/satellite receiver and a VCR4
picture quality21	TV2
sound24	VCR2
ANT/VIDEO button, using12	VCRs, two5
antenna input, selecting12	D
audio amplifier, connecting6	D
auto power off22	demonstration mode, viewing26
В	displaying on-screen information22
D	DVD with ColorStream and a VCR, connecting 4
batteries, installing into the remote control7	DVD/satellite receiver and a VCR, connecting 4
C	F
cable converter box and a VCR, connecting 3	favorite channels, programming15
cable converter box, connecting3	freezing the small picture (PIP)20
cable TV converter code table10	
camcorder, connecting 6	L
care and cleaning of your TV27	labeling channels18
changing	language, changing the on-screen display12
channels14	last mode memory feature, understanding26
on-screen display language12	location for TV, selecting1
position of the small picture (PIP)20	locking channels16
channel settings, adjusting15	locking charmore
channels	M
adding or erasing manually14	
adding to the TV's memory13	
changing14	
favorite, programming15	
labeling18	011 di 1101, dotting illiministration illiministration ==
locking16	or corocii dispidi idrigadgo, oriariging
programming automatically13	
switching between two15	
cleaning and care of your TV27	Р
closed caption feature, using23	picture
code table	adjusting 21
cable TV converter10	color temperature colorting 21
VCR	mentananan adiustina
color temperature, adjusting21	quality, adjusting21

picture-in-picture (PIP)	
changing the position of the small picture	20
freezing the small picture	
main and small pictures, switching	
watching	
power, auto off	
programming	
channels automatically	13
favorite channels	
remote control for use with a VCR or	
cable TV converter	8
R	
n	
remote control	
batteries, installing	7
learning about	11
preparing for use	7
programming for use with a VCR or	
a cable TV converter	8
using	7
using with a VCR or cable TV converter	7
S	
SAP, selecting	
satellite receiver/DVD and a VCR, connecting .	4
sound	
adjusting	
muting	
stereo/SAP broadcasts, selecting	
surround, using	25

specifications	28
stereo sound, selecting	24
surround sound, using	25
switching between two channels	
(channel return)	15
switching the main and small pictures (PIP)	20
т	
troubleshooting	27
TV	
connecting	2
location, selecting	1
setting up	12
V	
VCR and a cable converter box, connecting	3
VCR and a DVD with ColorStream, connecting	
VCR and a DVD/satellite receiver, connecting	
VCR, connecting	
VCRs, connecting two	
video input, watching	
W	
warranty	29
watching	
picture-in-picture (PIP)	19
video input	22

Toshiba America Consumer Products, Inc.

Head Office

82 Totowa Road Wayne, NJ 07470

Factory Service Centers

Northeast

82 Totowa Road Wayne, NJ 07470

Midwest

1010 Johnson Drive

Buffalo Grove, IL 60089-6900

West

5490 E. Francis Street Ontario, CA 91761

Southwest

1421 Champion Drive, Suite 304

Carrollton, TX 75006

Southeast

6115 Jimmy Carter Boulevard, Suite C2 Norcross, GA 30071-4607

Toshiba Hawaii, Inc.

Head Office

327 Kamakee Street Honolulu, HI 96814

Toshiba of Canada, Ltd.

Head Office

191 McNabb Street Markham, Ontario L3R 8H2 Canada

Service Centers

Toronto

191 McNabb Street

Markham, Ontario L3R 8H2

Canada

Tel: (905) 470-5400

Montreal

1643 North Service Road Trans-Canada Highway Dorval, Quebec H9P 1J1

Canada

Tel: (514) 856-4100

Vancouver

22171 Fraserwood Way Richmond, British Columbia V6W 1J5

Tel: (604) 303-2500

Manufactured by:

TOSHIBA

Toshiba America Consumer Products, Inc.

PRINTED IN USA (98-08)