

TOSHIBA

FILE NO. 020-9631

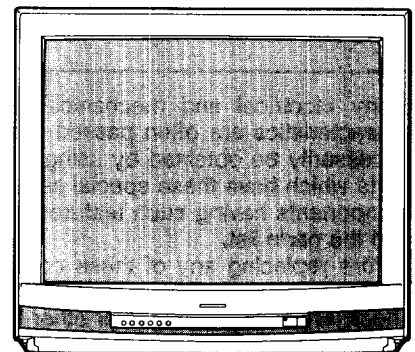
SERVICE MANUAL

COLOR TELEVISION

N5S Chassis

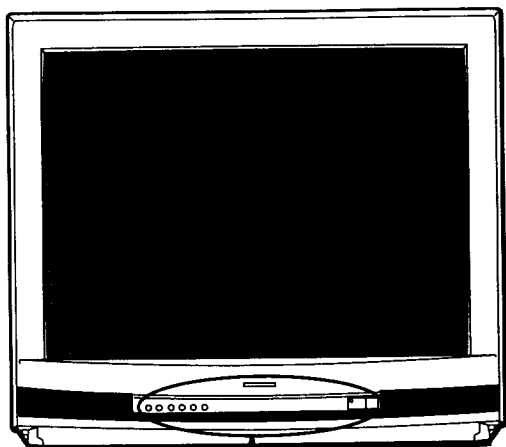
CX36F67

(TAC9606)

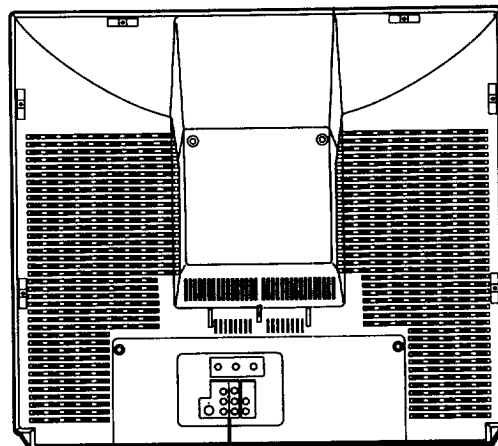


Location of Controls (TV Set)

Front view

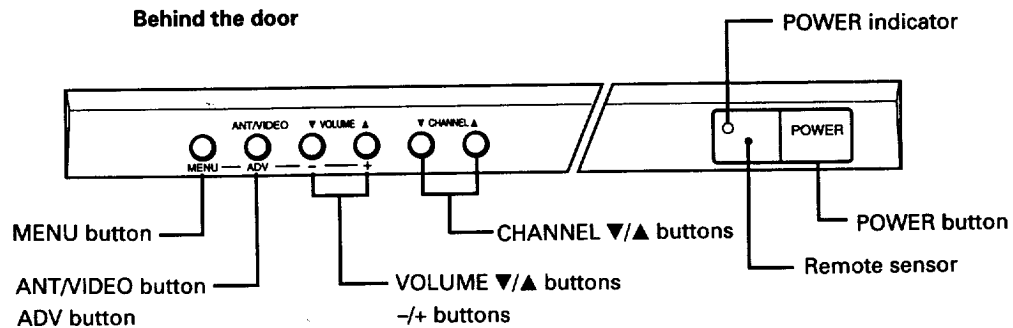


Rear view

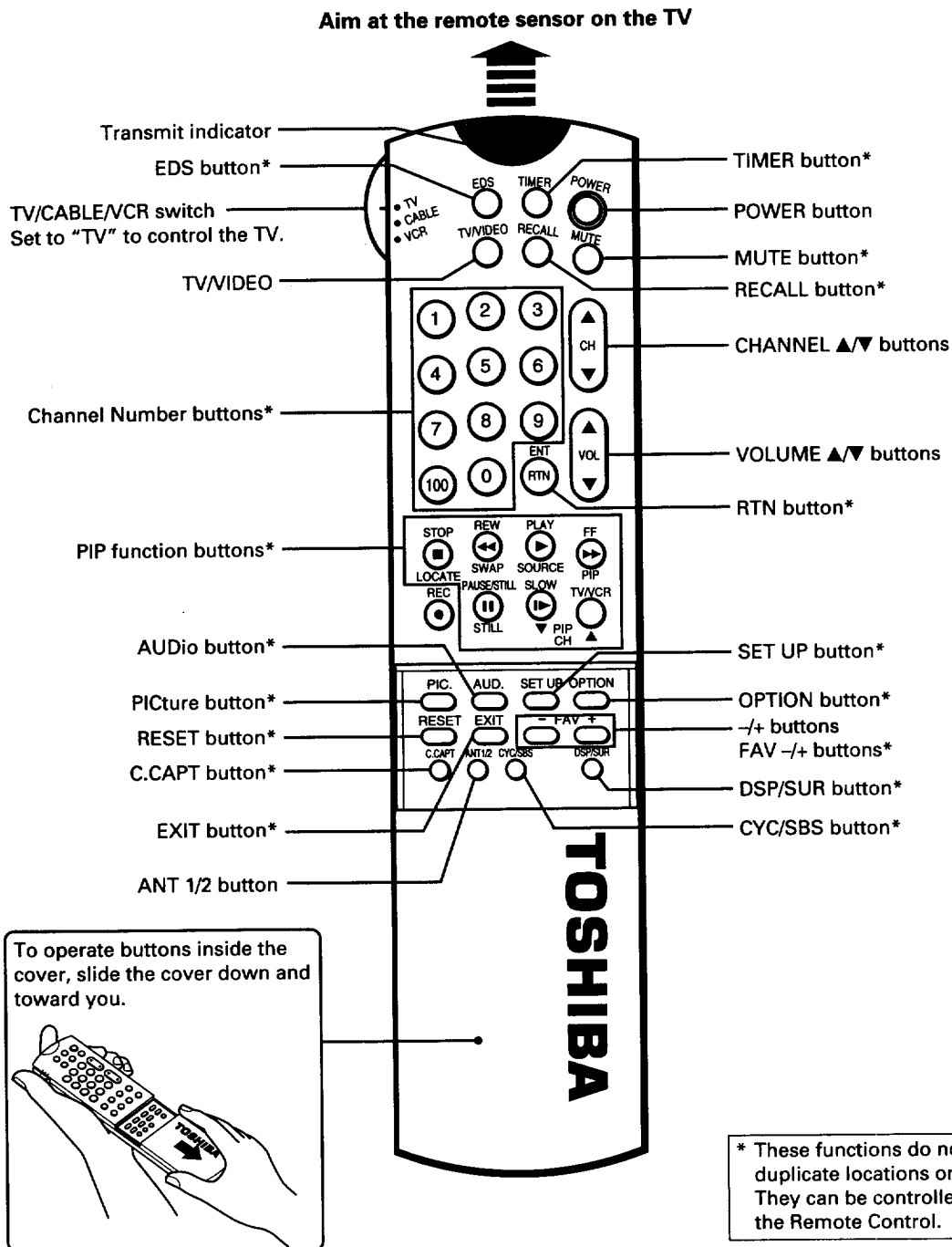


VIDEO/AUDIO terminals

Behind the door



Location of Controls (Remote Control)



Before Using the Remote Control

Introductions

With this Remote Control, you can operate your TV and most models of remote-controlled VCR's and Cable TV converters even if they are different brands. However, this Remote Control must be programmed to control other brands of VCR's and/or converters. If you will be using your TV set with a TOSHIBA VCR, your Remote Control has already been preprogrammed for you.

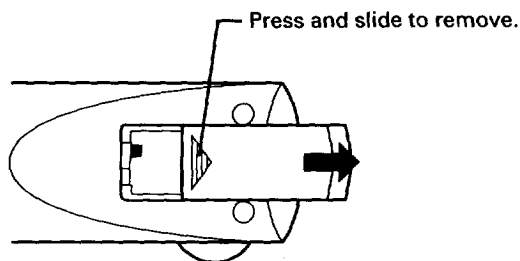
- Before attempting to operate your Remote Control, install the batteries according to the section "Installing and replacing batteries" shown below.
- For more detailed instructions, see the section "Programming the Remote Control".

Notes:

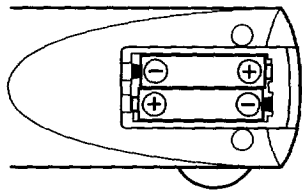
- After installing new batteries, the Remote Control will set itself to the codes for TOSHIBA's TV and VCR. If you are using the Remote Control to operate equipment that uses different codes, it will have to be reprogrammed for those codes.
- This Remote Control may have functions not available on the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

Installing and replacing batteries

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



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



- 3 Replace the battery cover until the lock snaps.

CAUTIONS:

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

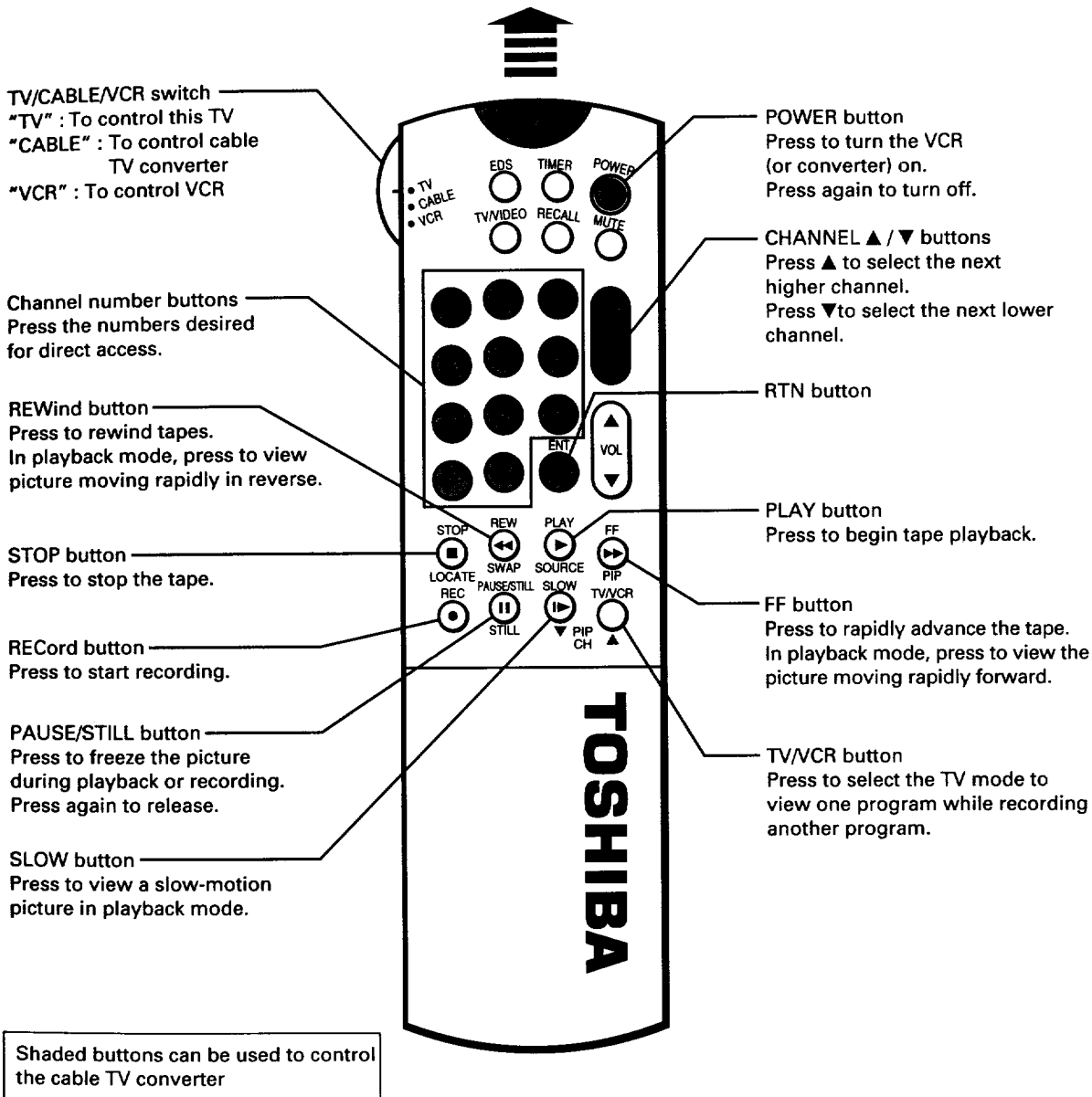
Tips for best operation

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

Using the Remote with VCR or Cable TV Converter

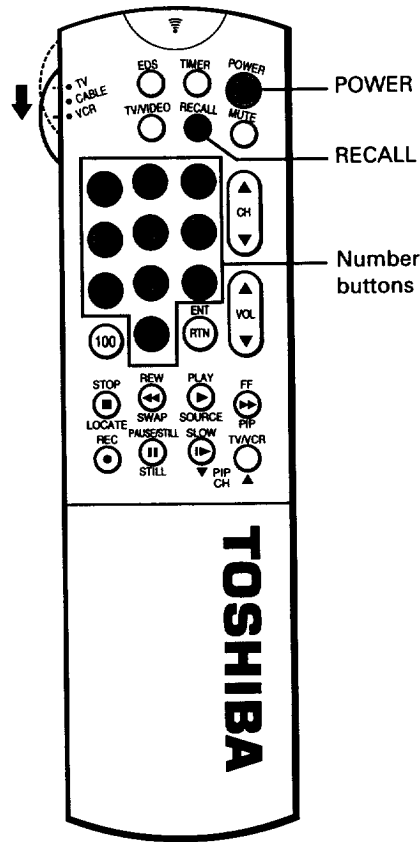
- To control a TOSHIBA VCR, first set the TV/CABLE/VCR switch to VCR. The buttons shown below will then control the VCR. The rest of the buttons operate the TV as usual.
If you have another brand of VCR, you can probably program the Remote Control to control it.
- To control a cable TV converter, this Remote Control must be programmed to recognize the brand of your converter.
Set the TV/CABLE/VCR switch to CABLE whenever you want to control the cable TV converter.

Aim at the VCR or cable TV converter



Programming the Remote Control

- This Remote Control is preprogrammed to operate TOSHIBA VCRs.
- To use VCRs other than TOSHIBA models (or Cable converter), perform the following procedures before operating.



Controlling other brands of VCR's and cable TV converters

- 1 Refer to the **"VCR code table"** (or **"Cable TV converter code table"**) on pages 9 and 10 to find the code number that corresponds to the brand name of your VCR (or your converter).

If more than one number is listed, try each one separately until you find the one that works.
- 2 Set the **TV/CABLE/VCR** switch to **"VCR"** (or **"CABLE"**).
- 3 Hold down **RECALL** while pressing the **Number** buttons for the three digit code number for your brand of VCR (or converter). The transmit indicator lights up for 1 second when the programming is completed.

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

- 4 Point the Remote Control at the VCR (or at the converter) and press **POWER** to test the code number.
 - If the right number was entered, the VCR (or the converter) should turn on.
 - If the VCR (or the converter) does not respond to the Remote Control, repeat steps 1 to 4 with another code number.

Notes:

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

For future reference, write the code you used.

VCR CODE: _____

CABLE CODE: _____

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

VCR code table

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

Programming the Remote Control (Continued)

Radiola 100
 Radix 056
 Randex 056
 RCA 054,061,079,084
 096,115,125,168
 221
 RCA Unified 079
 Realistic 019,054,056,065
 066,067,081,085
 123,259
 Rex 060
 Ricoh 053
 Roadstar 056,091,259,297
 Runco 058
 Saba 060
 Saisho 227,228
 Salora 062,065,125
 Samsung 064,259
 Sanky 058,067
 Sansui 060,086
 Sanyo 065,066,123,259
 SBR 100
 Schaub Lorenz 019,060
 Schneider 019,091,100,129
 Scott 062,064,140,203
 229,230,231
 Sears 054,056,061,065
 066,073,085,123
 SEG 259
 SEI 100
 Seleco 060
 Sentra 039
 Sharp 067,081
 Shintom 091
 Shogun 259
 Siemens 056,123
 Silva 056
 Singer 091
 Sinudyne 100
 Sontec 056
 Sony 051,052,053,054
 STS 061
 Sunstar 019
 Sylvania 019,054,062,100
 129
 Symphonic 019
 Tandy 019,123
 Tashiko 019
 Tatung 019,060,100
 Teac 019,060
 Technics 054,181
 Teknika 019,054,056,071
 Teleavia 060
 Telefunken 060,206
 Tenosal 091
 Tensai 019
 Thomson 060
 Thorn 060,123

TMK 227,259
 Toshiba 060,062,064,085
 229,231,385
 Totevision 056,259
 Triumph 227
 Unitech 259
 Universum 019,056,068,100
 125
 Vector 064
 Vector Research 057,059
 Victor 027,060,086
 Video Concepts 059,064,080
 Videosonic 259
 Wards 019,054,061,066
 067,081,091,168
 231,259
 XR-1000 019,054,091
 Yamaha 057,060
 Yamishi 091
 Yokan 091
 Yoko 039,259
 Zenith 052,053,058

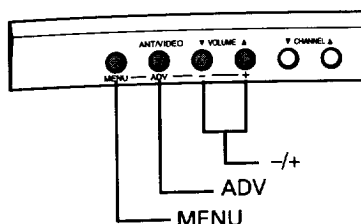
Popular
 Mechanics 419
 Pulsar 019
 PVP Stereo
 Visual Matrix 022
 RCA 040
 Regal 039,278,292
 Regency 021
 Rembrandt 030,089
 Runco 019
 Samsung 059,163
 Scientific Atlanta 025,027,036,296
 346
 Signal 034,059
 Signature 030
 SL Marx 059
 Sprucer 040
 Standard
 Components 174
 Starcom 022,034
 Stargate 034,059
 Starquest 034
 STS 175
 Teleview 059
 Tocom 031,032,078
 Toshiba 019
 Tusa 034
 Unika 172
 United Artists 026
 United Cable 022
 Universal 058,096,172,210
 Viewstar 046,079
 Zenith 019

Cable TV converter code table

BRAND NAME	CODE NUMBER
ABC	022,026,030,032 033,036
Archer	058,172
Century	172
Citizen	172
Colour Voice	044,050
Comtronics	059,079
Contec	038
Eastern	021
Garrard	172
Gemini	034,089
General	
Instrument	030
Hamlin	028,039,278,292
Hitachi	030
Hytex	026
Jasco	172
Jerrold	022,030,031,033 034,043,045,295
Macom	052
Magnavox	046
Memorex	019
Movie Time	175
NSC	089,175
Oak	026,038
Panasonic	040
Paragon	019
Philips	044,046,047,048 049,050,079,172
Pioneer	163

Menu Function (General Instructions)

We suggest you familiarize yourself with the procedure before using the Menu function.
To adjust any TV feature, the use of the Menu function is required. The adjustments that can be made to the TV appears on the screen.



MENU button (on TV)

Each time you press **MENU**, the Picture, Audio, Set up or Option menu on-screen display is selected in order, then press **ADV**.

Picture menu

CONTRAST|+
BRIGHTNESS|+
SHARPNESS|+
COLOR|+
TINT|+
RESET

TO SELECT ITEM PUSH ADV
TO CONTROL PUSH - +

Audio menu

MTS: |STR|SAP MONO
BASS|+
TREBLE|+
BALANCE|+
SPEAKERS: |ON|OFF

TO SELECT ITEM PUSH ADV
TO CONTROL PUSH - +

Option menu

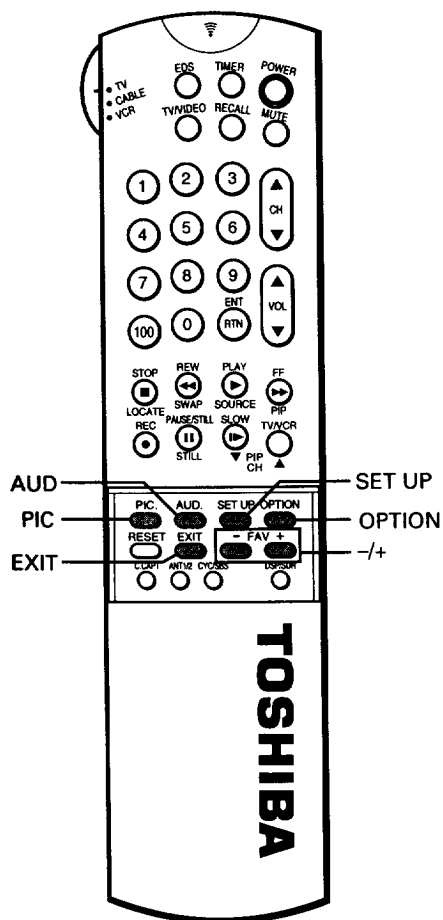
LANGUAGE: [ENGLISH] FRENCH
SPANISH
DEMO: START [STOP]
C. CAPT: C1 C2 C3 C4 T1
T2 T3 T4 [OFF]
CH LABEL

TO SELECT ITEM PUSH ADV
TO CONTROL PUSH - +

Setup menu

TIMER: 0 MIN
TV/CABLE: [TV] STD HRC 1RC
CH PROGRAM
ADD/ERASE: [ADD] ERASE
CH LOCK
FAVORITE CH

TO SELECT ITEM PUSH ADV
TO CONTROL PUSH - +



ADV button (on TV)

Use **ADV** after you have selected the on-screen menu you want to adjust with the **MENU** button.

Each time you press **ADV**, the function to be adjusted will be selected in order.

The selected function will be displayed in magenta.

-/+ buttons (on TV and on Remote)

Use -/+ to adjust the function you have selected with the **ADV** button or any of the four menu buttons (**PIC**, **AUD**, **SET UP** or **OPTION**: see the next page).

Notes:

- The **ADV** button on the TV will function as the **ANT/VIDEO** button when no menu display is on the screen.
- The -/+ buttons on the TV will function as the **VOLUME** ▼/▲ buttons when no menu display is on the screen.
- The -/+ buttons on the Remote Control will function as the **FAV** -/+ buttons when no menu display is on the screen.

Menu Function (General Instructions) (Continued)

PIC (Picture) button (on Remote)

Press **PIC** repeatedly until one of the Picture menu functions you want to adjust is selected.

The selected function will be displayed in magenta, then press **-/+** to adjust the setting.

```
CONTRAST  -.....|+
BRIGHTNESS -.....|+
SHARPNESS  -.....|+
COLOR      -.....|+
TINT       -.....|+
RESET

TO SELECT ITEM PUSH PIC
TO CONTROL PUSH - +
```

AUD (Audio) button (on Remote)

Press **AUD** repeatedly until one of the Audio menu functions you want to adjust is selected.

The selected function will be displayed in magenta, then press **-/+** to adjust the setting.

```
MTS:      [STR]SAP MONO
BASS       -.....|+
TREBLE     -.....|+
BALANCE    -.....|+
SPEAKERS:  [ON]OFF

TO SELECT ITEM PUSH AUD
TO CONTROL PUSH - +
```

SET UP button (on Remote)

Press **SET UP** repeatedly until one of the Set up menu functions you want to adjust is selected.

The selected function will be displayed in magenta, then press **-/+** to adjust the setting.

```
TIMER:      0 MIN
TV/CABLE:   [TV]STD HRC IRC
CH PROGRAM  -.....|+
ADD/ERASE:  [ADD]ERASE
CH LOCK     -.....|+
FAVORITE CH -.....|+

TO SELECT ITEM PUSH SET UP
TO CONTROL PUSH - +
```

OPTION button (on Remote)

Press **OPTION** repeatedly until one of the Option menu functions you want to adjust is selected.

The selected function will be displayed in magenta, then press **-/+** to adjust the setting.

```
LANGUAGE: [ENGLISH]FRENCH
          SPANISH
DEMO:     START[STOP]
C.CAPT:   C1 C2 C3 C4 T1
          T2 T3 T4[OFF]
CH LABEL  -.....|+

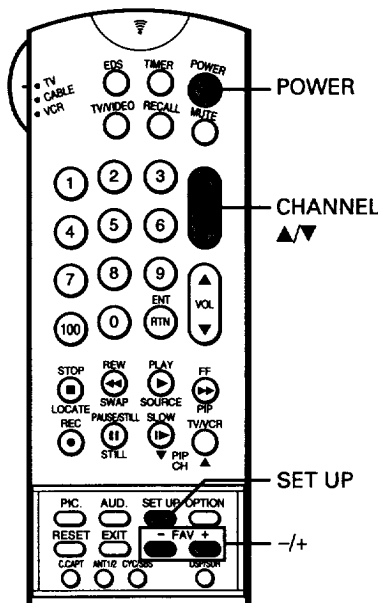
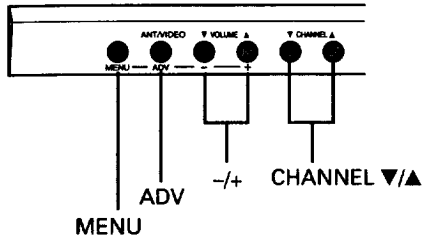
TO SELECT ITEM PUSH OPTION
TO CONTROL PUSH - +
```

EXIT button (on Remote)

The above four menu displays will automatically disappear from the screen if no control has been operated for about 15 seconds, and all other menu displays also disappear after about 6 seconds. If you want to clear the screen of all on-screen displays instantly, press **EXIT**.

Programming Channel Memory

The channel memory is the list of TV channel numbers your TV will stop on when you press the CHANNEL ▲ or ▼ button. **First, use the TV/CABLE and CH PROGRAM functions to preset all active channels in your area automatically.** If necessary, arrange the preset channels with the ADD/ERASE functions so that you can tune into only desired channels. **Note:** If you utilize both ANT-1 and ANT-2 terminals, perform programming channels for each input source.



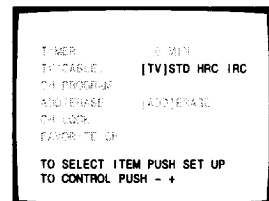
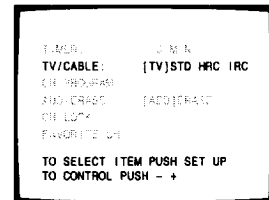
* This TV receives the following TV signals:

1. **TV:** TV broadcasts signals. (VHF channels 2 through 13 and UHF channels 14 through 69)
2. **STD CABLE:** Standard cable TV signals.
3. **HRC CABLE:** Harmonic Related Carrier cable TV signals.
4. **IRC CABLE:** Incremental Related Carrier cable TV signals.

If you are not sure what CABLE system they are using, consult your local cable company.

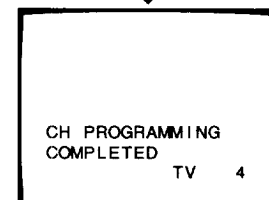
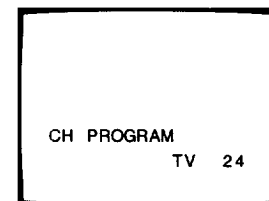
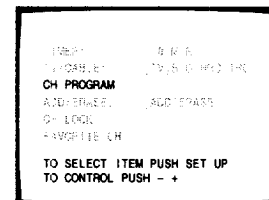
TV/CABLE function

- 1 Press **POWER** to turn on the TV.
- 2 Press **SET UP** on the Remote Control (or **MENU** on the TV) to display the Setup menu.
- 3 Press **SET UP** repeatedly (or **ADV** on the TV) until "TV/CABLE" is displayed in magenta.
- 4 Press - or + until the mode that corresponds to your TV signal system is displayed in magenta. Each time you press the button, the TV*, STD*, HRC* or IRC* mode will be selected in order.



CH PROGRAM function

- 1 Select "CH PROGRAM" following steps 2 and 3 above.
- 2 Press - or + to start channel programming. The TV will automatically cycle through all the TV or CABLE channels on the mode selected by the TV/CABLE function, and store active channels in the channel memory.
- 3 When channel programming is complete, you will see the message at the right.
- 4 Press **CHANNEL ▲** or **▼** to make sure the channel programming has been done properly.



Programming Channel Memory (Continued)

ADD/ERASE function

After performing the CH PROGRAM function, you can add or erase specific channels.

1 Select the channel you want to erase using the **CHANNEL ▲** or **▼** button, or select the channel you want to add using the **Channel Number** buttons.

2 Press **SET UP** on the Remote Control (or **MENU** on the TV) to display the Setup menu.

```

TIMER:          0 MIN
TV/CABLE:      [TV]STD HRC IRC
CH PROGRAM
ADD/ERASE:     [ADD]ERASE
CH LOCK
FAVORITE CH
TO SELECT ITEM PUSH SET UP
TO CONTROL PUSH - +
    
```

3 Press **SET UP** repeatedly (or **ADV** on the TV) until "ADD/ERASE" is displayed in magenta.

```

TIMER:          0 MIN
TV/CABLE:      [TV]STD HRC IRC
CH PROGRAM
ADD/ERASE:     ADD [ERASE]
CH LOCK
FAVORITE CH
TO SELECT ITEM PUSH SET UP
TO CONTROL PUSH - +
    
```

4 Press - or + :

To erase the channel

Press the button until "ERASE" is displayed in magenta indicating that the channel has been erased from the memory.

To add the channel

Press the button until "ADD" is displayed in magenta indicating that the channel has been memorized.

```

TIMER:          0 MIN
TV/CABLE:      [TV]STD HRC IRC
CH PROGRAM
ADD/ERASE:     [ADD]ERASE
CH LOCK
FAVORITE CH
TO SELECT ITEM PUSH SET UP
TO CONTROL PUSH - +
    
```

5 Repeat steps 1 to 4 for other channels.

You have now completed the channel programming.

CABLE channel reference chart

Number on this TV	1	5	6	14	15	16	.....	34	35	36	37	38	.....	60	61	62	63	64	65	66
Corresponding CABLE channel	A-8	5(A-7)	6(A-6)	A	B	C	.....	U	V	W	AA	BB	.....	XX	YY	ZZ	AAA	BBB	65	66
Number on this TV	67	68	69	.....	92	93	94	95	96	97	98	99	100	101	102	.....	123	124	125	
Corresponding CABLE channel	67	68	69	.....	92	93	94	A-5	A-4	A-3	A-2	A-1	100	101	102	.....	123	124	125	

The above chart is typical of many cable system channel allocations. If in doubt, consult your cable company.