TOSHIBA

Owner's Manual
Color Television

29CZ5DE
29CZ6DA
29CZ6TES

Owner's Record
You will find the model number and serial number on the back of the TV. Record these numbers in the spaces provided below. Refer to them whenever you call upon your TOSHIBA dealer regarding this product.
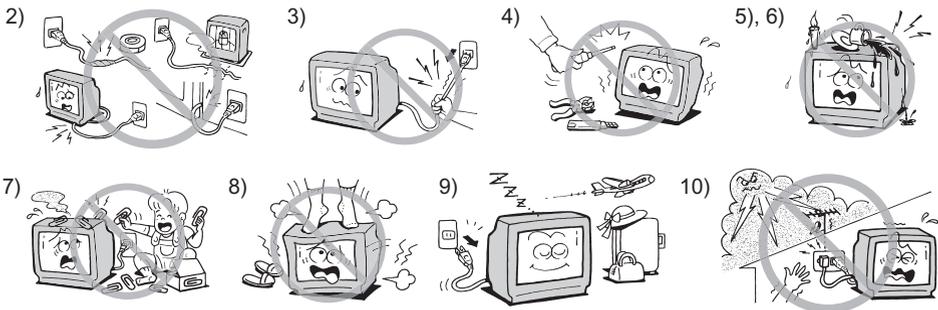
Model number:

Serial number:

SAFETY INSTRUCTIONS AND MAINTENANCE

For safety

1) If and when anything abnormal occurs, unplug the power cord from the outlet immediately. Make sure that the smoke has stopped, then contact for a service.
Continual usage of TV in such condition may cause a fire or an electric shock.

2) Do not cut, break, heat, modify, twist, bunch up or bent the cord or apply excessive force or tension to it, as this may cause damage, fire or electric shock. Contact a service technician if the power cord is damaged.

3) Do not pull on the power cord when removing the plug from the wall outlet. Always hold the plug firmly when removing it. If the power cord is yanked, the cord may become damaged and fire or electric shock may occur.

4) Do not repair, modify or disassemble the TV by yourself. Let qualified technicians check and adjust your TV. To avoid electrical shock or fire, never modify the TV.

5) Do not place hot objects or naked flame sources, such as lighted candles or nightlights, on or close to the TV. High temperature can melt plastic and lead to fires.

6) The TV shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the TV. This may cause a fire or electric shock.

7) Do not let metallic materials and/or combustibles get in the TV. These items may cause a fire or an electric shock. Be especially observant when children are present.

8) Do not stand or climb on the TV. The TV is dangerous if it is broken or if it has fallen down. Be especially observant when children are present.

9) When the TV will not be used for a long period of time, unplug the cord.

10) During lightning storm, do not touch any part of the TV, including the power cord and the antenna lead-in-wire. You may suffer an electric shock.
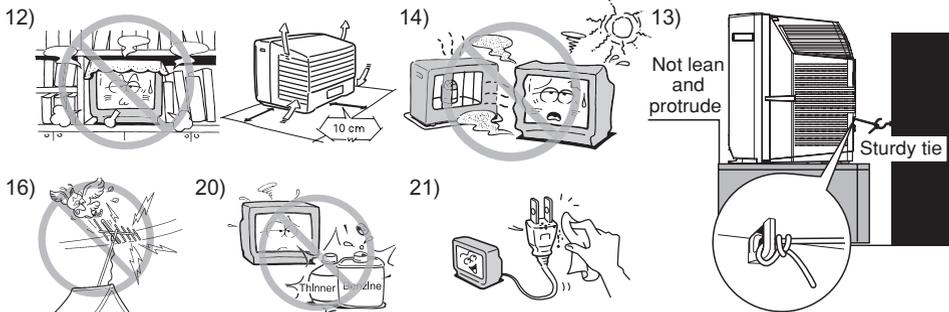

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Notes on installation and on use

11) Place the TV on a horizontal, stable surface. Avoid location subject to vibration. Do not place the TV on its side or back. Otherwise, the TV may drop or fall down which may cause injury or damage.

12) Do not block the ventilation holes. Place the TV at least 10 cm away from the walls for good air circulation. The inside of this TV will overheat if the ventilation holes are sealed, which may result in a fire.

13) Take measures to prevent the TV from falling over. If not, the TV may lean or fall over and cause an injury. When moving, watch out for the ties.

14) Avoid placing the TV in direct sunshine, near a heating source or places with a high temperature, such as in a closed car. A fire may result when the inside temperature increases.

15) Also avoid the placing the TV on dusty or damp places. This may cause a fire or electric shock.

16) Set up the outdoor antenna away from high ways, power lines and neon signs. If the antenna falls down or drops, it may cause injury or electric shock accidents.
The antenna should be checked and replaced periodically.

17) Do not jolt the TV, resulting in the TV falling over, dropping or causing an injury.

18) Keep magnets, electric clocks, speakers, etc. away from the TV.

19) Do not spray volatile compounds such as insecticide on the cabinet. This may cause a discoloration or damage of the cabinet.

Notes on cleaning

20) Before cleaning, unplug the power cord.
Clean the cabinet with a soft and dry cloth.
Do not use benzine, thinner, etc. to clean the TV.

21) Sometimes disconnect the power plug from the outlet and check it.
If dust has collected on the power plug connectors, clean off the dust.
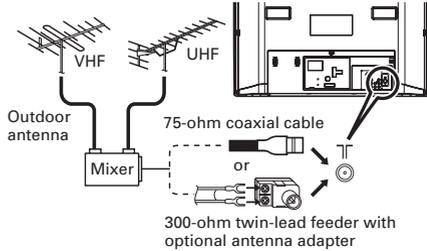

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Exemptions
- Toshiba is not liable for any damage caused by natural disaster (such as thunder, earthquake),fire, acts by third parties, accidents, misuse, or uses in other improper conditions.
- Toshiba is not liable for incidental damages (such as profit loss or interruption in business, modification or erasure of record data, etc.) caused by use or inability to use of product.
- Toshiba is not liable for any damage caused by neglect of the instructions described in the owner's manual.
- Toshiba is not liable for any damage caused by misuse or malfunction through simultaneous use of this product and the connected equipment.

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GETTING STARTED

1 Connect the antenna to ⊤ at the rear of the TV.

VHF   UHF

Outdoor antenna

75-ohm coaxial cable

Mixer   or   ⊤

300-ohm twin-lead feeder with optional antenna adapter

2 Connect the power cord to an electrical outlet with standard household power within the range of ~110-240V, 50/60Hz.

Notes
- Do not connect the power cord until all your equipments have been connected.
- The antenna cables should not be bundled with the power cord and the like.

3 Insert the batteries into the remote control.

Operating range

30° 5m 30°

Remote sensor
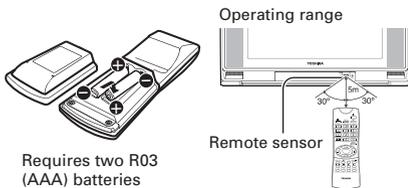
Requires two R03 (AAA) batteries

- If the remote control does not operate correctly, if the operating range becomes reduced, replace both batteries with new ones.
- When the remote control will not used for a long period of time or when the batteries are worn out, remove the batteries to prevent leakage.
- Do not drop, dampen or disassemble the remote control.

Cautions
- Do not dispose batteries into fire. Dispose batteries into the designated disposal areas according to the local regulations.
- Do not mix battery types or combine used batteries with new ones.

4 Push the ① (Power switch) until it clicks to turn on the power.

Refer to page 8 for details on power on and off.

5 Preset the channels automatically (ASM function).

Use remote control for this operation. The buttons on the TV with similar name may also be use.

1 Select the starting position for channel to be preset. Press the Number buttons **(-/--, 0~9)** or **CH ▲/▼**.

1

2 Set the correct broadcast system for your region. Press **MENU** and then ◢-/+ to highlight the "▣ SET UP" icon.

MENU

SETUP
LANGUAGE   ENGLISH
COLOR MODE   AUTO
SOUND MODE   B/G
SKIP   OFF
BLUE SCREEN   ON
TEXT   FAST

SELECT ▲/▼   MENU -/+   BACK ⊡
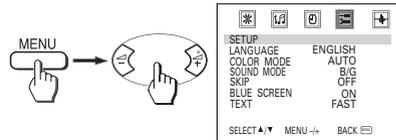
Confirm "COLOR MODE" is set to "AUTO" and "SOUND MODE" is set to proper system. (Refer to the table on page 9.) If not, press **CH ▲/▼** to select "COLOR MODE" or "SOUND MODE, press ◢-/+ and then **CH ▲/▼** to set each proper system.

3 Press **MENU** and then ◢-/+ to highlight the "➕ TUNING" icon. Select "ASM", then press ◢+ to start the search. When the TV screen returns to the start position, the procedure is complete.

MENU
CH ▲
CH ▼

TUNING
MFT   (-)(+)
AFT   OFF
ASM   (+)
SEARCH   (-)(+)
POSITION   P001
MEMORY   (+)

SELECT ▲/▼   ADJUST -/+   BACK ⊡
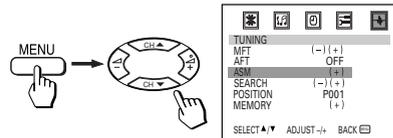
6 Press ◢-/+ to adjust the sound volume.

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NAMES AND FUNCTIONS OF CONTROLS

For details on the use of each control, refer to the page numbers in [ ] brackets.

TV Front and Remote control

Open the lid

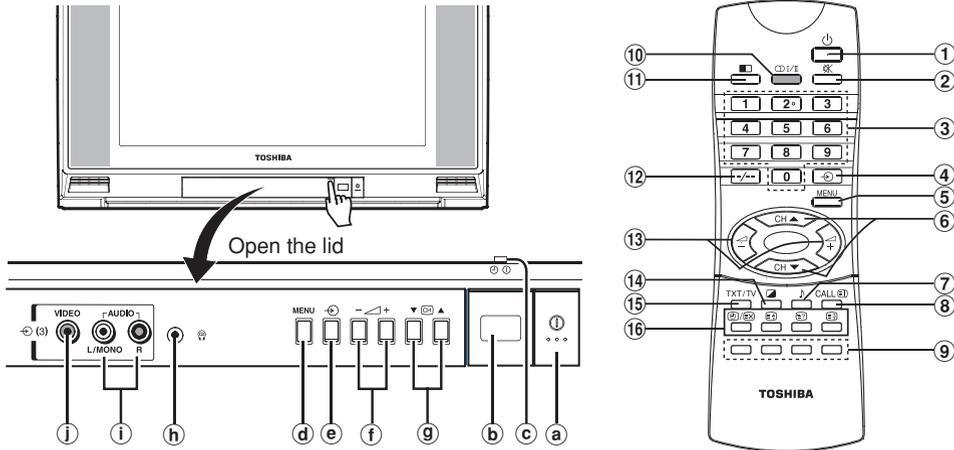| TV			Remote Control		
ⓐ	①	Main power on/off [8]	①	⏻	Power on/standby [8]	⑩	⏺I/II	Stereo/bilingual selection [11] Only available for 29CZ5DE and 29CZ6DA.
ⓑ		Remote sensor [5]	②	🔇	Sound Mute, press again or ⏴-/+ to restore the sound.			
ⓒ	①	Power indicator (red) [8]				⑪	▯▮	Double-window on/off [17]
	⏱	Timer-ON indicator (green) [12]	③	0~9	Number buttons [8]	⑫	-/--	Digit selection [8]
ⓓ	MENU	Turn on menu display [7]	④	⊷	Input source selection [18], Timer-ON position setting [12] Switch the active teletext page of the double window mode [17]	⑬	⏴-/+	Volume down/up [5], Menu selection or item adjust [7]
ⓔ	⊷	Input source selection [18]				⑭	◰	Picture menu [9]
ⓕ	-⏴+	Volume down/up [5], Menu selection or item adjust [7]				⑮	TXT/TV	Teletext/TV selection [15]
			⑤	MENU	Turn on menu display [7]	⑯		Teletext functions [15]
ⓖ	▼CH▲	Channel down/up [8], Menu item selection [7]	⑥	CH ▲/▼	Channel up/down [8], Menu item selection [7]		▣/⊠	– Time display, To select a page while viewing a normal picture
ⓗ	🎧	Stereo headphones jack (Ø3.5mm) for private listening. The sound from the speakers will be cut off automatically.	⑦	♪	Sound menu [10]		⊟	– To enlarge teletext display size
			⑧	CALL/▣	On-screen on/off [8], Turn off the menu [8], Teletext initial/index [15]		⊡	– To reveal concealed text
ⓘ	AUDIO	Audio input terminals [18]	⑨		Teletext colored buttons Red/Green/Yellow/Blue [16]		▤	– To hold a wanted page
ⓙ	VIDEO	Video input terminal [18]						

Note: The shaded button is not available for 29CZ6TES. If you press the button, "MODE NOT AVAILABLE" will appear on the screen.

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MENU FUNCTION

- Before watching the TV, please familiarize yourself the method to use the menu function of this TV.
- Instructions in this manual are based on using the remote control.
  Press the **MENU** to display menu, then press the ⊿-/+ to select menu.
  Press the **CH ▲/▼** to select an item and then press the ⊿-/+ to select or adjust setting.
- This manual shows the On-Screen Display of 29CZ5DE model.

Menu display chart
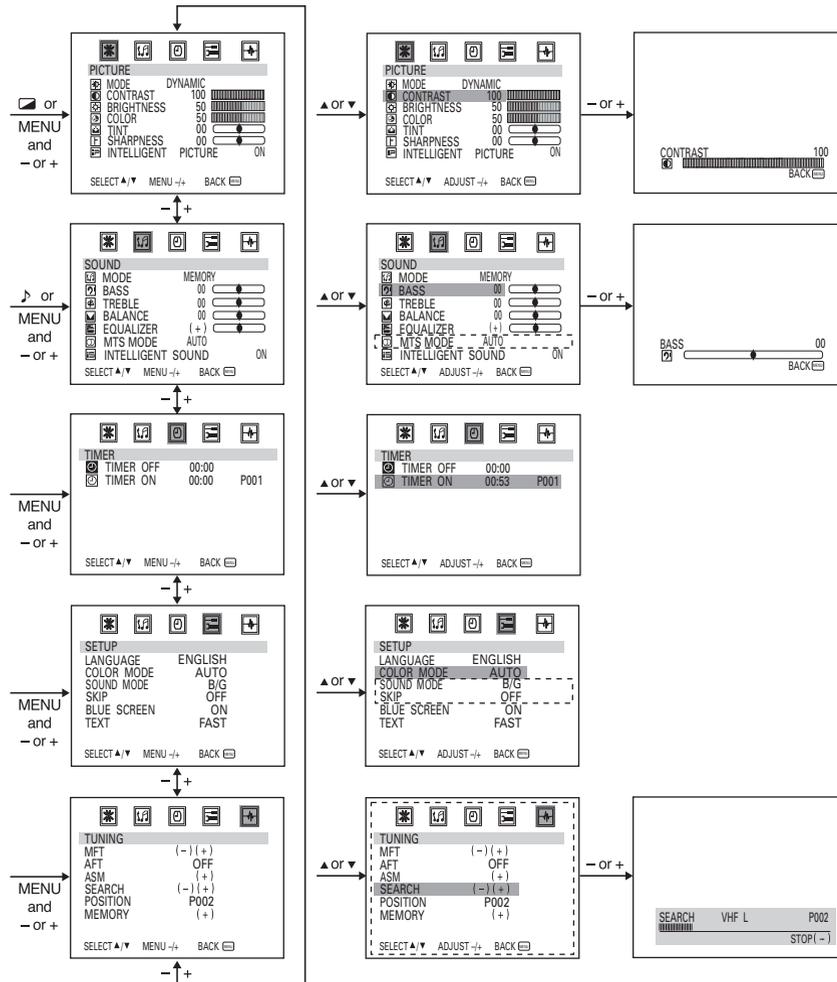
Notes
- If you do not make a selection within 15 seconds, the menu display disappears automatically.
- To return to the previous menu, press **MENU**.
- The ⌐ ⌐ area on the SOUND, SET UP and TUNING menu display does not appear when video input source is selected.
- MTS MODE will not display on the SOUND menu for 29CZ6TES model.

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BASIC OPERATIONS

To turn TV on/off

1 Press the ① power switch on the TV. The ① red power indicator lights up.

2 If no picture appears, it is in the standby mode, press the ⏻ button on the remote control.

Notes

- You can also turn on the TV by pressing one of the Number buttons (**0~9**) on the remote control instead of the ⏻ button. By pressing the number (one digit only) where the channel you want to watch is preset, you can turn on the TV and channel selection at the same time.

- When the remote control is not at hand, you can turn on the TV by pressing the −⟳, −◿+ or ▼CH▲ button on the TV.

3 To switch to the standby mode, press the ⏻ button.

4 To turn off the main power, press the ① power switch.

Auto Power Off

The TV will automatically turn itself off after about 15 minutes if it is tuned to a vacant channel, TV broadcasts for a day are finished, or the signal is interrupted for any reason. This feature does not work in video input mode.

Selecting the channels

- Press the -/-- button to select the input digit of position number and then press **0~9** to select the number. (e.g., for 25, press -/-- to display "--", then **2** and **5**)

--	→	25

- Press ▼ to select lower position number, ▲ to select higher ones.

Note

When a TV channel with teletext service is selected, a black bar with channel indication will display on the screen for a second. However, abnormal indication may appear depending on the received signal. This is not a malfunction of the TV.

Selecting the menu language

Choose from five different languages (English, Mandarin, Malay, Vietnamese and Thai), select to display all on-screen Menus in your language of choice.

1 Press **MENU** and then ◿-/+ to highlight the "▤ SETUP" icon.

2 Press **CH ▲/▼** to select "LANGUAGE", then press ◿-/+ to enter to LANGUAGE menu mode.

3 Press **CH ▲/▼** and then ◿-/+ to select the desired language.

```
 ✳  🎵  🔘  ▤  ✛
SETUP
LANGUAGE      ENGLISH         LANGUAGE
COLOR MODE    AUTO            ENGLISH
SOUND MODE    D/K             中文
SKIP          OFF             MELAYU
BLUE SCREEN   ON              TIẾNG VIỆT
TEXT          FAST            ภาษาไทย

SELECT ▲/▼  ADJUST -/+  BACK ▭   SELECT ▲/▼  ADJUST -/+  BACK ▭
```
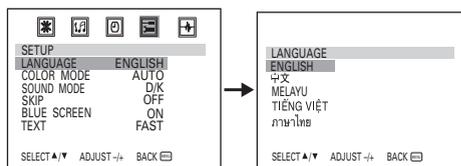
To display on-screen information

Press **CALL/▤** to display the position number or video input mode selected (−⟳1, −⟳2, DVD or −⟳3) and the Mono/Stereo/Bilingual* audio status. To erase the display, press **CALL/▤** again.

25	Position number or video input mode
⬭	Mono/Stereo/Bilingual audio status*
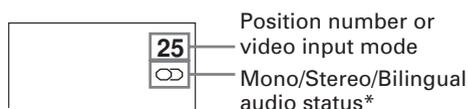
 (*Mono/Stereo/Bilingual symbol only appears on 29CZ5DE and 29CZ6DA model)

The **CALL/▤** button can also be used to erase the on-screen menu display.

To activate Blue screen

With the blue screen function ON, the TV screen will automatically turn blue and the sound will be muted when no TV signal is received.

1 Press **MENU** and then ◿-/+ to highlight the "▤ SETUP" icon.

2 Press **CH ▲/▼** to select "BLUE SCREEN", then press ◿-/+ to set ON or OFF.

8

PICTURE AND SOUND ADJUSTMENT

Color and Sound system

If the color or sound of a certain channel is abnormal

The color or sound system setting may be incorrect.

Press **MENU** and then ⊿ -/+ to highlight the "⬚ SETUP" icon.

```
┌─────────────────────────────┐
│  ✳  🗓  ⓪  ⬚  ➕            │
│ ┌─────────────────────────┐ │
│ │ SETUP                   │ │
│ │ LANGUAGE       ENGLISH   │ │
│ │ COLOR MODE     AUTO      │ │
│ │ SOUND MODE     D/K       │ │
│ │ SKIP           OFF       │ │
│ │ BLUE SCREEN    ON        │ │
│ │ TEXT           FAST      │ │
│ └─────────────────────────┘ │
│  SELECT ▲/▼  MENU -/+  BACK ⬚│
└─────────────────────────────┘
```

Press **CH ▲/▼** to select the following items:

COLOR MODE system setting

Press ⊿ -/+ to enter COLOR MODE selection. Press **CH ▲/▼** and then ⊿ -/+ to select the appropriate color system. AUTO, PAL, SECAM, NTSC4.43 or NTSC3.58 can be selected.

SOUND MODE system setting

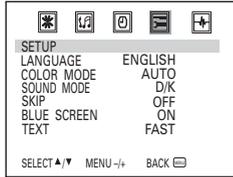If the picture or sound is abnormal when receiving programs through the ⊤ (antenna) terminal, the sound system setting may be incorrect. Press ⊿ -/+ to enter SOUND MODE selection. Press **CH ▲/▼** and then ⊿ -/+ to select the appropriate sound system according to the broadcast system of your region. Refer to the table below. B/G, I, D/K or M can be selected.

Picture quality adjustment

To access the ✳ PICTURE menu

Press ⬚ for direct selection or press **MENU** and then ⊿ -/+ to highlight the "✳ PICTURE" icon.

```
┌─────────────────────────────┐
│  ✳  🗓  ⓪  ⬚  ➕            │
│ ┌─────────────────────────┐ │
│ │ PICTURE                 │ │
│ │ ✳ MODE        DYNAMIC    │ │
│ │ ⓪ CONTRAST    100 ▮▮▮▮▮  │ │
│ │ ☀ BRIGHTNESS  50  ▮▮▮    │ │
│ │ 🎨 COLOR       50  ▮▮▮    │ │
│ │ 📺 TINT        00  ▭      │ │
│ │ 📺 SHARPNESS   00  ▭      │ │
│ │ 🗓 INTELLIGENT PICTURE ON │ │
│ └─────────────────────────┘ │
│  SELECT ▲/▼  MENU -/+  BACK ⬚│
└─────────────────────────────┘
```
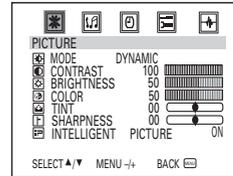
Press **CH ▲/▼** to select the following items:

➕ MODE (Preset picture mode)

Four preset picture modes can be selected.

Press ⊿ -/+ to enter MODE selection. Press **CH ▲/▼** and then ⊿ -/+ to select the desired picture mode.

DYNAMIC	select for a bright and dynamic picture
STANDARD	select for standard picture settings
MILD	select to display a softer picture
MEMORY	select for a picture quality set according to your preferences

Broadcast Transmission Systems in Each Country or Region

Area	Country or Region	System	
		Color	Sound
Asia M. E.	Bahrain, Kuwait, Israel, Oman, Qatar, United Arab Emirates, Yemen, and other middle Eastern countries. Indonesia, Malaysia, Singapore, Thailand, and other Southeast Asian Countries.	PAL	B/G
	China	PAL	D/K
	China Hong Kong	PAL	I
	Iraq, Islamic Republic of Iran, Lebanon, Saudi Arabia	SECAM	B/G
	Russian Federation	SECAM	D/K
	Myanmar	NTSC	M
Oceania	Australia, New Zealand	PAL	B/G
Africa	Republic of South Africa	PAL	I
South America	Argentina, Paraguay, Uruguay	PAL	N
	Brazil	PAL	M
	Chile, Colombia	NTSC	M

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◑ CONTRAST   Adjust to increase or decrease the picture contrast with + or - respectively.

▨ BRIGHTNESS Adjust to brighten or darken the picture with + or - respectively.

◉ COLOR   Adjust to increase or decrease the color intensity with + or - respectively.

▨ TINT   Adjust the picture to be more greenish or more purplish with + or - respectively. This effect is provided for NTSC system only.

⊡ SHARPNESS   Adjust to sharpen or soften the picture with + or - respectively.

▣ INTELLIGENT PICTURE

The Intelligent picture mode equipped with Black/White/Blue stretch feature. It enable a maximum of visible details in the darker parts of the picture and over the whole range of luminance. A brighter and sharper impression of the picture is percepted.

Press ⊿-/+ to set "ON" or "OFF".

Notes

• Any adjustment of the BRIGHTNESS, CONTRAST, COLOR, TINT or SHARPNESS settings will be stored in the MEMORY mode.

• If you adjust any one of items: BRIGHTNESS, CONTRAST, COLOR, TINT or SHARPNESS in the DYNAMIC, STANDARD or MILD modes, the TV will automatically change to the MEMORY mode.

Sound quality adjustment

To access the ▨ SOUND menu

Press ♪ for direct selection or press **MENU** and then ⊿-/+ to highlight the "▨ SOUND" icon.

✳	▨	◐	⊟	➡

```
SOUND
▨ MODE              MEMORY
♪ BASS              00  ▭
◈ TREBLE            00  ▭
◪ BALANCE           00  ▭
▤ EQUALIZER         ( + )
◎ MTS MODE          AUTO
▦ INTELLIGENT SOUND         ON
SELECT ▲/▼   MENU -/+   BACK ▣
```
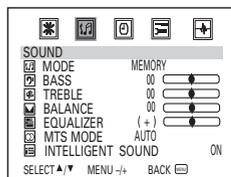
Press **CH ▲/▼** to select the following items:

▨ MODE (Preset sound mode)

Three preset sound modes can be selected.

Press ⊿-/+ to enter MODE selection. Press **CH ▲/▼** and then ⊿-/+ to select desired sound mode.

THEATER	select for playing music and movie
NEWS	select to emphasize human voice
MEMORY	select for a sound quality set according to your preferences

♪ BASS   Adjust to increase or decrease lower-pitched sound with + or - respectively.

◈ TREBLE   Adjust to increase or decrease higher-pitched sound with + or - respectively.

◪ BALANCE   Adjust to decrease left or right speaker balance with + or - respectively. This adjusted condition is not stored in the Memory mode.

▤ EQUALIZER   Press ⊿-/+ to enter EQUALIZER menu mode. A total of 5 equalizer bands can be adjusted according to your preference.

```
▤ EQUALIZER

100HZ   ▭▬▭    00  DB
300HZ   ▭▬▭    00  DB
1KHZ    ▭▬▭   +02  DB
3KHZ    ▭▬▭    00  DB
8KHZ    ▭▬▭    00  DB


SELECT ▲/▼   ADJUST -/+   BACK ▣
```

10
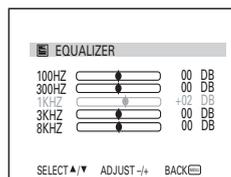
Press **CH ▲/▼** to select the desired band and then press ⊿ -/+ to adjust the level.

◻ MTS MODE (Multi-channel TV Sound)
Only available for 29CZ5DE/29CZ6DA model

The TV receives both stereo and bilingual broadcasts transmitted in either the NICAM or German stereo/bilingual broadcast system.

Press ⊿ -/+ to select "AUTO" or "MONO".

AUTO   The "AUTO" setting of the MTS mode automatically recognize stereo/bilingual programs depending on the broadcast signal.

MONO   If you experience noise or poor reception of any stereo/ bilingual program, set the MTS MODE to "MONO". Noise will be reduced and reception may improve.

◻ INTELLIGENT SOUND

The Intelligent sound mode equipped with Automatic Volume Levelling (AVL) and Extended Spatial Stereo (ESS) feature. It stabilize the volume to prevent any sudden loudness occured. And also provides user an experience of expanded stereo image by widening stereo sound effects.

Press ⊿ -/+ to set "ON" or "OFF".

Notes
- Any adjustment of the BASS, TREBLE or EQUALIZER settings will be stored in the MEMORY mode.
- If you adjust any one of items: BASS, TREBLE or EQUALIZER in the THEATER or NEWS modes, the TV will automatically change to the MEMORY mode.
- When the volume is set above 80, it is not recommended to adjust the bass, treble or equalizer to a high value.

Stereo/ Bilingual selection

(Only available for 29CZ5DE/29CZ6DA model)

To select the stereo programs

1. When a stereo program is received, ⊂⊃ appears on the screen.
2. Press ⊂⊃I/II to select the stereo/monaural mode. ⊂⊃ and ▽ appear cyclically on the screen.
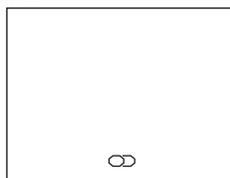
Display	Reception mode
⊂⊃	Stereo
▽	Monarual

Note

If you experience noise with a particular program on whose channel reception is usually good, try setting MTS MODE to AUTO, then switch the ⊂⊃I/II button to ▽ (monaural).

To select the bilingual programs

1. When a bilingual program is received, I/II appears on the screen.
2. Press ⊂⊃I/II to select the sound to be heard. The sound differs according to the transmission system: NICAM or German stereo/bilingual broadcast. I, II and ▽ appear cyclically on the screen.

Display	Sound to be heard	
	NICAM	**German stereo/ bilingual broadcast**
I	Sub I sound	Main sound
II	Sub II sound	Sub sound
▽	Main sound	Main sound

TIMER SETTING

Setting the Timer

To access the TIMER menu

Press **MENU** and then ⊿-/+ to highlight the "▣ TIMER" icon.

```
┌─────────────────────────────────┐
│ ✳ 🗓 ▣ 🔁 ➕                     │
│ TIMER                           │
│ ▣  TIMER OFF    00:00           │
│ ⏰ TIMER ON     00:00   P001    │
│                                 │
│                                 │
│ SELECT ▲/▼   MENU –/+   BACK ▭  │
└─────────────────────────────────┘
```
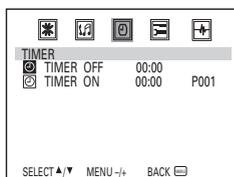
Press **CH ▲/▼** to select the required timer mode (TIMER OFF or TIMER ON). Complete the following steps to set the effective time.

TIMER OFF

With the TIMER OFF set, the TV will automatically switch to standby mode at a preset time.

To set the TIMER OFF

Highlight the TIMER OFF, press ⊿-/+ to set after how many hours and minutes you want the TV to switch into standby mode.

When you	⊿-/+	Setting time is
press once	⊿+	increased by 1 minute
	⊿-	decreased by 1 minute
hold down	⊿+	increased by 30 minutes
	⊿-	decreased by 30 minutes

To cancel the TIMER OFF

Press ⏻ twice (to turn off the TV once and turn it on again) or set the TIMER OFF time to 00:00.

TIMER ON

With the TIMER ON set, the TV will automatically turn on to a preset channel at a preset time.

To set the TIMER ON

Highlight the TIMER ON, press ⊿-/+ to set after how many hours and minutes you want the TV to turn on. The setting method will be similar to the TIMER OFF.

The ⊕ timer-ON indicator (green) will light up.

Press ⊸ to highlight the position number, "P***". Then, press ⊿-/+ to set the position number.

```
┌─────────────────────────────────┐
│ ✳ 🗓 ▣ 🔁 ➕                     │
│ TIMER                           │
│ ▣  TIMER OFF    00:00           │
│ ⏰ TIMER ON     00:53   P001    │
│                                 │
│                                 │
│ SELECT ▲/▼   ADJUST –/+  BACK ▭ │
└─────────────────────────────────┘
```
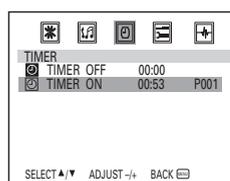
When you	⊿-/+	Setting position number is
press once	⊿+	increased by 1
	⊿-	decreased by 1
hold down	⊿+	increased by 10
	⊿-	decreased by 10

Press ⏻ to switch the TV to standby mode.
At the preset time, the TV will turn on automatically.

To cancel the TIMER ON

Press the ⏻ power switch to turn off the TV or set the TIMER ON time to 00:00.

12

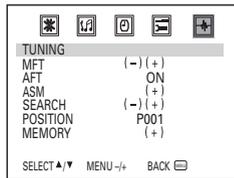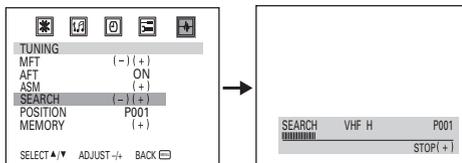# CHANNEL PRESET

Presetting channel

- First, use the ASM (Automatic Search Memory) function to preset all active channels in your area automatically. Refer to step 5 of "GETTING STARTED", page 5. Then, arrange the preset channels with the SEARCH, SKIP and MFT (Manual Fine Tuning) functions so that you can tune into only desired channels.
- Use the SEARCH function if desired channels cannot be preset with the ASM or if you would like to preset channels to specific position numbers one by one.

To use the SEARCH function

1 Press **MENU** and then ⊿ -/+ to highlight the "⊞ TUNING" icon.

```
┌─────────────────────────────────┐
│  ✳  🔄  🔘  ⊟  ⊞                │
│ ─────────────────────────────── │
│ TUNING                          │
│ MFT              ( − ) ( + )     │
│ AFT                 ON           │
│ ASM                 ( + )        │
│ SEARCH          ( − ) ( + )     │
│ POSITION           P001          │
│ MEMORY             ( + )        │
│                                 │
│ SELECT▲/▼   MENU−/+   BACK ▭    │
└─────────────────────────────────┘
```
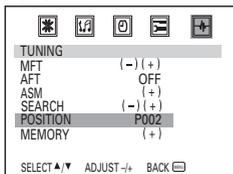
2 Press **CH ▲/▼** to select "SEARCH". Press ⊿ -/+ to start searching. Pressing "−" searches for channels at lower frequencies while pressing "+" searches for channels at higher frequencies. While searching, pressing the opposite direction button, + and - respectively, will cancel SEARCH function.
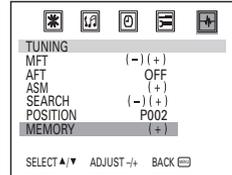
```
┌──────────────────┐      ┌──────────────────┐
│ ✳ 🔄 🔘 ⊟ ⊞     │      │                  │
│ ──────────────── │      │                  │
│ TUNING           │      │                  │
│ MFT      (−)(+)  │      │                  │
│ AFT       ON     │  ─▶  │                  │
│ ASM       (+)    │      │                  │
│ SEARCH   (−)(+)  │      │                  │
│ POSITION  P001   │      │ SEARCH  VHF H  P001│
│ MEMORY    (+)    │      │ ▮▮▮▮▮▮▮          │
│ SELECT▲/▼ ADJUST−/+ BACK▭│      │        STOP(+)   │
└──────────────────┘      └──────────────────┘
```

Repeat this process until you can get the desired channel.

3 When the desired channel is shown, press **CH ▼** to select "POSITION". Press ⊿ -/+ repeatedly until the position number to be preset is shown.

```
┌─────────────────────────────────┐
│  ✳  🔄  🔘  ⊟  ⊞                │
│ ─────────────────────────────── │
│ TUNING                          │
│ MFT              ( − ) ( + )     │
│ AFT                 OFF          │
│ ASM                 ( + )        │
│ SEARCH          ( − ) ( + )     │
│ POSITION           P002          │
│ MEMORY             ( + )        │
│                                 │
│ SELECT▲/▼   ADJUST−/+   BACK ▭  │
└─────────────────────────────────┘
```

4 Press **CH ▲/▼** to select "MEMORY", then press ⊿ + to memorize the channel at the current position.

```
┌─────────────────────────────────┐
│  ✳  🔄  🔘  ⊟  ⊞                │
│ ─────────────────────────────── │
│ TUNING                          │
│ MFT              ( − ) ( + )     │
│ AFT                 OFF          │
│ ASM                 ( + )        │
│ SEARCH          ( − ) ( + )     │
│ POSITION           P002          │
│ MEMORY             ( + )        │
│                                 │
│ SELECT▲/▼   ADJUST−/+   BACK ▭  │
└─────────────────────────────────┘
```

5 When you program other channels, repeat steps 2 to 4.

To skip a position number

After presetting the channels, you may skip unnecessary position numbers so that only the channels you want to watch are selected using **CH ▲/▼**.

1 First, select the position number to be skipped with **CH ▲/▼** or digit selection and number buttons (**-/--, 0~9**).

2 Highlight the "⊟ SET UP" icon and press **CH ▲/▼** to select "SKIP".

```
┌─────────────────────────────────┐
│  ✳  🔄  🔘  ⊟  ⊞                │
│ ─────────────────────────────── │
│ SETUP                           │
│ LANGUAGE         ENGLISH         │
│ COLOR MODE       AUTO            │
│ SOUND MODE       B/G             │
│ SKIP             ON              │
│ BLUE SCREEN      ON              │
│ TEXT             FAST            │
│                                 │
│ SELECT▲/▼   ADJUST−/+   BACK ▭  │
└─────────────────────────────────┘
```
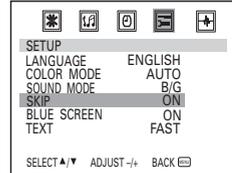
3 Press ⊿ -/+ to set "SKIP" to "ON". This completes the setting for skipping the selected position number.

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Notes

• When "SKIP" is set to "ON" for the selected position number, a " * " mark appears to the left of the position number.

```
                                    *12
```

The position number will then be skipped when you select the position with **CH ▲/▼**.
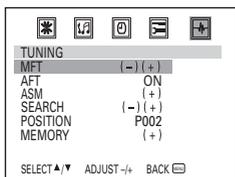
• If you want to restore a skipped position number, select it using the **-/--** and **0~9** buttons then switch the "SKIP" setting to "OFF".

Manual fine tuning (MFT)

The adjustments below are not necessary under normal conditions. However, under some reception conditions, fine tuning may be necessary to improve the picture quality. In such cases, adjust the manual fine tuning (MFT).

1 Select the position number where the channel you want to fine-tune with **CH ▲/▼** or digit selection and number buttons (**-/--**, **0~9**).

2 Press **MENU** and then ⊿ -/+ to highlight the " TUNING" icon.

3 Press **CH ▲/▼** to select "MFT". Press ⊿ -/+ to start fine tuning. Press ⊿ -/+ repeatedly until the best possible picture and sound are obtained.

```
        ✳  🔣  🄌  🗐  🔲

        TUNING
        MFT              ( − ) ( + )
        AFT                   ON
        ASM                  ( + )
        SEARCH           ( − ) ( + )
        POSITION           P002
        MEMORY               ( + )

        SELECT ▲/▼   ADJUST −/+   BACK ⏎
```

Auto fine tuning (AFT)

If the signal frequency is unstable due to environmental conditions, use auto fine tuning.

1 Select the position number where the channel you want to fine-tune with **CH ▲/▼** or the digit selection and number (**-/--**, **0~9**) buttons.

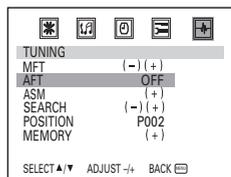**Note**

When the position is set to "AFT OFF" status, the " ■ " mark appears to the left of the position number.

```
                                    ■25
```

When the channel is set to "AFT ON" status, the position number is displayed without the "■" mark.

2 Press **MENU** then ⊿ -/+ to highlight the " TUNING" icon.

3 Press **CH ▲/▼** to select "AFT". Press ⊿ -/+ to select the "ON" indication.

```
        ✳  🔣  🄌  🗐  🔲

        TUNING
        MFT              ( − ) ( + )
        AFT                  OFF
        ASM                  ( + )
        SEARCH           ( − ) ( + )
        POSITION           P002
        MEMORY               ( + )

        SELECT ▲/▼   ADJUST −/+   BACK ⏎
```
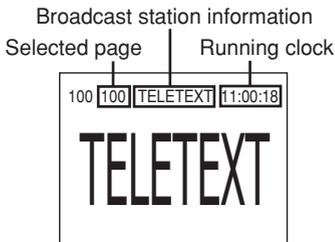
Notes

• When you operate MFT, AFT is switched "OFF" automatically. If you switch on AFT after fine tuning with MFT, MFT may be canceled.

• AFT may be set independently for each position.

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VIEWING TELETEXT

The TV is capable of showing both normal text and the text information selected by FAST mode and LIST mode. The Teletext buttons on the remote control have the same function for both text information types.

To display a page of text

1 Select a position number preset a TV channel with the text service desired.

2 Press **TXT/TV**. The index page will appear.

3 Enter the 3-digit page number using the Number buttons (0-9). Ex. Page 110: Press **1**, **1** and **0**.

Broadcast station information
Selected page   Running clock

```
100 │100│ TELETEXT │11:00:18│

TELETEXT
```

Teletext control functions

To superimpose the text over a normal broadcast picture (TXT/TV)
Press **TXT/TV** again.

To return to the normal TV mode (TXT/TV)
Press **TXT/TV** repeatedly until the text disappears.

To display an index/initial page (CALL/▣)
Press **CALL/▣** if no page number is displayed in the text mode. The index page (FAST mode) or the preset initial page (LIST mode) will appear.

To go to the previous or next page (CH ▲/▼)
Press **CH ▲** to switch to the next page.
Press **CH ▼** to switch to the previous page.

To stop a page of text (▣)
When a page is divided into sub pages, it is convenient to hold a given page.
Press ▣ to stop the page. "▣" will appear in the top left of the screen.
Press again to release the stop mode.

To enlarge the text display size (▣)
Press ▣ once to enlarge the top half of the page. Press again to enlarge the bottom half of the page, and again to return to the normal (full) size.

Note
When viewing the enlarged format teletext page with sub pages changes automatically, the top half of the page is always displayed first; thus disturb the flow of text.
Press ▣ stop button to hold the sub page while viewing the enlarged teletext.

To select a page while viewing a TV picture (▣/▣)
When in teletext mode, if a page selection is made and then ▣/▣ is pressed, a normal picture will be displayed. The TV will indicate when the page is present by displaying the number of the text page at the top of the screen. Press **TXT/TV** to view the page.

To display news flashes (▣/▣)
To view news flashes as they are broadcast, select the news flash page for the particular teletext service (see the index page of teletext service). The news flashes will be displayed as and when they are broadcast. Press ▣/▣ to cancel the news flash display.

Note
Press **TXT/TV** to cancel the news flash page before changing channels.

To display the time (▣/▣) (with the teletext service only)
To display the accurate time on the screen while watching a normal TV picture, press ▣/▣. Press again to turn off the time display.

To reveal concealed text (▣)
Some pages have sections that are concealed, such as the answers to quizzes and the punchlines of jokes. To see the concealed part, press ▣. Press ▣ again to conceal.

To adjust MFT in teletext mode
During teletext mode, when the teletext or picture reception is poor, MFT adjustment is possible. Press **MENU**, "MFT−+" will display on the bottom left of the screen. Press ◢ -/+ repeatedly to adjust until the best possible text and picture are obtain.
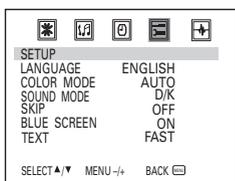
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VIEWING TELETEXT (continued)

Fast / List Mode

• FAST mode is a method of viewing Teletext pages by related subjects grouped by the broadcast studio. You can access any given topic shown on the screen simply by pressing the corresponding colored button on the remote control.

• LIST mode is provided for easier operation for normal text broadcast. By presetting up to four of the most frequently used text pages, you can access these pages easily with single button operation. The first of these four pages is set as the initial page. Each time you select the teletext mode, this page appears.

To select the FAST mode

When you select the FAST mode, four colored prompts will appear at the bottom of the screen. The colors correspond to those of the teletext colored buttons on the remote control. So, press the corresponding teletext colored button to go to the desired topic page instantly.
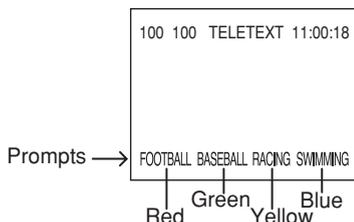
1 Press **MENU** and then ⊿-/+ to highlight the "⊟ SET UP" icon.

```
[✳] [🎵] [◉] [⊟] [➕]

SETUP
LANGUAGE        ENGLISH
COLOR MODE      AUTO
SOUND MODE      D/K
SKIP            OFF
BLUE SCREEN     ON
TEXT            FAST

SELECT▲/▼   MENU -/+   BACK ▣
```

2 Press **CH ▲/▼** to select "TEXT". Then, press ⊿-/+ to set "TEXT" to "FAST"(Fastext mode).

To view Fastext

1 Select a position number preset a TV channel with the desired FASTEXT service.

2 Press **TXT/TV** to select the text mode. Four colored prompts will appear at the bottom of the screen.

```
100  100  TELETEXT  11:00:18




Prompts →  FOOTBALL BASEBALL RACING SWIMMING
              Red   Green  Yellow  Blue
```

3 Press the colored button which corresponds to your desired topic.
The screen will switch to the selected page.

4 Repeat step 3 to switch to the next topic you want to view.

To return to the normal TV mode
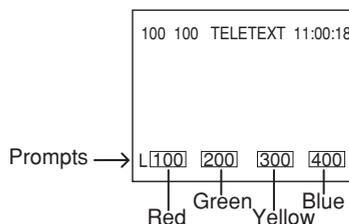Press **TXT/TV** twice.

To display an index page
Press **CALL/▣**.

To select the LIST mode

1 Press **MENU** and then ⊿-/+ to highlight the "⊟ SET UP" icon.

2 Press **CH ▲/▼** to select "TEXT". Then, press ⊿-/+ to set "TEXT" to "LIST"(LIST mode).

To preset an initial page

1 Select a position number preset a TV channel with the normal TEXT service.

2 Press **TXT/TV** to select the text mode. Four colored prompts will blink at the bottom of the screen.

```
100  100  TELETEXT  11:00:18




Prompts →  L[100] [200] [300] [400]
               Green      Blue
            Red      Yellow
```

3 Press the number buttons to enter the 3-digit page number that you want to preset as an initial page. Ex. page 120: Press 1, 2 and 0. Red prompt will stop blinking at the bottom left of the screen. And the preset page displays on the screen. (When a vacant teletext page is preset, the prompt will not stop blinking.)

```
120  120  TELETEXT  11:00:18




L[120]  200  300  400
```
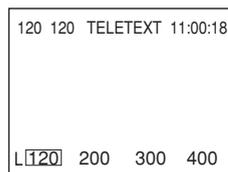
4 Press the red colored button momently. Four colored prompts will turn to white momentarily and will be stored in memory.

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To preset desired pages
1 Press the green colored button.
2 Enter the 3-digit page number you want to preset by using the number buttons.

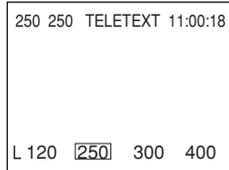```
250 250 TELETEXT 11:00:18

L 120   250   300   400
```

**3** Repeat steps 1 and 2 to preset other two pages by using the yellow and blue colored buttons.
**4** Press the blue colored button momently. Four colored prompts will turn to white momentarily and will be stored in memory.

**To display a desired page**
Press the desired colored button according to the four colored prompts on the screen.

**To display an initial page**
Press **CALL/▤**.

**Note**
• You cannot preset the same teletext page twice.
• When a vacant teletext page is preset, the colored prompt will be blink.

## Double Window Teletext

Double window feature allow us to view two text pages of the same broadcast station at a time ,or to view a normal broadcast picture and a text page simultaneously.

**To activate Double Window**
During teletext mode, press ▣ once.
Two teletext pages appear side by side on the screen. Only one page is in active mode. All the teletext operation can be done on the active page. The other page is for viewing only.

```
100 100  TELETEXT 11:00:18 | 101 101  TELETEXT

TELETEXT | TELETEXT
```
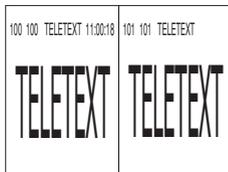
To switch the active page
Press ⟳. The running time clock on the top shows the active page.

To view a normal broadcast picture and a text page simultaneously
Press ▣. A compressed version of the broadcast picture is shown on the left side of the screen while the active teletext page is on the right.

```
                101 101  TELETEXT 11:00:18

                TELETEXT
```

Press ▣ again. The left half portion of the normal picture is shown on the left side of the screen while the active teletext page is on the right.

```
                101 101  TELETEXT 11:00:18

                TELETEXT
```

To return to single teletext window, press ▣ again.

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EXTERNAL EQUIPMENT CONNECTIONS

- You can connect video equipments such as a VTR and video camera to this TV and enjoy the high quality picture. The front A/V terminal ⊖ (3) is convenient when hooking up video camera or game equipment.
- The following describes how to use and connect the TV with other AV equipment. Refer to the owner's manual of the equipment to be connected as well.
- If your video equipment has an S-VIDEO output terminal, connect it to the S-VIDEO ⊖ (1) input terminal (special S-VIDEO type) of the TV. If not, connect it to the video terminal (phono type).
- Connection cables are not supplied.

Caution: Do not plug in any power cords until you have finished connecting all equipment.

- The ⊖ MONITOR terminals output the TV program or video (⊖1, ⊖2/DVD, ⊖3) signals being displayed on the screen. You can record a TV program or video signals by connecting a VTR from the output terminals (⊖MONITOR) to the input terminals of the VTR. **However, except for personal use, you are not allowed to use video or sound you have recorded without consent of the owner of copyright according to copyright law.**
- When playing back DVD images by connecting to COMPONENT VIDEO INPUT, the (⊖ MONITOR) video terminal will output "Y" (Black and White) signal only. In such condition, abnormal images will occur if recorded.

Notes
- Do not connect one VTR to the output and input terminals on the TV simultaneously, it may cause interference.
- Your DVD video player should have either the P_B, P_R or C_B, C_R output terminals. This TV is available for either type.
* Connect either the S-VIDEO terminal or the VIDEO terminal of the input terminals ⊖(1). If you use both terminals at the same time, unusual phenomena may happen to the TV set and/or VTR.

To select the video input source
Each time you press ⊖, the "⊖1" mark, "⊖2" mark (or "DVD" mark when there is a DVD P_B/C_B input), "⊖3" mark, and channel position number appear and selected cyclically.

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TROUBLESHOOTING

Before calling service personnel, please check the following chart for a possible cause to the trouble you are experiencing.

Symptom	Solution
Power is not turned on.	• Be sure the power cord is plugged in.
No sound.	• The headphones may be plugged in.
Poor color/tint.	• The contrast, color and tint may need to be adjusted. • If you change the direction of the TV while the TV is on, the picture may suffer from color shading. If so, turn off the TV and allow about 30 minutes to cool, then turn on the TV again. The picture may be improved.
Spots appear on the screen.	• The broadcast signal may be jammed by other electrical sources such as cars, motorcycles, electric trains, high tension lines, neon signs, hair dryers.
Lines appear on the screen.	• The broadcast signal may be jammed by other TV receivers, personal computers, and TV games, as well as interference from radio stations.
Double or triple images.	• Interference may be due to broadcast waves reflected from mountains or buildings. • Check if the direction of the antenna has changed due to strong wind.
Snowy picture.	• The antenna lead may be broken or disconnected. • Check if the direction of the antenna has changed.
Remote control does not work.	• The batteries in the remote control may be exhausted. • The batteries may be improperly installed. • Check that there is no obstruction between the remote control and the remote (infrared) sensor. • Check that a strong light is shining on the remote (infrared) sensor. • Check that the main power is not turned off.

The following phenomena are not malfunctions

The cabinet clicks.	• The clicking is a creaking sound produced when the cabinet expands or contracts due to changes in the temperature. This will not affect the picture or sound.
Unevenness in color sometimes develops in part of the screen.	• If the brightness is set too high, such unevenness in color may occur depending upon the nature of the picture. The proper color can be restored by reducing the contrast.

SPECIFICATIONS

MODEL	29CZ5DE/ 29CZ6DA/29CZ6TES
Rated voltage	~ 110 V–240 V, 50/60Hz
Power consumption (at ~ 220V, 50Hz)	123W
Dimensions (Width x Depth x Height)	782.1(W) X 492.5(D) X 585.1(H) mm
Mass	44 kg
Picture Tube	Type 29 Flat super crystal picture tube (727.4mm) Overall picture tube measured diagonally (676mm) Viewable picture tube measured diagonally 104° deflection

Television system (Antenna input)	Channel coverage	System		Channel	VHF	UHF	CATV
		PAL	B/G	CCIR	2 - 12	21 - 69	X~Z+2, S1~S41
		PAL	I	UK	—	21 - 69	—
		PAL	D/K	CHINA	1 - 12	13 - 57	Z-1~ Z-38
		SECAM	B/G	CCIR	2 - 12	21 - 69	X~Z+2, S1~S41
		SECAM	D/K	OIRT	1 - 12	21 - 69	X1~X19
		NTSC	M	US	2 -13	14 - 69	A-6~A-1, A~W, AA~ZZ, AAA, BBB
		NTSC	M	JAPAN	1-12	13 - 62	M1~M10, S1~41
	Special RF Signal	**Color system** NTSC4.43, PAL 60Hz **Sound system** 5.5/6.0/6.5 MHz					

Color system	PAL50/PAL60/SECAM/NTSC4.43/NTSC3.58
Sound output	10 W X 2
Speaker	6 x 12cm (2)
Terminals	Input [–⊖(1)] : S-Video/Video, Audio L/MONO, Audio R Input [–⊖(2)/DVD] : Video/Y, P_B/C_B, P_R/C_R, Audio L/MONO, Audio R Input [–⊖(3)] : Video, Audio L/MONO, Audio R Output [⊖→(MONITOR)] : Video, Audio L/MONO, Audio R Headphone output : Ø 3.5 mm (mini jack stereo type)
Accessories	• Remote control (1) • Batteries (R03, AAA) (2) • This Owner's Manual

Design and specifications are subject to change without notice.

Help to recycle, this product indicates material names on main plastic parts.

TOSHIBA CORPORATION