

RECORD YOUR MODEL NUMBER (Now, while you can see it)

The model and serial number of your Entertainment Machine™ are located on the back of the TV cabinet. For your future convenience, we suggest that you record these numbers here:

MODEL NO. SERIAL NO.





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 flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING:
TO PREVENT FIRE OR SHOCK HAZARDS, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

NOTE TO CABLE/TV INSTALLER:

This reminder is provided to call the cable TV system installer's attention to Article 820-40 of the National Electric Code (U.S.A.). The code 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 the cable entry as practical.

REGULATORY INFORMATION:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
 Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION:

Do not attempt to modify this product in any way without written authorization from Zenith Electronics Corporation. Unauthorized modification could void the user's authority to operate

"Entertainment Machine" is a trademark of Zenith Electronics Corporation

MPORTANT SAFETY INST

Important safeguards for you and your new product

Your product has been manufactured and tested with your safety in mind. However, improper use can result in potential electrical shock or fire hazards. To avoid defeating the safeguards that have been built into your new product, please read and observe the following safety points when installing and using your new product, and save them for future reference.

Observing the simple precautions discussed in this booklet can help you get many years of enjoy ment and safe operation that are built into your new product.

This product complies with all applicable U.S. Federal safety requirements, and those of the Canadian Standards Association.

1. Read Instructions

All the safety and operating instructions should be read before the product is operated.

2. Follow Instructions

All operating and use instructions should be followed.

3. Retain Instructions

The safety and operating instructions should be retained for future reference.

4. Heed Warnings

All warnings on the product and in the operating instructions should be adhered to.

5. Cleaning

Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

6. Water and Moisture

Do not use this product near water - for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming

7. Accessories, Carts, and Stands

Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer

8. Transporting Product

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.

9. Attachments

Do not use attachments not recommended by the product manufacturer as they may cause hazards.

10. Ventilation

10. Ventilation

Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to. adhered to.

11. Power Sources

This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions.

12. Power-Cord Polarization

This product is equipped with a three-wire grounding type alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to inset the plug fully into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

13. Power-Cord Protection

Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.



(Continued on next page)

IMPORTANT SAFETY INSTRUCTIONS

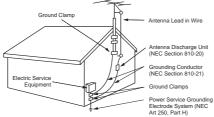
(Continued from previous page)

14. Outdoor Antenna Grounding

14. Outdoor Antenna Grounding

If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code (U.S.A.), ANSI/ NFPA 70 provides information with regard 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.

Example of Grounding According to National Electrical Code Instructions



NEC - National Electrical Code

15. Lightning

For added protection for this product (receiver) during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line

16. Power Lines

An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

17. Overloading

Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.

18. Object and Liquid Entry

Never push objects of any kind into this product through openings 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 product.

19. Servicing

Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

20. Damage Requiring Service

Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- a. If the power-supply cord or plug is damaged.
- b. If liquid has been spilled, or objects have fallen into the product.
- c. If the product has been exposed to rain or
- d. If the product does not operate normally by fold. If the product does not operate normally by fol-lowing the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
- e. If the product has been dropped or the cabinet has been damaged.
- f. If the product exhibits a distinct change in per-

21. Replacement Parts

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

22. Safety Check

Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in propér operating condition.

23. Wall or Ceiling Mounting

The product should be mounted to a wall or ceiling only as recommended by the manufacturer. The product may slide or fall, causing serious injury to a child or adult, and serious damage to the product.

The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that pro-

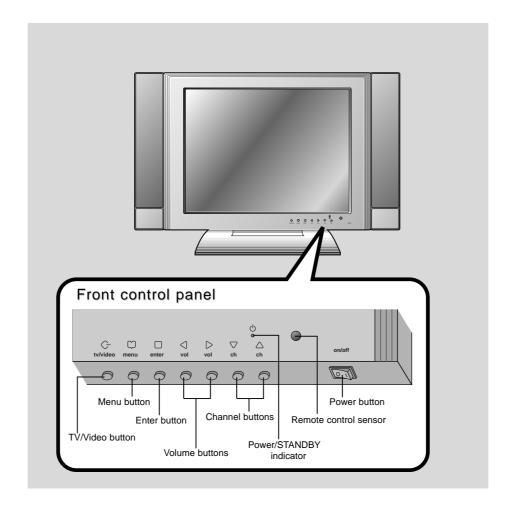
CONTEN	TS
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Before operating the set, please read this manual carefully.

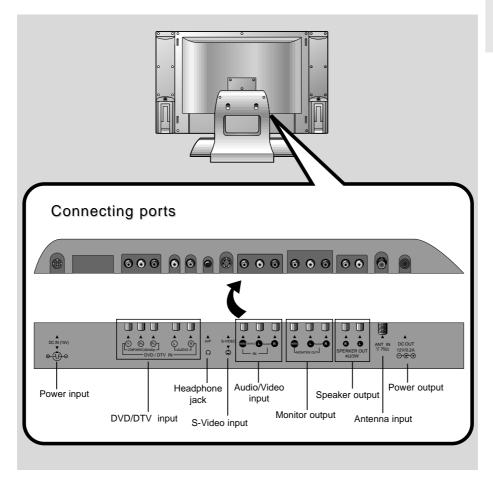
1	Safety warnings Important safety instructions Controls TV overview		2 3 6 10
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3	Using remote control Turning on the set Function check in TV mode Setting language Closed caption function Parental control function Programming / Erasing channels	24 24 2	21 23 25 26 29 31
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Controls

Front of the set

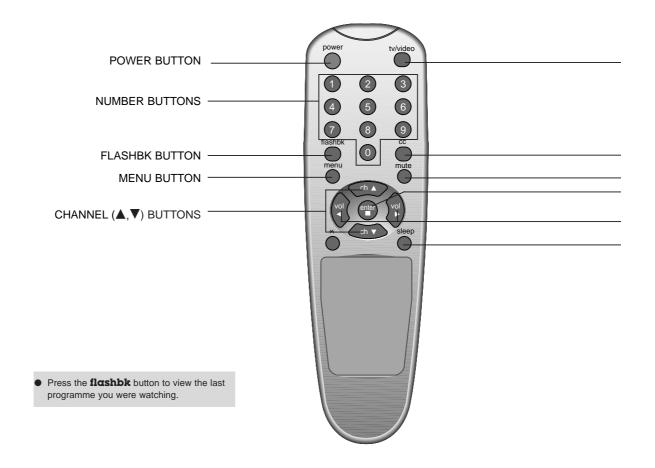


Back of the set

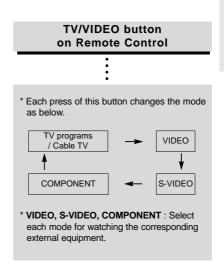


Controls

Remote Control

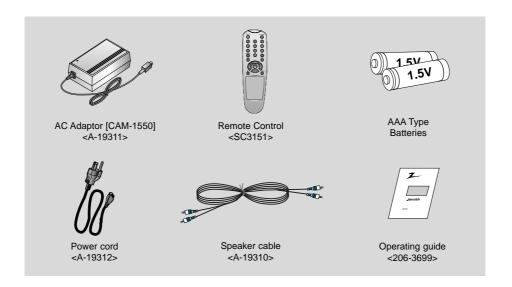


TV/VIDEO BUTTON	PAGE 17~19
 CC BUTTON	PAGE 27
MUTE BUTTON ENTER BUTTON	PAGE 38
 VOLUME (◀,▶) BUTTONS	3
 SLEEP BUTTON	PAGE 33



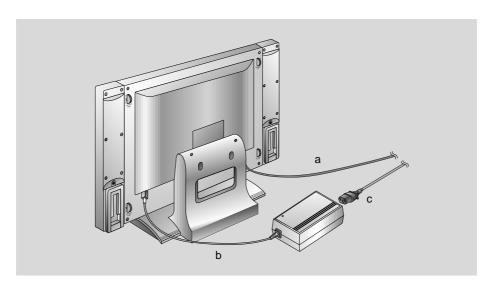
TV Overview

Accessories



Watching TV programs

- * Please make sure to connect the power plug to the wall outlet socket after connecting the TV to the adaptor.
- a. Connect the antenna cable to the antenna input port of the set.
- b. Connect the adaptor to the power input port of the set.
- c. Connect the power plug to the wall outlet socket after connecting the power cord to the adaptor.



Note : If the TV feels cold to the touch, there may be a small "flicker" when turned on. This is normal, there is nothing wrong with TV.

Warning: When you install the TV after separating stand from it, There is a damage to upset the TV toward bottom.

TV Overview

Connecting or separating the set and speakers

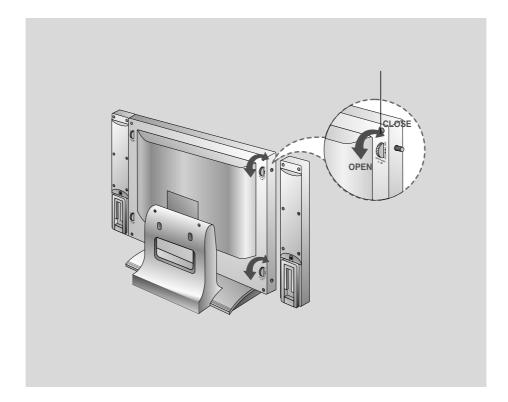
• The speakers mounted on the TV cabinet are removable and can be detached from the TV.

NOTE: If you remove the speakers, you will need to connect them to the TV jack panel on the back of the TV using the standard audio cables provided. Refer to page 13.

The speakers can be detached and re-mounted to the TV by turning the knobs on the back of the TV to the appropriate position.

To remove speakers, turn the knobs to "Open", then detach speakers.

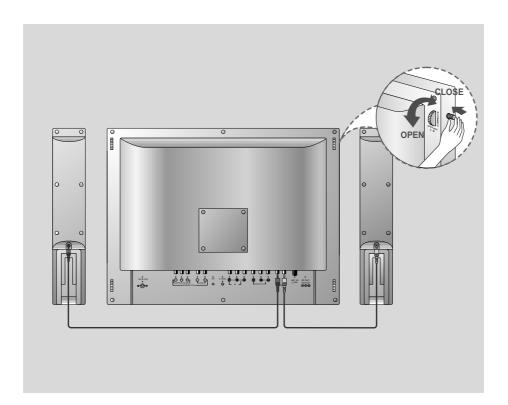
To re-install the speakers onto the TV, turn the knobs to "Open" position, re-mount the speakers, then turn the knobs to "Close" position to lock the speakers in place.



Removing/ Installing speakers: Audio cables hookup

- Instruction for removing and reinstalling speakers is provided on Page 12.
- Connect the Red colored speaker wire from the right speaker jack to (R) Red speaker out on the TV jack panel.
- Connect the White colored speaker wire from the left speaker jack to (L) White speaker out on the TV jack panel.

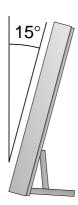
Note: The speaker mounting and alignment posts which stick out from the sides of the TV after the speakers are detached, can be recessed into the TV as shown below.

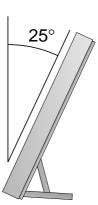


TV Overview

Adjusting the speaker angle

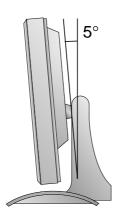
*After seperating the speaker from the monitor, adjust the angle of the speaker : 15° and 25° $\,$

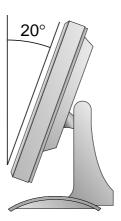




Adjusting the monitor angle

*After installing the set, adjust the angle of the monitor between 5° and 20°







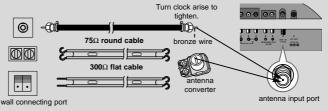
Connecting antenna

* To get better picture quality, adjust the direction of antenna.

Connecting to wall antenna socket

In case of wall antenna socket in apartment houses, connect the antenna cable as shown below.
 (Use the correct type of antenna cable to the type of wall antenna socket.)



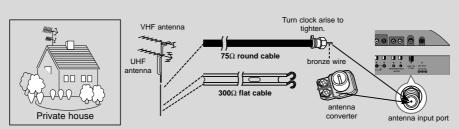




- * In case of 75Ω round cable, insert the bronze wire and then tighten the connecting nut. And in case of 300Ω flat cable, connect the twisted wire to the antenna converter and then connect the converter to the antenna input port.
- * When using 75 Ω round cable, do not bend bronze. It may cause poor picture quality.

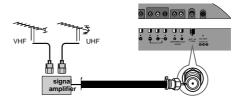
Connecting to outdoor antenna

• This type of antenna is usually used at common private houses.





- * In poor signal area, you can get better picture quality if you install the antenna like the figure as shown right.
 * If an antenna is divided to two TV
- * If an antenna is divided to two TV sets, use "signal divider" for connecting.



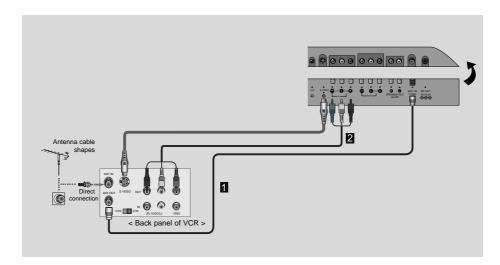


- * TV screen is automatically converted to TV mode by pressing the channel (▲,▼) buttons, flashbk or number buttons (0~9) when using VIDEO.
 * Please connect to other AV equipment by using input ports of the set.

Connecting VCR

How to connect

• Connect the audio/video output ports of VCR to the corresponding input ports of the set.



How to use

Watching TV programs

Turn the set on and select the channel you want.

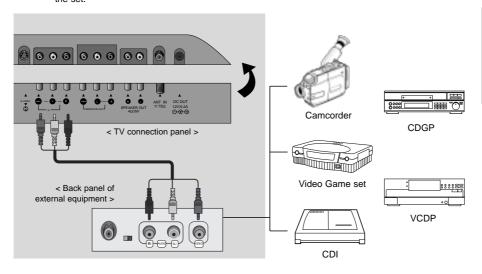
Watching VCR

- a. Press tv/video button of the remote control to select [VIDEO].
 - * Select the channel 3 or 4 if you use only connection 1.
 - * Select VIDEO if you use connection 2.
- b. Insert a video tape into the VCR and press the PLAY button.

Only watching external AV source

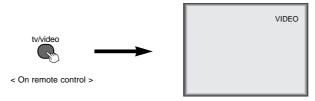
◀ How to connect

 Connect the audio/video output ports of external A/V equipment to the corresponding input ports of the set.



→ How to use

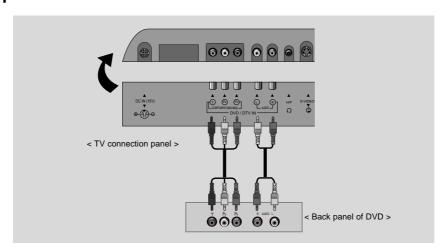
• Turn the set on and press **tv/video** button to select [VIDEO].

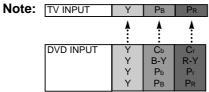


• Try this after turning on the external AV equipment.

Connecting DVD player

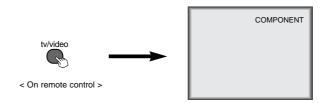
 Connect DVD/ DTV input to COMPONENT(480i / 480p), Y, PB, PR and audio inputs to right and left port of AUDIO L / R ports.





→ How to use

● Turn the set on and press tv/video button to select [COMPONENT].



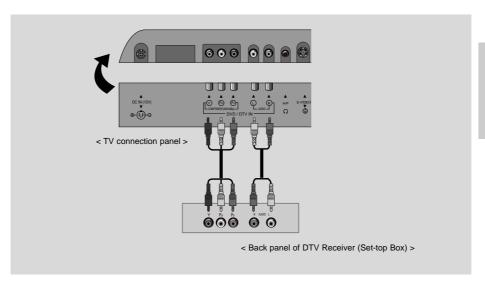
• Try this after turning on the DVD set.



Connecting DTV

- Connect DVD/ DTV input to COMPONENT(480i / 480p), Y, PB, PR and audio inputs to right and left port of AUDIO L / R ports.
- To receive the DTV program, It is necessary to purchase DTV receiver (Set-top Box) and connect it to the

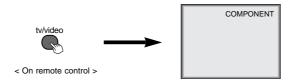
1 How to connect



2

How to use

● Turn the set on and press tv/video button to select [COMPONENT].



• Try this after turning on the DTV receiver (Set-top Box).

Using remote control

Inserting batteries

Pull the battery cover upward in the arrow direction to remove.

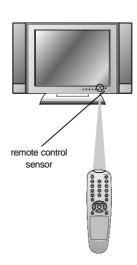


Insert the batteries with correct polarity.



Replace the battery compartment cover.







- * Install two high-quality 1.5V alkaline batteries of AAA type. Don't mix the used batteries with new batteries.
- * Remove batteries when you don't use the remote control for long time. Liquid leakage from old battery may cause operation failure.

Notes for using remote control

Make sure these are no objects between the remote control and its sensor.

trol may ure.

Don't place the remote control near a heater or damp place. Strong impact on remote control may cause operation failure.



Signal from the remote control may be disturbed by sun light or other strong light. In this case, turn the set to other direction.





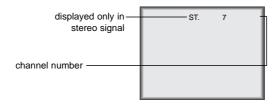
Turning on the set

- * First, connect antenna cable and power cord with the adaptor.
- * Press the power button and you will get stable picture and sound in a few seconds.
- * See page 31 to memorize the channels available in your local broadcast area.
- 1

Press the **power** button to turn the set on.

• If the set is in standby mode, press the power, ch (▲,▼), tv/video and number button on the remote control or tv/video ch (▲,▼) on the set to turn on it fully.
Press the power button on the remote control. The set reverts to standby mode.

Press the power button again to turn the set off.



- Press the channel (▲,▼) or number buttons to select a channel you want after memorizing received broadcasting signals in the local area.
 - Direct selecting channels

Press number of the program as one or two digits with number buttons.

- ex: channel 7 → 7 or 07
- \bullet Refer to page 31 ~ 32 to memorize channels.
- 3

Adjust Volume level.

- Volume (►) button increases the level of sound.
- Volume (◄) button decreases the level of sound.



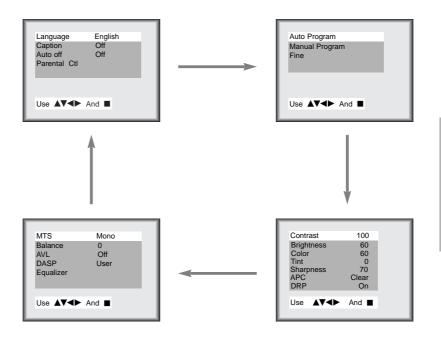


* If you want to turn the set off, press the power button on the front panel of the set or disconnect the power plug to the wall outlet socket.



Function checking in TV mode

Press the **menu** button. Each time you press the button you can see menus shown below.

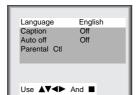


 $\boldsymbol{\gamma}$ Press the channel $(\blacktriangle,\blacktriangledown)$ buttons to select a function you want to use.

Setting language

Language

Press the **menu** button to select the screen display as below.



Press the **enter** (■) button.

2 Press the channel $(\blacktriangle, \blacktriangledown)$ buttons to select a language you want to adjust.



 Each press of volume (◀, ►) buttons changes the screen display as below.





Closed caption function

Closed captioning is a process which converts the audio portion of a television program into written words which then appear on the television screen in a form similar to subtitles. Closed captions allow viewers to read the dialogue and narration of television programs.

Using Closed Captions



Captions are the subtitles of the dialogue and narration of television programs. For prerecorded programs, program dialogue can be arranged into captions in advance. It's possible to caption a live program by using a process called real-time captioning, which creates captions instantly. Real-time captioning is normally done by professional reporters using a machine shorthand system and computer for translation into English.

Captioning is an effective system for the hearing-impaired, and it can also aid in teaching language skills.

• The picture at left shows a typical caption.

Caption Tips

- Not all TV broadcasts include closed caption signals.
- Sometimes TV stations broadcast four different caption signals on the same channel. By selecting **Mode 1** or **Mode 2**, you can choose which signal you view. **Mode 1** is usually the signal with the captions, while **Mode 2** might show demonstration or programming information.

 Your TV might not receive caption signals normally in the following situations.
- 1 Poor reception conditions are encountered:



Picture may flutter, drift, suffer from black spots or horizontal streaking. Usually caused by interference from automobile ignition systems, neon lamps, electrical drills, and other electrical appliances.



GHOSTS:

Ghosts are caused when the TV signal splits and follows two paths. One is the direct path and the other is reflected off tall buildings, hills or other objects. Changing the direction or position of the antenna may improve reception.



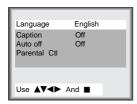
If your receiver is located at the weak, fringe area of a TV signal, your picture may be marred by small dots. It may be necessary to install a special antenna to improve the picture.

- 2 An old, bad or illegally recorded tape is played.
- 3 Strong, random signals from a car or airplane interfere with the TV signal.
- 4 The signal from the antenna is weak.
- [5] The program wasn't captioned when it was produced, transmitted, or taped.

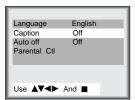
Closed caption function

Selecting a Closed Caption/ Text option

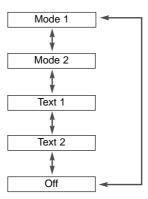
Press the **menu** button to select the screen display as below.



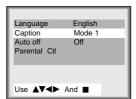
2 Press the channel $(\blacktriangle, \blacktriangledown)$ buttons to select [Caption].



 Each time you press the volume (◀, ▶) buttons, the caption mode is displayed one by one as shown below.



Q Press the volume (▶) button.



Press the **enter** (■) button.

 This TV is programmed to remember which mode it was last set to, even if you switch the POWER off.

Using the Text Function

Text services give a wide variety of information on all kind of subjects (ex. captioned program lists, weather forecasts, stock exchange topics, news for hearing-impaired- - -) through the full TV screen. But not all stations offer text services, even though they might offer captioning.

 In the event you receive a poor signal, an empty black box may appear and disappear, even when the text mode is selected. This is normal function in such an event.

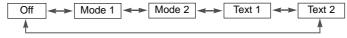
Using Closed Caption

Press the **cc** button to select [Caption].



? Press the volume (**◄**, **▶**) buttons to select [Mode 1] and press the **enter** (**■**) button.

● Each press of volume (◄, ►) buttons changes the screen display as below.



• Captions function setting is Completed.

Parental control function

The Parental Control Function (V-Chip) is used to block program viewing based on the ratings sent by the broadcast station. The default setting is to allow all programs to be viewed. Viewing can be blocked by the type of program and by the categories chosen to be blocked. It is also possible to block all program viewing for a time period. To use the Parental Control Function, the following must be set:

- 1. Ratings and categories to be blocked.
- 2. Number of hours to lock the television viewing control
- 3. Set a password
- 4. Enable the lock

V-Chip rating and categories

Rating guidelines are provided by broadcast stations. Most television programs and television movies can be blocked by TV Rating and/or Individual Categories. Movies that have been shown at the theaters or direct-to-video movies use the Movie Rating System(MPAA) only.

For Movies previously shown in theaters:

Movie Ratings:

- * Unblocked
- * G and Above (general audience)
- * PG and Above (parental guidance suggested)
- * PG-13 and Above (13 years and up)
- * R and Above (restricted)
- * NC-17 and Above (18 years and up)
- * X (adult)

If you set PG-13 and Above ; G and PG movies will be available, PG-13, R, NC-17 and X will be blocked.

For Television programs including made-for-TV movies:

General TV Ratings:

- * Unblocked
- * TV-G and Above (general audience) (individual categories do not apply)
- * TV-PG and Above (parental guidance suggested)
- * TV-14 and Above (14 years and up)
 * TV-MA (mature audience)

Children TV Ratings:

- * Unblocked
- * TV-Y and Above (youth) (individual content categories do not apply)
- * TV-Y7 (youth, 7 years and up)

Content Categories:

- * Dialog sexual dialogue

 * Language adult language

 * Sex scenes sexual situations

 (applies to TV-PG and Above, TV-14)

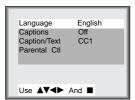
 (applies to TV-PG and Above, TV-14 and Above, TV-MA)

 (applies to TV-PG and Above, TV-14 and Above, TV-MA)
- * Violence (applies to TV-PG and Above, TV-14 and Above, TV-MA)
- * F Violence fantasy violence (applies only to TV-Y7)
 * No Rating (blocks all viewing)

Parental control function

Setting up Blocking

Press the **menu** button to select the screen display as below.

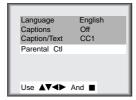


Press the channel (♠,♥) buttons to select the types of blocking to be set. Press the volume (◄, ►) buttons to select the types of ratings to block.

 [MPAA], [Age] and/or [Content block] may be set.

Press the **menu** button to return from [Age Block] or [Content Blk] setting screens.

Press the channel (▲,▼) buttons to select [Parental Ctl].



Press the channel (▲,▼) buttons to select [Set Hours].

Press the volume (◀, ▶) buttons to set the number of hours for the blocking (Up to 99)

Press the channel (▲,▼) buttons to select [Set Password].

Enter a four digit password. Enter it again when requested.

- A new password may be chosen each time blocking is set up.
- **?** Press the volume (►) button.



 If parental control is already set then enter the password when requested. Press the channel (▲,▼) buttons to select [Lock On/Off].
Press the volume (◄, ►) buttons to set the lock [On].

Press the **menu** button to save the blocking setup and exit.

Programming / Erasing channels

Auto programming channels

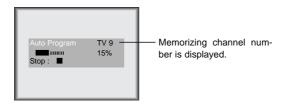
- * This function can be operated only when the set can receive input signal from broadcasting stations and the antenna cable is connected.
- * [Auto programming] function memorizes all the receiving channels of terestrial TV signals or cable TV programs.
- * If channels of general wireless TV and cable TV are duplicated, press the number buttons (0 \sim 9) to change as



Press the **menu** button to select the screen display as below.



? Press the volume (►) button.





- * Press the channel ($\blacktriangle, \blacktriangledown$) buttons to check the memorized channels after auto programming is finished.
- * If you press the enter (m) button in auto programming, the function will stop and only channels programming up to that time will remain.
- * Auto programming function can memorize only the channels which are being received at that time.

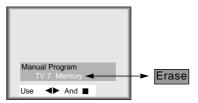


Programming / Erasing channels

Memorizing / Erasing current channel

- *You can select [MEMORY] or [ERASE] for the current channel.
- Press the **menu** button to select the screen display as below. Then press the channel (**A**, **V**) buttons to select [Manual Program].
- Press the channel (▲,▼) buttons to select a channel you want and then press the volume (◄, ►) buttons to select [Memory] or [Erase].



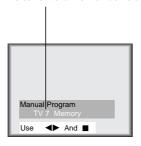


Each time you press the volume (◄, ►) buttons, you can select as below alternative.



9 Press the volume $(\blacktriangleleft, \blacktriangleright)$ buttons.

The current channel number is displayed.



Press the **enter** (■) button.

 The current channel is to be MEMORY / ERASE.

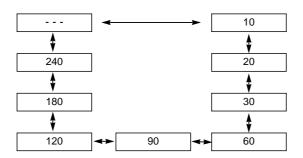
Setting Sleep Time function

* This function will automatically turn the set off after a set time.

Press the **sleep** button to set sleep time function.

 Each press of the button changes setting time status as below.





- To release sleep time setting, press the sleep button repeatedly to select [---].
- The screen display of [Sleep] appears on the screen for one minute untill automatically turning off.



- * When a sleep time you want is displayed on the screen, don't press the **sleep** button. The screen display disappears and sleep time is to be set.
- * To check remaining sleep time after setting, press the **sleep** button just once.
- * To change sleep time setting, press the **sleep** button repeatedly to select time setting you want.
- * If you turn the set off after setting sleep time, the setting will be erased. Set it again.



CLOCK

Adjusting audio condition

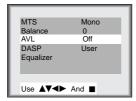
* This function keeps on an equal volume level automatically even if you change channels.

AVL(Auto Volume Leveler)

■ Press the menu button to select the screen display as below.



Press the channel (▲,▼) buttons to select [AVL].



- Press the volume $(\blacktriangleleft, \blacktriangleright)$ buttons to select [On] and press the **enter** (\blacksquare) button.
 - \bullet Each press of volume $(\blacktriangleleft,\blacktriangleright)$ buttons changes the screen display as below.

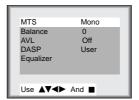


Screen display in stereo signal : Stereo Screen display in bilingual signal : SAP

- * Bilingual (dual language) signal
- This signal contains the secondary language signal in addition to the primary language.
- There are the primary and secondary language and stereo modes in bilingual signal.
- \bullet [Mono] : The primary language is output from left and right speaker. Signal mode is mono.
- [Stereo] : The primary language is output from left and right speaker. Signal mode is stereo.
- [SAP] : The secondary language is output from left and right speaker.
- Press the **menu** button to select the screen display as below.



Press the volume $(\blacktriangleleft, \blacktriangleright)$ buttons to select an audio mode you want.



 Each press of volume (◄, ►) buttons changes the screen display as below.



 $2 \quad \text{Press the channel } (\blacktriangle, \blacktriangledown) \text{ buttons to select [MTS]}.$



Press the **enter** (\blacksquare) button.



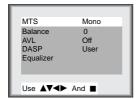
- * If some strange sound is heard when watching TV programs on stereo mode in poor signal areas, or if in non-dual signal service area, make sure to select mono mode.
- * [Stereo] or [Mono] mode can be available only when broadcasting signal contains the data.

Adjusting audio condition

*This function selscts the sound appropriate to your viewing program character.

DASP

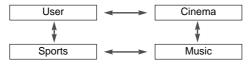
✓ Press the **menu** button to select the screen display as below.



 $oldsymbol{\gamma}$ Press the channel ($oldsymbol{A},oldsymbol{V}$) buttons to select [DASP].



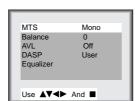
● Each press of volume (◀, ▶) buttons changes the screen display as below.



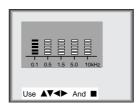
Press the **enter** (■) button.

Adjusting equalizer

Press the **menu** button to select the screen display as below.



Press the volume (◀, ▶) buttons to adjust a band as you want.



2 Press the channel $(\blacktriangle, \blacktriangledown)$ buttons to select [Equalizer].



press the channel (▲,▼) buttons to adjust a level as you want.

Press the **enter** (■) button.

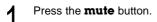
AUDIO /

? Press the volume (►) buttons.

Adjusting audio condition

Mute

 $\mbox{\ensuremath{^{\star}}}$ This function cuts off speaker sound. It's convenient when getting phone calls.

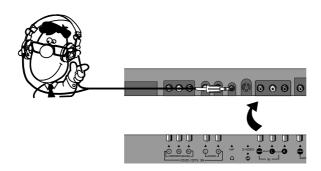




- \bullet To release muted sound, press the \pmb{mute} button or volume (\blacktriangleleft , \blacktriangleright) buttons.
- If muted sound is released, volume level is displayed on the screen.

Using headphone

- Headphone is an optional item.
- You can adjust headphone sound with volume(◄, ►) buttons. While you
 are listening to sound through headphone, speaker sound is cut off.

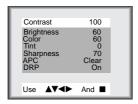




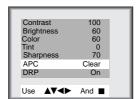
Adjusting video condition

APC (Auto Picture Control)

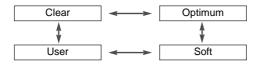
Press the **menu** button to select the screen display as below.



9 Press the channel $(\blacktriangle, \blacktriangledown)$ buttons to select [APC].



 Each press of volume (◄, ►) buttons changes the screen display as below.



power tv/video

1 2 3
4 5 6
7 8 9
flashbk 0 cc
menu mute
ch vol enter vol
* ch v sleep

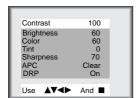
AUDIO /

Press the **enter** (■) button.

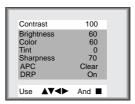
Adjusting video condition

Manual picture control

Press the **menu** button to select the screen display as below.



Press the volume (◀, ▶) buttons to adjust the picture condition as you want.



- [Contrast], [Brightness], [Color], and [Sharpness] are adjusted from 0 to 100.
- [Tint] is adjusted from Red 50 to Green 50.

- 2 Press the channel $(\blacktriangle,\blacktriangledown)$ buttons to select a picture item you want to adjust.
- Press the **enter** (■) button.

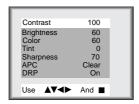


* APC setting is to be released if you use this function.

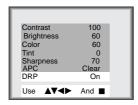
DRP(Digital Reality Picture)

♠ Press the menu button to select the screen display as below.

◆



Press the channel (▲,▼) buttons to select [DRP].



- Press the volume (◀, ▶) buttons to select [On] and press the **enter** (■) button.
 - \bullet Each press of volume $(\blacktriangleleft,\blacktriangleright)$ buttons changes the screen display as below.



AUDIO /

Adjusting video condition

* This function is to adjust the picture to stable condition when it is poor, for example, a horizontal stripe, twisted picture or no color in broadcasting.

Adjusting fine tuning

- Press the **menu** button to select the screen display as below.
- Press the volume (►) button.



Press the volume (◀, ▶) buttons to adjust the picture condition as you want.



2 Press the channel $(\blacktriangle, \blacktriangledown)$ buttons to select [Fine].



Press the **enter** (■) button.

Product specifications

:	ZLD20A1		
:	Horizontal size (inch)	: 20.236	
	Height (inch)	: 15.913	
	Thickness (inch)	: 2.803	
	Weight (pound)	: 20.172	
:	Horizontal size (inch)	: 27.087	
	Height (inch)	: 18.425	
	Thickness (inch)	: 7.677	
	Weight (pound)	: 28.44	
:	DC 15V/4.5A		
		AC Adaptor, manufactured	
:	NTSC		
:	VHF : 2 ~ 13, UHF : 14 ~ 69 Cable : 01 ~ 125		
:	LCD Panel		
:	See the back of the set		
:	75 Ω		
:	3.0W + 3.0W		
:	4 Ω X 4		
·	VIDEO input port set 1 VIDEO output port set 1 Component (480i / 480p) input set 1 S-VIDEO input 1 Headphone jack 1 Speaker output port set 1 DC 12V output port set 1 Power DC 15V input 1 Antenna input 1		
:	In : AC 100-240V 50/60Hz, 180 Out : DC 15V, 4.5A	IVA	
	: : only wit	: Horizontal size (inch) Height (inch) Thickness (inch) Weight (pound) : Horizontal size (inch) Height (inch) Thickness (inch) Weight (pound) : DC 15V/4.5A only with Model No. CAM-1550 ng-Nam Electronics. : NTSC : VHF : 2 ~ 13, UHF : 14 : Cable : 01 ~ 125 : LCD Panel : See the back of the se : 75 Ω : 3.0W + 3.0W : 4 Ω X 4 : VIDEO input port set 1 VIDEO output port set 1 VIDEO output port set 1 VIDEO input 1 Headphone jack 1 Speaker output port se DC 12V output port se Power DC 15V input 1 Antenna input 1 : In : AC 100-240V	

^{*} CAUTION : If replacement becomes necessary, replace it with an exact duplicate. Contact any Zenith authorized service center.

Standard North America three wire earth-grounding with flexible cord SJT type or higher type.

Power supply cordset

Your Zenith Limited Warranty

Direct-View Color TV

Welcome into the Zenith family! We believe that you will be pleased with your new Zenith Entertainment Machine. Please read this warranty carefully, it is a "LIMITED WARRANTY" as defined under Federal Law. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state within the U.S.A.

ZENITH RESPONSIBILITY

Service Labor During a period of one year from effective warranty date, Zenith will provide service labor by a

Zenith authorized service center when needed as determined by Zenith, as a result of manufacturing defects. This applies only in the U.S.

New or remanufactured replacements for factory-defective parts will be supplied by a Zenith authorized service center for one year from effective warranty date. Such replacement parts are **Parts**

warranted for the remaining portion of the original warranty period.

Home Service Warranty service for 21" diagonal (U.S.A.) or larger screen size models is provided in the home in most cases. (Some repairs may require the unit to be taken by the servicer to the repair facili-

ty and returned, at no additional charge.)

Not Covered This warranty covers manufacturing defects and does not cover installation, adjustment of cus-

tomer controls in the home, installation or repair of home antenna systems, cable converters or cable company-supplied equipment; it also does not cover damage due to misuse, abuse, negligence, acts of God or other causes beyond the control of Zenith. Any alteration of the product

after manufacture voids this warranty in its entirety.

THIS WARRANTY IS IN LIEU OF ANY OTHER WARRANTY, EXPRESS OR IMPLIED, INIS WARRANTY IS IN LIEU OF ANY OTHER WARRANTY, EAPRESS OR IMPLIEU, INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND ZENITH SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL, INDIRECT, OR INCIDENTAL DAMAGES OF ANY KIND, INCLUDING LOST REVENUES OR PROFITS IN CONNECTION WITH THE PRODUCT, SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS OR THE

EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.

OWNER'S RESPONSIBILITY

Effective Warranty Date Warranty begins on the date of original consumer purchase. For your convenience, keep the

dealer's dated bill of sale or delivery ticket as evidence of the purchase date.

Operating Guide Read your Operating Guide carefully so that you will understand the operation of your set and

how to adjust the customer controls.

Reception problems caused by inadequate home antenna or faulty antenna connections are the Antenna

owner's responsibility

Product Registration—Please fill out and mail your Product Registration Card. It is imperative that Zenith know how to reach you promptly if we should discover a safety problem that could Important

For warranty service, contact Zenith at 1-800-984-9349. Parts and service labor that are **Warranty Service**

Zenith's responsibility (see above) will be provided without charge. Other service is at the owner's expense. If you have any problem in obtaining satisfactory warranty service, call or write the Zenith Response Center. You must provide the model number, serial number and date of purchase or date of original installation. Before you ask for warranty service, read

"Maintenance and Troubleshooting" in your operating guide. You might avoid a service call.

ZENITH ELECTRONICS CORPORATION Zenith Response Center

201 James Record Rd., Building 3,

Telephone (800) 984-9349
Mon-Fri, 7:00 a.m.-8:00 p.m. CST
Sat. 8:00 a.m.-5:00 p.m. CST

www.zenith.com

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(256) 774-4025
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Will accept UPS Home & Carry-in Service

Television/VCR Parts and Accessories PTV/Camcorders