

COLOUR TELEVISION

OPERATION MANUAL

CHASSIS NO.: CH-20

Features	Optional	
	✓	×
Surround/Mono/Nicam/Stereo		
S-Video/Earphone Terminals		
Multilingual OSD		
Multi System		
Mold/Power source		
CRT (FS/SF/PF)		
Designs are subject to change without notice.		



Please read this manual carefully before operation.

BEFORE OPERATION

Dear Customer:

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

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

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

Customer's Record

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

Record these numbers in the spaces provided below.



Refer to them whenever you call upon your dealer regarding this product.

Model Number: _____

Chassis Number: _____

Safety Precautions

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

	CAUTION RISK OF ELECTRIC SHOCK. DO NOT OPEN.	
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER(OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.		



The lightning symbol in the triangle tells you that the voltage inside this product may be strong enough to cause an electric shock.

DO NOT TRY TO SERVICE OR CHANGE THIS PRODUCT YOURSELF.



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

CAUTIONS:

TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS POLARIZED PLUG WITH AN EXTENSION CORD RECEPTACLE OR OTHER OUTLET UNLESS THE PRONGS CAN BE FULLY INSERTED INTO THE OUTLET TO PREVENT ANY EXPOSURE OF THE PRONGS ON THE POLARIZED PLUG.

Warning-This TV set should only be serviced by an authorized and properly trained technician. Opening the cover or other attempts by the user to service this TV set may result in serious injury or death from electrical shock, and may increase the risk of fire.

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

NOTE TO CABLE INSTALLER:

The cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

Important Safety Instructions

CAUTION

PLEASE READ THESE INSTRUCTIONS, KEEP THESE INSTRUCTIONS AND HEED ALL WARNINGS.
FOLLOW ALL INSTRUCTIONS.

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

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

BEFORE OPERATION (continued)

Precautions

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

Grounding or Polarization-Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

Alternate Warnings-This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to have a suitable outlet installed. Do not defeat the safety purpose of the grounding plug.

Water and Moisture Warnings-Do not use the TV set near water-for example, near a bath tub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool; and the like. The TV set shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the TV set.

Ventilation-Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the TV set and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the TV set on a bed, sofa, rug, or other similar surface. This TV set 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.

Heat-Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

Power-Cord Protection-Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

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

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

Overloading-Do not overload wall outlets, extension cords or integral convenience receptacles as this can result in fire or electric shock.

Lightning-For added protection for this TV set 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 surges.

Object and Liquid Entry-Never push objects of any kind into the TV set 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 TV set.

BEFORE OPERATION (continued)

Precautions (continued)

Cleaning-Unplug the TV set from the wall outlet before cleaning or polishing it. Do not use liquid cleaners or aerosol cleaners. Use a dry cloth for cleaning the exterior of the TV set.

Attachments-Do not use attachments not recommended by the product manufacturer as they may cause hazards or electric shock.

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

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

- a. If the power cord or plug is damaged or frayed.
- b. If liquid has been spilled or objects have fallen into the TV set.
- c. If the TV set has been exposed to rain or water.
- d. If the TV set has been subject to excessive shock by being dropped, or the cabinet has been damaged.
- e. If the TV set does not operate normally by following 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 TV set to its normal operation.
- f. When the TV set exhibits a distinct change in performance-this indicates a need for service.

Servicing-Do not attempt to service the TV set yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

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 parts. Unauthorized substitutions may result in fire, electric shock, or other hazards.

Safety Check-Upon completion of any service or repairs to the TV set, ask the service technician to perform routine safety checks to determine that the TV set is in proper operating condition.

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

ANTENNA

Outdoor Antenna Grounding-if an outdoor antenna is installed, follow the precautions below.

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

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

Be sure the antenna system is grounded so as to provide some protection against voltage surges and built-up static charges.

CONTENTS

INTRODUCTION

Front/Rear Panels	2
Remote Control Keys	3

INSTALLATION

To Connect the Antenna.....	4
Installing the Remote Control Batteries	4
Connecting to the Audio/Video Inputs/Outputs	5

BASIC FUNCTIONS

Power On/Off	6
Picture Menu	6

Sound Menu	6
Setup Menu	7
Timer Menu	7
Parental CONT Menu	7
Install Menu	8
Auto Store	8
Search Menu	8
Sort Menu	8
Name Menu	8
Teletext	9

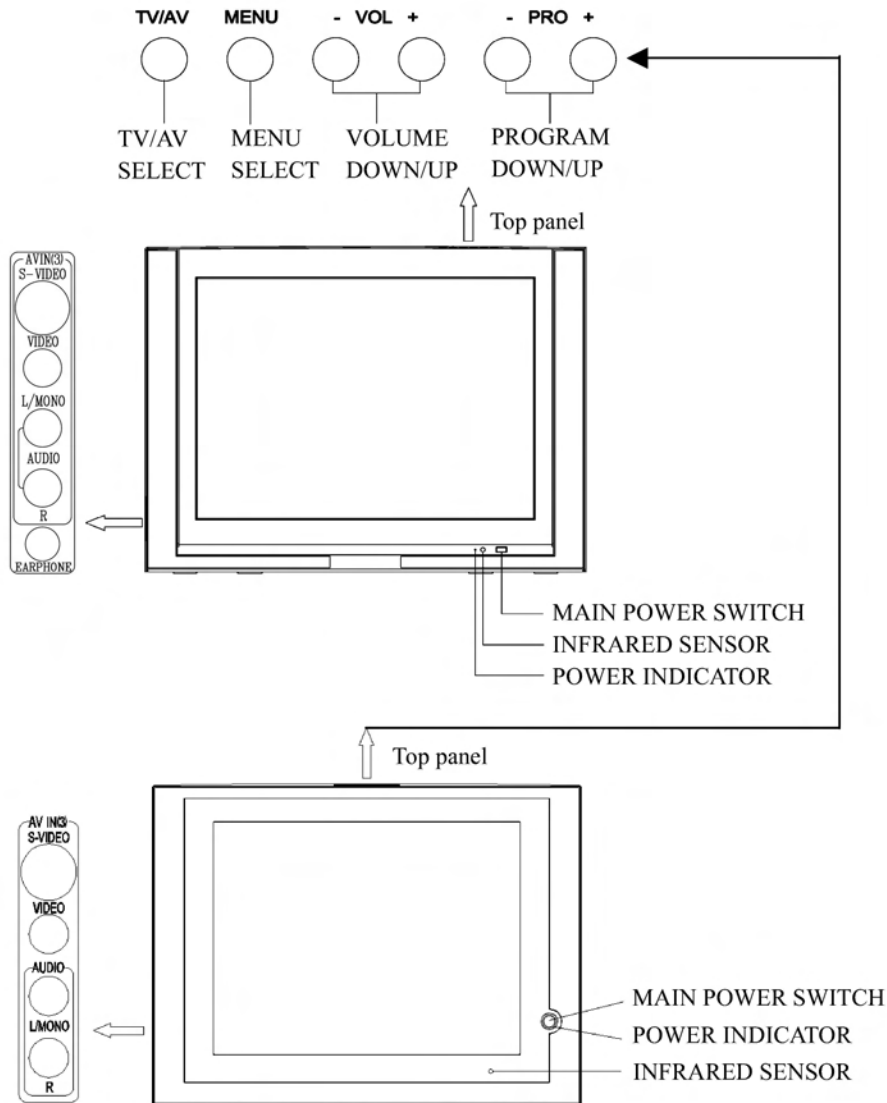
TROUBLESHOOTING	9
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Notes:

- 1) The OSD and illustration in this manual may be somewhat different from the actual situation. Please take the TV as the standard.
- 2) Designs are subject to change without notice.

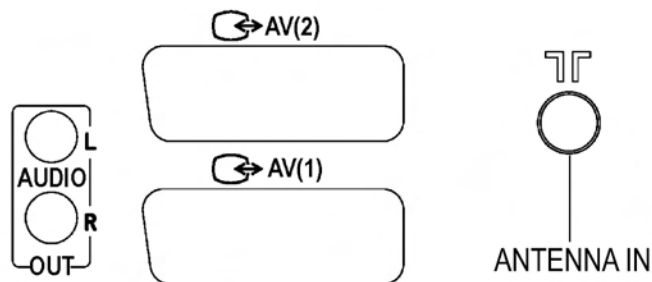
INTRODUCTION (example PF29T18 and PF29T25)

Front Panel




Note: The keys on the TV share the same functions with those keys with the same names on the remote control. This manual focuses on operation of the remote control.

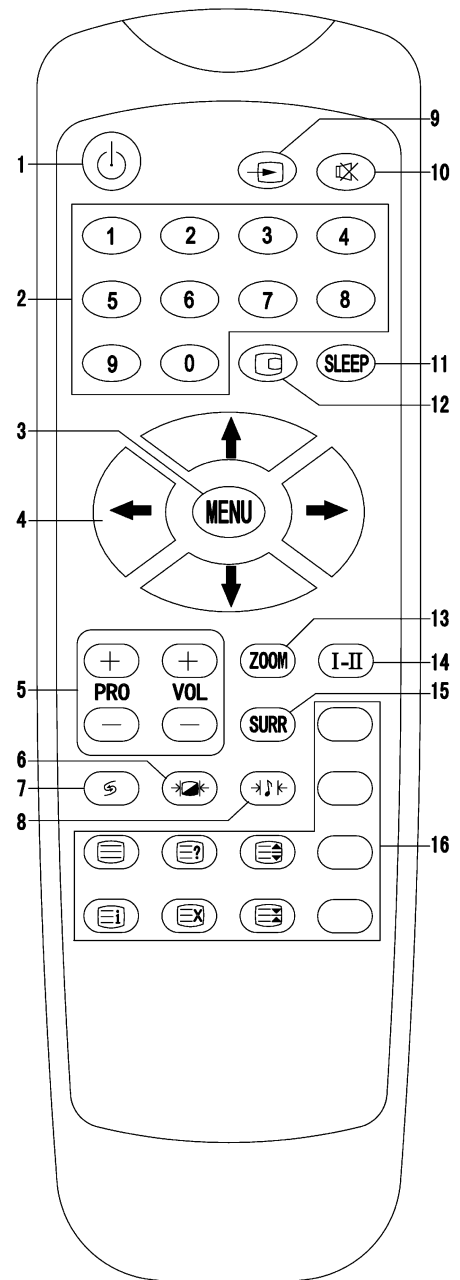
Rear Panel



INTRODUCTION (continued)

Remote Control Keys

1. **Standby** – To let you place the TV set on standby. To turn on the TV, press .
2. **Number keys** – Direct access to the programs. For a 2 digit program, enter the 2nd digit before the dash disappears.
3. **Menu** – To call up or exit the menus.
4. **Cursor** – These 4 keys are used to move around the menus.
5. **Program selection** – To access the next or previous program. The number, (name) are displayed for a few moments.
Volume adjust – To adjust the sound level.
6. **Pre-set image** – Used to access a series of stored settings: **Soft, Natural, Rich** and return to **Personal**.
7. **Recall** – To return to the last channel viewed.
8. **Pre-set sound** – Used to access a series of stored settings: **Speech, Theater, Music** and return to **Personal**.
9. **TV/Video** – To toggle between TV and different Video modes.
10. **Mute** – To mute or restore the sound.
11. **Sleep** – To select an automatic standby after a preset time (from 0 to 240 minutes).
12. **Screen information** – To display/clear the program number, name (if any), time, etc. This key is also used to exit from the menu. When there is no signal received, “No signal” will be displayed on the screen.
13. **Zoom** – Press this key repeatedly to switch the TV among the **16:9, Zoom** and **4:3** modes.
14. **Sound mode** – (Only available on certain versions)
Used to force programmes in **Stereo** to **Mono** or, for bilingual programs, to choose between **Dual I** or **Dual II**. For TV sets equipped for Nicam reception, depending on the programmes, you can force the **Nicam Stereo** sound to **Mono** or select between **Nicam Dual I, Nicam Dual II** and **Mono**. In the Video mode, “**Stereo**” is default setting, and pressing this key can force **Stereo** to **Left** or **Right**.
15. **Surround** – (Only available on certain versions) To activate/disable the incredible surround feature. In mono, a pseudo spatial stereo effect is obtained. In stereo, the speakers appear further apart.
(Only available on certain versions) To select Mono/Surround in the TV mode and select Stereo/Surround in the Video mode.
16. **Teletext (P9)**



Notes:

- 1) When in operation, please point your remote control directly to the infrared sensor. If the sensor receives remote signal, the power indicator blinks.
- 2) Do not expose the remote control to impacts, water or disassemble it.

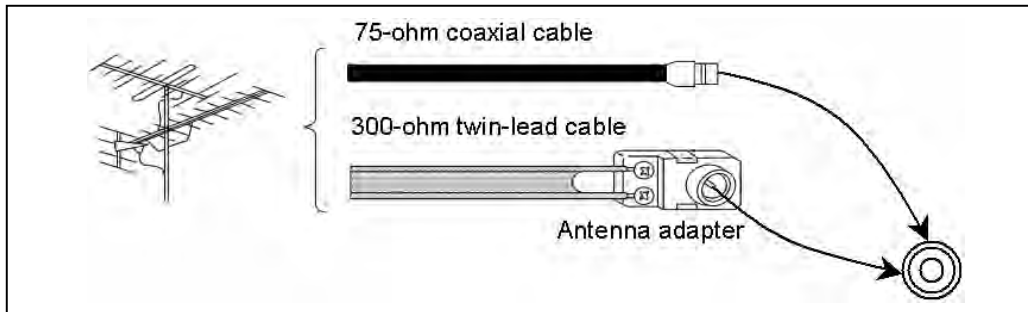
INSTALLATION

- Please read the safety instructions in this manual completely before installation.
- Install your TV in an area where direct sunlight will not fall upon the screen.
- Soft, indirect light is best for television viewing.
- Allow enough space (at least 4 inch) between the TV and any walls or enclosures for proper ventilation.
- Optimum television viewing distance is 3-5 times the screen's vertical length.

Auto-Degaussing

Colour television can be easily affected by magnetism, which shows as colour distortion on the screen. If your TV is affected by nearby magnetic components or appliances, turn it off for a few minutes. The built-in auto-degaussing circuit will eliminate the magnetic interference.

To Connect the Antenna



Notes:

- 1) It is recommended that a 75 ohm coaxial cable be used in order to eliminate interference and noise which may occur due to nearby radio transmissions.
- 2) The antenna cable should not be tied together with other wiring.
- 3) Set up a lightning rod and check it regularly when an outdoor antenna is used.

Installing the Remote Control Batteries

1. Remove the battery compartment lid.
2. Insert two AAA batteries. Make sure the positive (+) and negative (-) polarities are correctly aligned.
3. Reattach the battery lid.

Notes:

- 1) Alkaline batteries are recommended for longer life.
- 2) Always replace both batteries at the same time.
- 3) Do not expose batteries to fire or break them open.
- 4) To avoid battery leakage, remove batteries from the remote control when it is not being used for a long period of time.

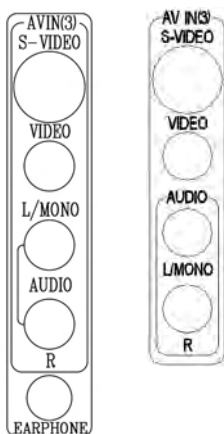
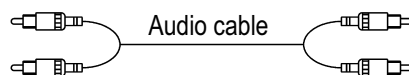
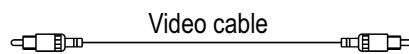
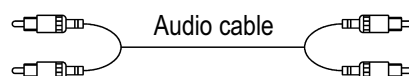
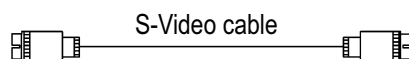
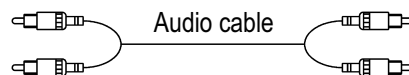
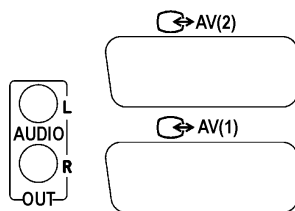
INSTALLATION (continued)

Connecting to the Audio/Video Inputs/Outputs

The following are optional connections. Please refer to operation manuals of external audio/video equipment for details. Before connection, do power off your TV and external equipment.

Rear (or Side) of TV

AV cable



DVD/VCR combo



Video game device



Music center



Camcorder



Satellite receiver



Headphone



Connecting earphones/headphones (Only available on certain versions)

- You can connect a set of earphones/headphones to your television if you wish to watch a television program without disturbing the other people in the room.
- When earphones/headphones are connected, the sound on the TV set will be cut. The **VOL-/+** keys are used to adjust the volume level.
- Prolonged use of earphones/headphones at a high volume may damage your hearing.

The television has 2 external sockets situated at the back of the set (AV1 and AV2).

- The AV1 socket has audio, CVBS/RGB inputs and audio, CVBS outputs.
- The AV2 socket has audio, CVBS/S-Video inputs and audio, CVBS outputs.

Notes:

- 1) The Audio/Video (or S-Video) connectors on the TV set are used for equipment, such as camcorders, certain DVD/VCR combo, certain video game devices, satellite receivers, etc.
- 2) To connect to music center, use an audio connection cable and connect the "L" and "R" outputs on the rear of the TV set to the "AUDIO IN" "L" and "R" inputs on your music center.
- 3) To receive signals from external equipment, please select the relevant AV mode. Press  to select AV1, AV2 (S-Video2) (S-Video2 signals from the AV2 socket) and AV3 (S-Video) (on the side panel). With signals input to S-Video2, press  to select the S-Video2 mode.

BASIC FUNCTIONS

Power On/Off

1. Power on

Plug in the supply socket, and press the **MAIN POWER SWITCH** key on the TV. The power indicator lights. You may press any of the **STANDBY** (⏻), **Program Number (0-9)** and **PRO-/+** keys on the remote control (or any key on the TV) to turn on the TV. The power indicator becomes dimmer.

2. Power off

To switch back to the Standby mode, press ⏻. You can also power off the TV directly by pressing the **MAIN POWER SWITCH** key.

Auto off without signal received

When there is no signal received (for example, the program of a certain channel is over), the TV will switch to the Standby mode if no key is pressed within 15 minutes. If you have set "Off Time" and the remaining time is less than 15 minutes, Off Time will be carried out prior to AUTO OFF.

In the AV mode, this function doesn't work.

Menus

Many operations get started from menu selection. To adjust a menu, press the **MENU** key to select it. Then press the ↑ / ↓ keys to highlight an item to be adjusted, and the ← / → keys to adjust it. Pressing the **MENU** key returns to the previous menu or exits.

Note: In the following function introduction, only the item to be adjusted in a menu will be displayed for the convenience of users, while others are omitted.

Main Menu	
Picture ▶	Brightness
Sound	Colour
Setup	Contrast
Install	Sharpness
	Colour Temp

Picture Menu

To set desired picture quality

Item	Press	
	←	→
Brightness	Dimmer	Brighter
Colour	Less colour	More colour
Contrast	Less contrast	More contrast
Sharpness	Less sharpness	More sharpness
Tint	More purplish	More greenish
Colour Temp	Normal (balanced), Cool (bluer), Warm (redder)	

Picture	
Brightness	◀ [Progress Bar] ▶ 50
Colour	◀ [Progress Bar] ▶ 50
Contrast	◀ [Progress Bar] ▶ 50
Sharpness	◀ [Progress Bar] ▶ 50
Tint	◀ [Progress Bar] ▶ 0
Colour Temp	Normal

The adjusted picture level is stored to the **Personal** position and remains unchanged until next adjustment.

Sound Menu

To set desired sound quality

Item	Press	
	←	→
Bass	Less bass	More bass
Treble	Less treble	More treble
Balance	Left dominance	Right dominance

Sound	
Bass	◀ [Progress Bar] ▶ 50
Treble	◀ [Progress Bar] ▶ 50
Balance	◀ [Progress Bar] ▶ 0

The adjusted sound level is stored to the **Personal** position and remains unchanged until next adjustment.

BASIC FUNCTIONS (continued)

Setup Menu

Child Lock

With Child Lock On, the keys on the TV don't function.

DNR (Dynamic Noise Reduction)

If the received signal is inferior, activate the noise reducer to improve the picture. In normal condition, it is recommended to set DNR Off in case of adverse affecting picture definition.

Item	Press	
	←	→
Timer	Access the Timer Menu	
Parental CONT	Access the Parental CONT Menu	
Child Lock	Off, On	
DNR	Off, On	

Setup	
Timer	▶
Parental CONT	▶
Child Lock	Off
DNR	Off

Timer Menu

Time

This feature allows you to set the clock on the TV.

On Time

This feature allows you to preset a time when the TV set turns on.

Off Time

This feature allows you to preset a time when the TV set turns off.

Timer	
Time	--:--
On Time	--:--
Off Time	--:--
Program No.	1
Sleep	Off

Program No.

This feature allows you to preset the program on display when the On Time is activated. Use ←/→ or 0-9 keys to enter Program No.

Sleep

This feature allows you to select among the following Sleep Off minutes: 15→30→45→60→90→120→180→240→Off (Unit: Minute). The TV will automatically enter the Standby mode when the preset Sleep time is up. "TV will turn off soon!" will be displayed on the screen one minute before the Sleep timer runs out.

Parental CONT Menu

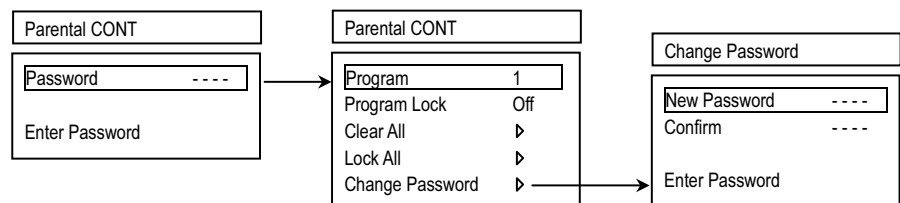
6688 is the factory default password. The initial password will be replaced when the new one is used. Please contact the service center in case you forget the password.

Program

Press ←/→ keys to select the associated program number.

Program Lock (Off, On)

Program Lock On will block the current program from being viewed. Program Lock Off will disable the program lock.



Clear All

Press ←/→ keys to highlight "OK". The TV will clear all lock function.

Lock All

Press ←/→ keys to highlight "OK". The TV will block all programs.

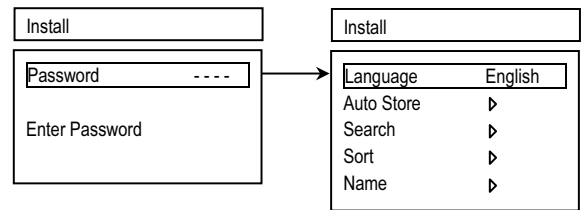
Change Password

This feature allows you to change the password. Press ←/→ keys to access Change Password Menu. "New Password" will appear on the screen reminding you of entering a new password. The confirmed new password will cover the old one.

BASIC FUNCTIONS (continued)

Install Menu

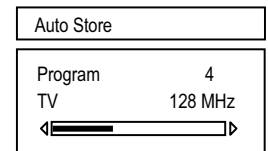
Enter the password to access the Install Menu. (If a program is locked, it's required to enter password before accessing the Install Menu.)



Language Select

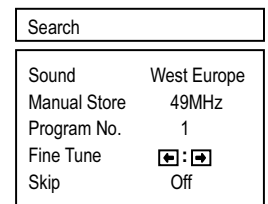
Auto Store

Press the \rightarrow key, and the Auto Store begins from Program No. 1. During Auto Store, press the **MENU** key to stop Auto Store.



Search Menu

Press the \leftarrow/\rightarrow keys to access the Search Menu.



Sound

This feature allows you to select a sound system among East Europe (DK), West Europe (BG), UK (I) and France (L/L')

Manual Store

Press the \leftarrow/\rightarrow keys to activate manual store.

Program No.

Press the \leftarrow/\rightarrow or **0-9** keys to set program No. The program manually searched will be stored on the set No.

Fine Tune

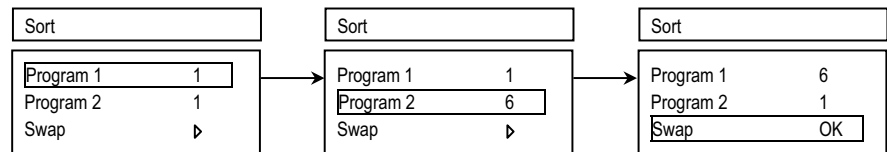
Press and hold down the \leftarrow/\rightarrow keys until you get the best sound and picture effect.

Skip (Off, On)

This feature allows you to access or skip the current program.

Sort Menu

Press the \leftarrow/\rightarrow keys to access the Sort Menu. This feature allows you to set programs to the specific program numbers as desired for convenience of memory and selection.



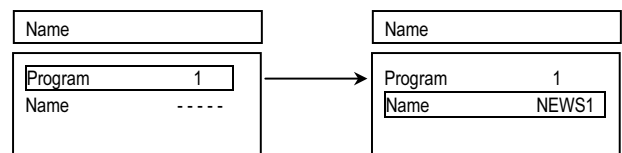
Press \leftarrow/\rightarrow or **0-9** keys to set the Program 1 and Program 2 to the related program number. Press the \leftarrow/\rightarrow keys to set Swap OK, and the program number of Program 1 will swap with that of Program 2.

Pressing the **MENU** key can return to the previous menu.

Name Menu

Program

Press the \leftarrow/\rightarrow or **0-9** keys to set the current program No. to name or rename.



Name


Press the \uparrow/\downarrow keys to move around the name display area (5 characters) and the \leftarrow/\rightarrow keys to enter one of the letters (A-Z) or one of numbers (0-9).

Pressing the **MENU** key can return to the previous menu. The name is stored.

BASIC FUNCTIONS (continued)

Teletext


The TV can receive various Teletext signals, including news, weather forecast and stock market quotation, which is convenient for your operation.


 **Teletext call** - This is used to call teletext, change to transparent mode and then exit. The summary appears with a list of items that can be accessed. Each item has a corresponding 3 digit page number.


If the channel selected does not broadcast teletext, the indication 100 will be displayed and the screen will remain blank (in this case, exit teletext and select another channel).

Selecting a page - Enter the number of the page required using the 0 to 9 or ↑ / ↓ keys. Example: page 120, enter 1, 2, 0. The number is displayed on top left, the counter turns and then the page is displayed. Repeat this operation to view another page.


If the counter continues to search, this means that the page is not transmitted. Select another number.


 **Direct access to the items** - Coloured areas are displayed at the bottom of the screen. The 4 coloured keys are used to access the items or corresponding pages.


 *The coloured areas flash when the item or the page is not yet available.*

 **Contents** - This returns you to the contents page (usually page 100).

 **Temporary stop** - This is used to temporarily disable or activate the teletext display.

 **Enlarge a page** - This allows you to display the top or bottom part of the page and then return to normal size.

 **Stop sub-page acquisition** - Certain pages contain sub-pages which are automatically displayed successively. This key is used to stop or resume sub-page acquisition.

 **Hidden information** - To display or hide the concealed information (games solutions).

TROUBLESHOOTING

Symptoms		Checks and Adjustments
Picture	Sound	
No picture	No sound	<ol style="list-style-type: none"> 1. Make sure the power cord is plugged in. 2. Check if the MAIN POWER SWITCH is pressed or not. 3. Check if the levels of CONTRAST, BRIGHTNESS and VOLUME are set to minimum.
Normal	No sound	<ol style="list-style-type: none"> 1. Check if the TV set is in the MUTE mode or the volume is minimum. 2. Check if the sound system is correct.
No colour	Normal	<ol style="list-style-type: none"> 1. Check if the colour is set to minimum. 2. Check if the colour system is correct.
	With noise	<ol style="list-style-type: none"> 1. Check if the sound system is correct. 2. Check if the colour system is correct.
With stripes	With noise	The TV set may be interfered by electric waves from automobiles, motors, neon lights, etc.
With snow	With noise	<ol style="list-style-type: none"> 1. Check if the antenna cable is broken or disconnected. 2. Check if the antenna direction has changed.
Ghost picture	Normal	Check if the antenna direction has changed.
Unclear picture	Normal or weak	Auto store again.
With spots	Normal	<ol style="list-style-type: none"> 1. The TV set may be moved with power on. 2. Check if magnetic objects are put near the TV set.
The remote control doesn't work.		The batteries may be exhausted or improperly installed.
Standby		When you switch the TV set on it remains in Standby mode and the indication Locked is displayed when you use the keys on the TV set? The Child Lock function is switched On .

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