Panasonic®

Operating Instructions
LED TV

Model No.
TH-24M400H
TH-32M400H

(image: TH-24M400H)

Thank you for purchasing this Panasonic product.

Please read these instructions carefully before operating this product and retain them for future reference.

Please carefully read the "Safety Precautions" of this manual before use.

The images shown in this manual are for illustrative purposes only.

72-M400HK-E69Z1

HE VC Advance™
Covered by patents at patentlist.accessadvance.com

◼◼ Dolby Audio

Manufactured under license from Dolby Laboratories. Dolby, Dolby Audio, and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

HDMI™
HIGH-DEFINITION MULTIMEDIA INTERFACE

The terms HDMI and HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing Administrator, Inc. in the United States and other countries.

real®
RealMedia, RealVideo and RealAudio are trademarks or registered trademarks of RealNetworks, Inc.

These statements are under the Licence Agreement with RealNetworks, Inc.

4.4.2.1 Terms of use must prohibit the user from modifying, translating, reverse engineering, decompiling, disassembling or using other means to discover the Source Code or otherwise replicate the functionality of the Client Code, except to the extent that this restriction is expressly prohibited by applicable law.

4.4.2.2 Terms of use must effectively disclaim on behalf of Real all warranties and conditions other than those set forth in this Agreement, express and implied, including implied warranties or conditions of merchantability and fitness for a particular purpose; and effectively exclude all liability for indirect, special, incidental and consequential damages, including but not limited to lost profits or replacement systems.

This product is licensed under the AVC patent portfolio license for the personal use of a consumer or other uses in which it does not receive remuneration to (i) encode video in compliance with the AVC Standard ("AVC Video") and/or (ii) decode AVC Video that was encoded by a consumer engaged in a personal activity and/or was obtained from a video provider licensed to provide AVC Video. No license is granted or shall be implied for any other use.
Additional information may be obtained from MPEG LA, LLC.
See http://www.mpegla.com.

Panasonic does not guarantee operation and performance of peripheral devices made by other manufacturers; and we disclaim any liability or damage arising from operation and/or performance from usage of such other maker's peripheral devices.

24-inch model   32-inch model

∼

This mark indicates the product operates on AC voltage.

◻

This mark indicates a Class II or double insulated electrical appliance wherein the product does not require a safety connection to electrical earth (ground).

Notice for Digital terrestrial broadcasting functions
● Function related to Digital broadcasting will work in the areas where the digital terrestrial broadcasting services are received. Consult your local Panasonic Dealer with coverage areas.
● Not all the features are available depending on the country, area, broadcaster and service provider.
● This TV has the capability for Digital broadcasting specifications. But future Digital broadcasting services cannot be guaranteed.

Even if no special notation has been made of company or product trademarks, these trademarks have been fully respected.

Damages

● Excepting cases where responsibility is recognised by local regulations, Panasonic accepts no responsibility for malfunctions caused by misuse or use of the product, and other problems or damages caused by use of this product.
● Panasonic accepts no responsibility for the loss, etc., of data caused by disasters.
● External devices separately prepared by the customer are not covered by the warranty. Care for the data stored in such devices is the responsibility of the customer. Panasonic accepts no responsibility for abuse of this data.

The illustration for **TH-24M400H** is used in this manual unless otherwise mentioned. Illustrations shown may be different depending on the model.
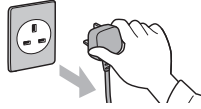
Contents

Safety Precautions

To help avoid risk of electrical shock, fire, damage or injury, please follow the warnings and cautions below:

■ Mains plug and lead

Warning

If you detect anything unusual, immediately remove the mains plug.

Note

● Mains Plug and lead types vary depending on the model and countries.

● This TV is designed to operate on AC ∿ 100-240 V, 50 / 60 Hz.

● Insert the mains plug fully into the mains socket.
● To turn Off the apparatus completely, you must pull the mains plug out of the mains socket.
  Consequently, the mains plug should be easily accessible at all times.
● Disconnect the mains plug when cleaning the TV.
● Do not touch the mains plug with wet hands.

● Do not damage the mains lead.
  • Do not place a heavy object on the lead.

  • Do not place the lead near a high temperature object.

  • Do not pull on the lead. Hold onto the mains plug body when disconnecting the plug.

  • Do not move the TV with the lead plugged into a mains socket.
  • Do not twist the lead, bend it excessively or stretch it.
  • Do not use a damaged mains plug or mains socket.
  • Ensure the TV does not crush the mains lead.
● Do not use any mains lead other than that provided with this TV.

■ Take care

Warning

● Do not remove covers and never modify the TV yourself as live parts are accessible and risk of electric shock when they are removed. There are no user serviceable parts inside.
● Do not expose the TV to rain or excessive moisture. This TV must not be exposed to dripping or splashing water and objects filled with liquid, such as vases, must not be placed on top of or above the TV.
● Do not insert foreign objects into the TV through the air vents.
● If the TV is used in an area where insects may easily enter the TV.
  It is possible for insects to enter the TV, such as small flies, spiders, ants, etc. which may cause damage to the TV or become trapped in an area visible on the TV, e.g. within the screen.
● Do not use an unapproved pedestal / mounting equipment. Be sure to ask your local Panasonic dealer to perform the setup or installation of approved wall-hanging brackets.
● Do not apply strong force or impact to the display panel.
● Ensure that children do not climb on the TV.
● Do not place the TV on sloping or unstable surfaces, and ensure that the TV does not hang over the edge of the base.

Warning
Never place a TV in an unstable location. A TV may fall, causing serious personal injury or death. Many injuries, particularly to children, can be avoided by taking simple precautions such as:
● Using cabinets or stands recommended by the manufacturer of the TV.
● Only using furniture that can safely support the TV.
● Ensuring the TV is not overhanging the edge of the supporting furniture.
● Not placing the TV on tall furniture (for example, cupboards or bookcases) without anchoring both the furniture and the TV to a suitable support.
● Not placing the TV on cloth or other materials placed between the TV and supporting furniture.
● Educating children about the dangers of climbing on furniture to reach the TV or its controls.

If your existing TV is being retained and relocated, the same considerations as above should be applied.

● This TV is designed for table-top use.
● Do not expose the TV to direct sunlight and other sources of heat.

To prevent the spread of fire, keep candles or other open flames away from this product at all times


■ Suffocation / Choking Hazard

Warning

● The packaging of this product may cause suffocation, and some of the parts are small and may present a choking hazard to young children. Keep these parts out of reach of young children.

■ Display

Caution

● Do not spray water or detergent directly on TV screen for cleaning purpose. Leaking liquid substance will cause damage to TV.

● Be careful of cats, rats or other animals that may urinate on the TV (front and rear). It may lead to TV failure.

● Do not use sharp or hard objects (finger nails, knife and etc.) on TV screen. This may cause damage to the screen surface.
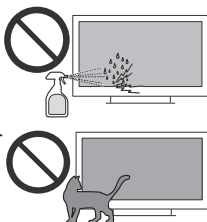
■ Pedestal

Warning

● Do not disassemble or modify the pedestal.

Caution

● Do not use any pedestal other than the one provided with this TV.
● Do not use the pedestal if it becomes warped or physically damaged. If this occurs, contact your nearest Panasonic dealer immediately.
● During setup, make sure that all screws are securely tightened.
● Ensure that the TV does not suffer any impact during installation of the pedestal.
● Ensure that children do not climb onto the pedestal.
● Install or remove the TV from the pedestal with at least two people.
● Install or remove the TV by the specified procedure.

■ Ventilation

Caution

Allow sufficient space (at least 10 cm) around the TV in order to help prevent excessive heat, which could lead to early failure of some electronic components.

(cm)
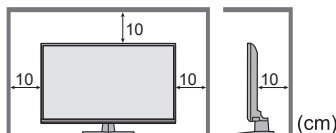
Note

TV stand is for explanation only, not match with actual design.

● Ventilation should not be impeded by covering the ventilation openings with items such as newspapers, tablecloths and curtains.

● Whether you are using a pedestal or not, always ensure the vents at the bottom of the TV are not blocked and there is sufficient space to enable adequate ventilation.

■ Moving the TV

Caution

Before moving the TV, disconnect all cables.
● At least two people are required to move the TV.

■ When not in use for a long time

Caution

This TV will still consume some power even in the Off mode, as long as the mains plug is still connected to a live mains socket.
● Remove the mains plug from the wall socket when the TV is not in use for a prolonged period of time.

■ Use conditions

Caution

● This appliance is intended for use in tropical climates.

■ Battery for the Remote Control

Caution

● Incorrect installation may cause battery leakage, corrosion and explosion.
● Replace only with the same or equivalent type.
● Do not mix old and new batteries.
● Do not mix different battery types (such as alkaline and manganese batteries).
● Do not use rechargeable batteries (Ni-Cd, etc.).
● Do not burn or break up batteries.
● Do not expose batteries to excessive heat such as sunshine, fire or the like.
● Make sure you dispose of batteries correctly.
● Remove the battery from the unit when not using for a prolonged period of time to prevent battery leakage, corrosion and explosion.

Setting Up the TV

Supplied accessories

Accessories may not be placed all together. Take care not to throw them away unintentionally.

Operating Instructions

Remote Control

● RC200PS002
➡ **(p. 9)**

Batteries (AAA) × 2
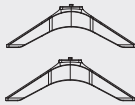➡ **(p. 5)**

Pedestal
➡ **(p. 5)**

24-inch model	● Pedestal
● Assembly screws (ST3 x 12) x 4	

32-inch model	● Pedestal
● Assembly screws (ST4 x 15) x 4	
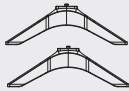
> **Note**
> ●Illustrations shown may be different between models and countries.

Preparation

Take out the pedestal and the TV from the packing case and put the TV onto a work table with the screen panel down on the clean and soft cloth (blanket, etc.)
●Use a flat and firm table bigger than the TV.
●Do not hold the screen panel part.
●Make sure not to scratch or break the TV.

Attaching the pedestal
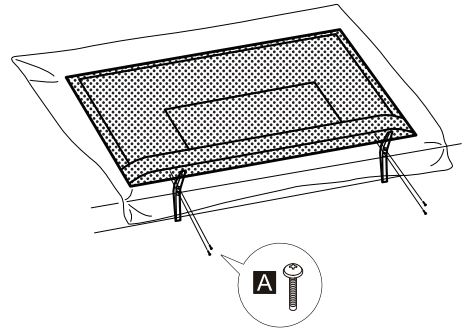
Removing the pedestal from the TV

Be sure to remove the pedestal in the following way when using the wall-hanging bracket or repacking the TV.

1 **Lay the TV on a foam mat or thick soft cloth on a table.**

2 **Remove the assembly screws from the TV.**

3 **Pull out the base from the TV.**

Inserting remote's batteries

Press the hook and lift the cover

Note the correct polarity (+ or -)

Wall mounting the TV (optional)

Please contact your local Panasonic dealer to purchase the recommended wall-hanging bracket.

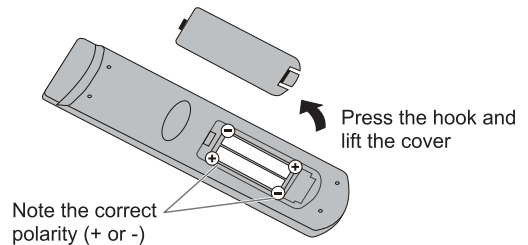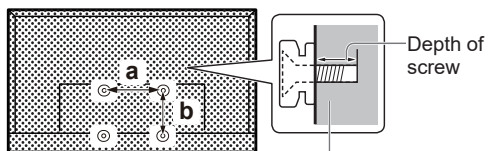Rear of the TV　　　　　　(View from the side)

Depth of screw

Screw for fixing the TV onto the wall-hanging bracket(not supplied)

■ Holes for wall-hanging bracket installation

Model	a	b
24-inch	100 mm	100 mm
32-inch	100 mm	100 mm

■ Screw specification

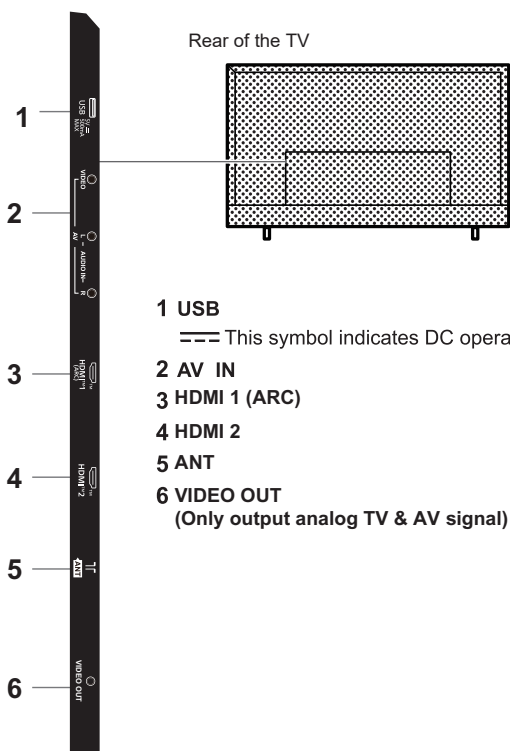| Model	Type	Depth of screw	
		Minimum	Maximum
24-inch	M4	6 mm	10 mm
32-inch	M4	6 mm	10 mm

(Warning)

- When optional accessories such as wall brackets etc. are used, always read and follow the manufacturer installation and usage instructions.
- Do not mount the unit directly below ceiling lights (such as spotlights or halogen lights) which typically give off high heat. Doing so may warp or damage plastic cabinet parts.
- When installing wall brackets you must ensure the wall bracket is not electrically grounded to metal wall studs. Always ensure that there are no electrical cables, pipes etc. in the wall before you begin the wall bracket installation.
- To prevent fall and injury, remove the TV from its fixed wall position when it is no longer in use.

Connecting the TV

- Please ensure the TV is disconnected from the mains socket/ power point before attaching or disconnecting any RF/ AV leads.
- External equipment and cables are for illustrative purposes only and not supplied with this TV.
- Check the type of terminals and cable plugs are correct when connecting.
- When using an HDMI cable, use the fully wired one.
- Keep the TV away from electronic equipment (video equipment, etc.) or equipment with an infrared sensor. Otherwise, distortion of image/ sound may occur or operation of other equipment may be interfered.
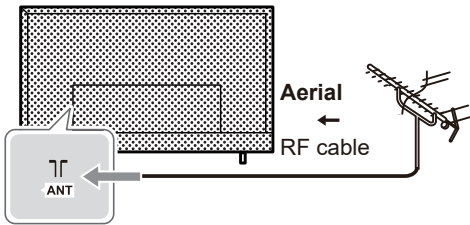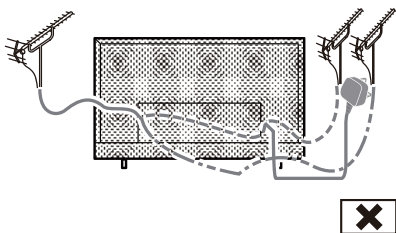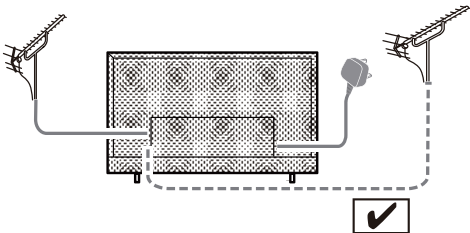- Also read the manual of the equipment being connected.

Terminals

Rear of the TV

1 USB

━━━ This symbol indicates DC operation.

2 AV IN

3 HDMI 1 (ARC)

4 HDMI 2

5 ANT

6 VIDEO OUT
(Only output analog TV & AV signal)

Connections

Aerial and mains lead

Aerial

Aerial
← RF cable
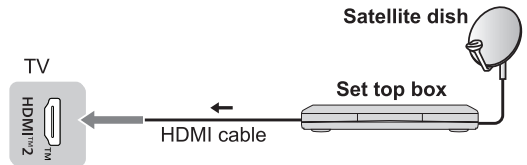
- Keep RF (aerial) cable away from the mains lead to avoid and minimise mains interference pickup.
- Do not place the RF cable under the TV.
- An aerial, correct cable (75 Ω coaxial) and correct terminating plug are required to obtain optimum quality picture and sound.
- If a communal aerial system is used, you may require the correct connection cable and plug between the wall aerial socket and the TV.
- Your local Television Service Centre or dealer may be able to assist you in obtaining the correct aerial system for your particular area and the accessories required.
- Any matters regarding aerial installation, upgrading of existing systems or accessories required, and the costs incurred, are the responsibility of you, the customer.
- If the aerial is placed in the wrong location, interference might happen.

DVD Recorder / VCR

TV

HDMI™2
HDMI cable
RF cable

ANT
RF cable
DVD Recorder / VCR

Set top box

TV

Satellite dish
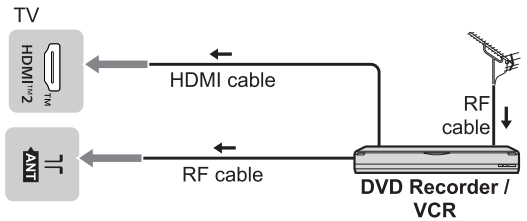
HDMI™2
HDMI cable
Set top box

AV / Game equipment

■ **Using HDMI terminal**

TV

HDMI™2
HDMI cable
Equipment
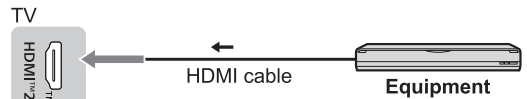
- You can also make similar connection via HDMI 2.

■ **Using COMPONENT terminals**

TV

VIDEO
Video cable (Shielded)   **Equipment**

AV
L — AUDIO IN — R
Audio cable (Shielded)

Speaker system

Amplifier with speaker system

TV

HDMI™1 (ARC)
HDMI cable
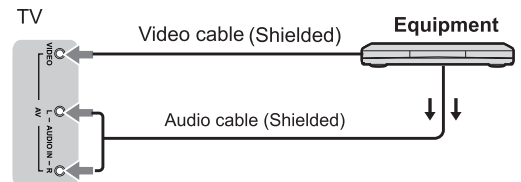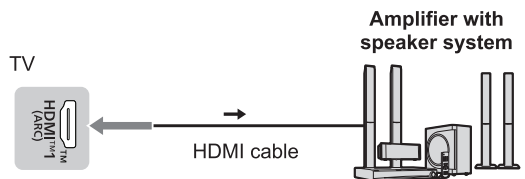
- Use HDMI 2 to connect to an extension with ARC(Audio return channel) capability the sound.

- Enjoy the sound of external devices in multichannel sound (e.g. Dolby digital) 5.1CH), connect the device to the loudspeaker. For connections, see the device and the instructions for the loudspeaker.

7

Initial Setup

When you first turn on the TV, a series of steps will pop-up to guide you to setup your TV.
● These steps are not necessary if the setup has been completed by your local dealer.

1 Plug the mains plug into the mains socket and turn on the TV.
It may take a few seconds before the screen is displayed.

① AC100 - 240 V, 50 / 60 Hz

②
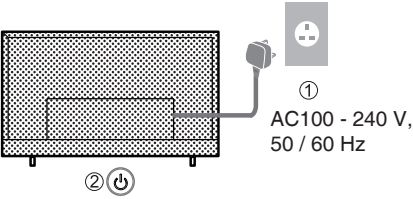
2 Select your language.

3 Select Tune Type.

4 Select [Home].

Installation Guide

OSD Labguage	◀ English ▶
Tune Type	◁ DTV+ATV ▷
View Environment	◁ Home ▷

RETURN Exit   OK Enter

Select

Start Auto Setup
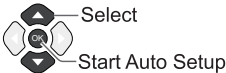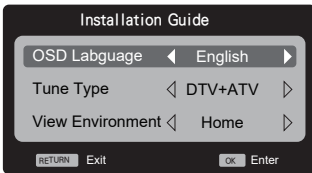
● [Shop] is for shop display.
● To change the viewing environment later on, you need to initialise all settings by accessing [Reset] (p.14).

5 Scanning starts.

DTV + ATV

ATV   :   5   Program(s)

DTV   :   2   Program(s)

Radio :   0   Program(s)

UHF   DS-35   85% (DTV)

RETURN Skip   MENU Exit

Confirm
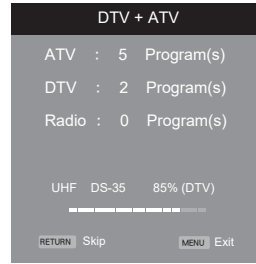
● This function searches and stores TV channels.
● The stored channels and sorted channel order vary depending on the area, broadcasting system and conditions of signal reception.

Setup is now complete and your TV is ready for viewing.

Note

● If tuning has failed, check the connection of the RF cable, then follow the on-screen instructions.

Operating the TV

Using the remote control
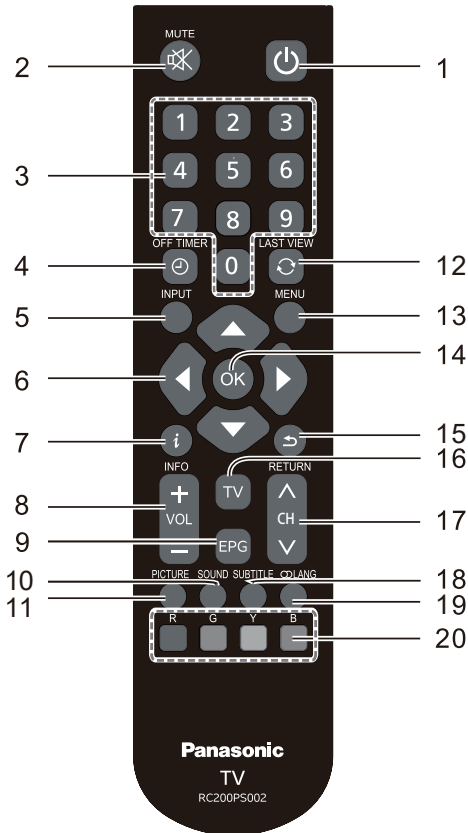
1 [⏻]: **Switches TV On or Off (Standby)**

2 **Sound Mute On / Off**

3 **Numeric buttons**
- Changes channel.

4 **Setting off time**

5 **Input**
- Displays [Input Selection] to seect the input mode.

6 **Cursor buttons**

7 **Displays Information banner**

8 **Volume Up / Down**

9 **EPG**
- Go straight to TV guide (Only available in DTV)

10 **Sound**
- Recurrent select different sound modes

11 **Picture**
- Recurrent select different picture modes

12 **Return**
- Return to last watched channel (Only available in ATV or DTV mode)

13 **Menu**
- Displays [Main Menu]

14 **OK**
- Confirms selections.
- Press after selecting channel positions to quickly change channel.
- Displays the [Channel List].

15 **Return**
- Returns to the previous menu / page

16 **TV**
- Switches to TV input mode. (DTV or ATV).

17 **Channel Up / Down**

18 **Subtitle**
- Enter the subtitle mode menu (Only available in DTV or USB mode)

19 **⭕Lang**
- Enter the sound mode menu (Only available in DTV or USB mode)

20 **Coloured buttons**
- Performs multiple operations which correspond to the operation guide displayed on the menu screen.

Programme Guide

Press the **"EPG"** key of the remote control to enter the TV guide.
Press **"G"** to make an appointment to watch the program once a day or once a week.
Press **"Y"** to view the programme information of the previous day (limited to one week).
Press **"B"** to view the programme information of the following day (limited to one week).
Reservation list: Under the electronic Program Guide screen, press the **"EPG"** key to enter the reservation list.
Press **"R"** to delete a scheduled program.
Press **"Y"** to add scheduled programs.
Press **"B"** to edit a scheduled program.

> **Note**

- Only available in DTV.

Channel List

In DTV or ATV mode, press **OK** to display the channel list, then press the up and down key to select the channel, and press **OK** to enter.

> **Note**

- The channel list can only be displayed in DTV or ATV mode.

Operating the TV

Indicators on the TV

2 3

1

● Location of indicators may vary depending on the models.

1 Mains power On switch

● The TV is off, short press the button to turn on the power.

● The TV is on, short press the button, the virtual button will display as shown below.

⏻ ⟳ ＋ － ∧ ∨

● When the virtual button appears, press the button briefly to switch the button key functions.

● When the virtual button is present, press the button long enough (for more than 1 second), can perform the following functions.

⏻ Power off
To turn Off the apparatus completely, you must pull the mains plug out of the mains socket.

⟳ Input source
Long press display input source option, and then long press to release the button switch input mode.

＋ Volume increase

－ Volume reduction

∧ Previous channel

∨ Next channel

2 Power LED
● Red: Standby
Green: On

3 Remote control signal receiver

Watching External Inputs

1 Connect the external equipment.
➡ **(p. 7)**

2 Display the [Input Selection] menu, then select the input of the connected equipment.

Example:

INPUT ➡

Input source
DTV
ATV
AV
HDMI 1
HDMI 2
USB

Note

● If the external equipment has an aspect adjustment function, set it to "16:9".

10

Using Media Player

Media Player allows you to enjoy photo, music or video recorded on a USB Flash Memory.

● The picture may not appear correctly on this TV depending on the digital cameras used.
● Display may take some time when there are many files and folders in the USB Flash Memory.
● Partly degraded files might be displayed at a reduced resolution.
● The folder and file names may be different depending on the digital camera used.

Inserting / Removing the USB Flash Memory

TV

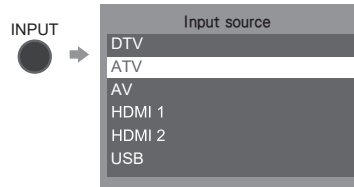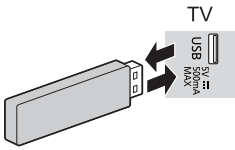● Insert or remove straight and completely.

Starting Media Player

1 Insert the USB Flash Memory.

2 Press the Input button to enter the signal source menu and select USB to enter.

3 Select the mode.

Select
Access

[Photo]: Displays the thumbnail of all photos in the USB Flash Memory.

[Music]: Displays the thumbnail of music folders in the USB Flash Memory.

[Movie]: Displays the thumbnail of video titles in the USB Flash Memory.

[Text]: Displays the thumbnail of all file titles in the USB Flash Memory.

Follow the operation guide to perform available operations in each mode.

INFO

ⓘ ● Displays / hides the operation guide.

Photo mode

Select the **Photo** and press **OK** to enter.
Select the image file on your USB device,
Press **OK** to open.

Select the appropriate directory and press **OK** to enter. If there are playable images in the directory file, can be directly displayed, press **Up/Down/Left/Right** keys to select, press **OK** key to play.

[Option Menu]

Press **OK** to bring up the operation interface:

Play/Pause: Play or pause the picture.
Prev./Next: Switch to previous or next picture.
Stop: Stop the current picture, after stop, will enter the preview mode automatically.
In the preview mode, press the **Up/Down/Left/Right** keys to select the picture, and press the **OK** key open select picture, if you want to exit picture play, you can press the **Return** key step by step to exit.
Repeat: Random, Repeat-None, Repeat-One, Repeat-All.
Music On: You can play music files at the same time while playing pictures
Music files must be placed in the same folder as pictures.
Playlist: Press the **OK** key to display the playlist and select the file you want to play.
Info: Displays information about the currently playing picture.
Rotating: The picture rotates clockwise/counterclockwise.
Enlarge: Enlarge the image.
Zoom In/Out: Zoom out the picture.
Move View: Move the image, but the image must be enlarged first.
Slide Show : Transitions used to switch photos during a slide show. Including Normal, All Effect Show, Dissolve, Diagonal Blocks, Wipe, Slide. Press **OK** to switch.

> Note

● Image pixels may become low when playing with slide set.

Music mode

Select the **Music** and press **OK** to enter. Select the music file on your USB device, press **OK** to open.

Select the appropriate music file and press **OK** to play.

[Option Menu]

Press **OK** to bring up the operation interface:

Play/Pause: Pause or play the current music.
FB/FF: x2, X4, X8, X16 are available.
Prev./Next: Return to the previous track or skip to the next track.
Stop: Stops the currently playing music. After stopping, press the **Up/Down/Left/Right** keys to select the audio file and press **OK** to open it. If you want to exit the music, you can exit step by step by pressing the **Return** key.
Repeat: Random, Repeat-None, Repeat-One, Repeat-All.
Mute: Enter or unmute mode.
Playlist: Displays all played files.
Info: Displays the information about the currently playing audio.
Goto Time: Select a certain period of time to play.

Movie mode

Select the movie and press **OK** to enter. Select the movie file on your USB device, press **OK** to open.

Select the corresponding directory and press **OK** to enter. If there are playable views in the directory frequency files can be displayed directly. Press the **Up/Down/Left/Right** keys to select, and press the **OK** key to play.

[Option Menu]

Press **OK** to bring up the operation interface:

Play/Pause: Pause or play the current music.
FB/FF: x2, X4, X8, X16, X32 are available.
Prev./Next: Go back to the previous movie or skip to the next movie.
Stop: Stops the currently playing movie. After stopping, press the I**Up/Down/Left/Right** keys to select the movie file and press **OK** to open it. If you want to exit the movie, you can exit step by step by pressing the **Return** key.
Repeat: Random, Repeat-None, Repeat-One, Repeat-All.
A-B Set: A segment is played in A loop.
Playlist: Shows all the movies that are playing and can select the ones you want to play file.
Info: Displays information about the currently playing movie.
Slow: optional X2, X4, X8, X16.
Step: Play the movie frame by frame.

Goto Time: Select a favorite period of time to play.
Zoom in/Out: Press **OK** to zoom in or zoom out on the picture of the movie.
Aspect: adjust the screen size: Zoom 1, Zoom 2, Auto, 4:3, 16:9.
Move view: Move the image after zooming in.

Text mode

Select the file and press **OK** to enter.
Select the text file on the mobile storage device and press **OK** to open it.

[Option Menu]

Press **OK** to bring up the operation interface:

Previ Page: One page back.
Next Page: Forward one page.
Previ/Next: When playing multiple files, you can Return to the previous text or skip to the next file.
Stop: To stop playing, press **OK** if you want to play again.
Music On: Music can be played at the same time when playing files, but music files must be in the same folder as the file to be played.
Playlist: To call up the playlist, select the file to play.
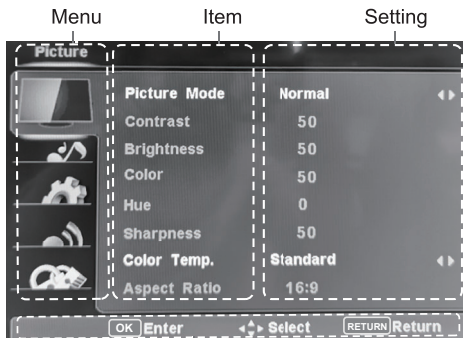**Info:** Displays information about the current file.

Using the Menu Functions
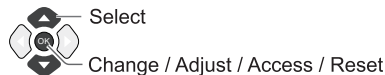
1 Display the menu.

MENU

Example:

Menu   Item   Setting

Picture	
Picture Mode	Normal
Contrast	50
Brightness	50
Color	50
Hue	0
Sharpness	50
Color Temp.	Standard
Aspect Ratio	16:9

OK Enter   Select   RETURN Return

Operation guide

2 Select the menu.

Select

Access

3 Select the item.

Select

Change / Adjust / Access / Reset

4 Change the setting.

Example:

● Change the setting option

Picture Mode	User	◀▶

Select

● Adjust the intensity bar

Contrast	50	▬▬▬

Adjust

● Access the submenu

Lock System		◀▶

Access

Note

● Only available items can be selected.

Picture

[Picture Mode]

Sets the picture mode for each input. **[Dynamic] / [Normal] / [Cinema] / [User]**
  [Dynamic]: Improves contrast and sharpness for viewing in a bright room.
  [Normal]: For viewing in a normal lighting condition.
  [Cinema]: Improves the performance of contrast, black and colour reproduction for watching movies in a darkened room.
  [User]: Reproduces the original image quality precisely without any revision.

In each [Viewing Mode], the settings for [Backlight], [Contrast], [Brightness], [Colour], [Sharpness] and [Hue].

[Contrast], [Brightness], [Colour], [Sharpness]

Increases or decreases the levels of these options according to your personal preference.

[Hue]

Adjusts the picture hue to suit your taste.
● For NTSC signal reception.

[Colour Temp.]

Selects the colour temperature of the picture.
[Cool] / [Standard] / [Warm]

[Aspect Ratio]

Choose the right image proportions.

[16:9] / [Zoom 1] / [Zoom 2] / [4:3] / [Auto] (Only available in DTV and USB) / [Full] (Only available in DTV/ATV and HDMI) / [Point To Point] (Only available in HDMI))

[DNR]

**Select the image dynamic noise reduction mode.
[Off] / [Low] / [Medium] / [High]**

[Backlight]

Adjust the backlight brightness.
● Before adjustment, you need to set **[Other]** > **[Dynamic Backlight]** to "**Off**".

Sound

[Mode]

Sets your favourite sound mode.
[Standard] / [Music] / [Movie] / [Sports] / [User]

[Standard] : Use standard sound quality.

[Music] : Improve the sound quality of watching music, video, etc.

[Movie] : Improve the sound quality of watching movies, plays, etc.

[Sports] : Improve the sound quality of watching sports, sports, etc.

[User] : When the voice mode is user, the high pitch can be adjusted by itself, bass setting.

[Treble]

Adjusts level to enhance or minimise sharper, higher sound output.

[Bass]

Adjusts level to enhance or minimise lower, deeper sound output.

[Balance]

Adjusts volume level of right and left speakers.

[Auto Volume]

Automatically regulates large sound level differences between channels and inputs. **[Off] / [On]**

[Digital Output]

[Auto] / [PCM]

Other

[OSD Language]

Changes language for on-screen displays.

[OSD Timer]

Select the time to display the menu.
[5 S] / [10 S] / [15 S] / [20 S] / [25 S] / [30 S]

[OSD Transparency]

Display menu transparency.

[Blue Screen]

Select **On**, the screen background of the machine is blue in the state of no signal.
Select **Off**, the background of the machine is black or snowflake in the state of no information.

[Timer Setting]

Set the scheduled **On/Off** time.
Clock: Current TV time.
When the digital broadcast has a signal, and the current frequency channel time synchronization.
Off Timer: Set the scheduled shutdown time.
[Off] / [Once] / [Every Day]
On Timer: Set the scheduled startup time.
[Off] / [Once] / [Every Day]
Sleep: Set a sleep time.
[Off] / [15 Min...] / [30 Min...].... [240 Min...]
● (Maximum set time: 240 minutes)

[Dynamic Backlight]

Select **On,** the internal chip automatically adjusts the backlight brightness according to the input screen content, so as to achieve optimize picture quality and reduce power consumption. Select **Off**, backlight brightness can be adjusted manually in **[Picture]**>**[Backlight]**.

[Reset]

Restore the TV to factory condition.

[View Environment]

Choose where to watch TV.
[Home] / [Shop]

[Software Update (USB)]

Update the software version.
●Please insert the USB device with the upgrade file.

[HDMI CEC]

Select **On**, just turn on the device connected to HDMI first and select the playback mode, the TV will automatically switch to the appropriate HDMI.

Tune

Note
●Original password： 0000

[Auto Scan]

Retunes the channels received in your area automatically.
●Automatically searches and adds available channels to the memory.
●After the scan is complete, all previously saved channels will be erased.

[DTV + ATV] / [DTV] / [ATV]

[DTV Manual Tuning]

Manual search for digital channels.
All channels found are added to the channel list.

```
          DTV Manual Tuning

    ◀         VHF DS-1          ▶




           Searching, Please Wait...
            frequ...  574.00  MHz
    Bad                          Good

    RETURN  Return          MENU  Exit
```

[ATV Manual Tuning]

Sets analogue channel manually.

ATV Manual Tuning	
Current CH	◀ 1 ▶
Color Sys.	PAL
Sound Sys.	B/G
Fine Tune	168.25 MHz
AFC	On
Search	
RETURN Return	MENU Exit

[Channel Edit]

Edits the programs according to your own preferences, options delete, rename, move and skip.

●DTV cannot be renamed.

[Signal Information]

Displays information about the current channel.

> **Note**
>
> ●Only available in DTV.

Lock

You can lock a specific channel code.
A message is displayed when you select a locked channel.
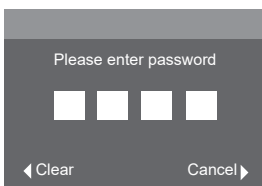Please enter your password to view it.

[Lock System]

You can lock specific channels / AV input terminals. When the locked channel / input is selected, a message appears. Enter the PIN number to watch.

[On] / [Off]

When selecting **On**, enter the 4-digit password.
● Original password： 0000

```
          Please enter password
          □  □  □  □

      ◀ Clear            Cancel ▶
```

[Set Password]

●Enter the PIN number twice at first setting.
●Make a note of the PIN number in case you forget it.

```
        Please enter old password
          □  □  □  □
        Please enter new password
          □  □  □  □
        Confirm new password
          □  □  □  □
      ◀ Clear            Cancel ▶
```
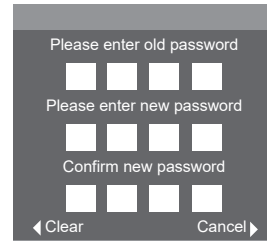
> **Note**
>
> ● Setting [Reset] (P14) will erases the PIN number and all settings.

[Block Program]

Select the channel you want to lock, and then press the Green button on the remote control to lock or unlock.

[Key Lock]

Set key lock switch.

[On] / [Off]

Additional Information

Auto power standby function

The TV will automatically go into Standby mode in the following conditions:
●No signal is received and no operation is performed for 15 minutes in Analogue TV mode.
●[Off Timer] is active in the [Timer] menu (p. 14).
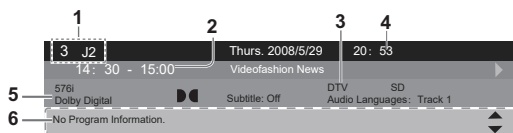
Information banner

Example : Digital TV

1 Channel position and name

2 Programme Start / Finish time

3 Channel type / TV mode

4 Current time

5 Input signal

6 Programme details

To display extra information (Digital TV)

INFO
ⓘ (Press again to hide the banner.)

Aspect

■ **[16:9]**
Directly displays the image at 16:9 without distortion (anamorphic).
− For Digital Broadcast channels, image will be displayed based on broadcasted channel aspect ratio.

■ **[Zoom1]**
Displays a 16:9 letterbox or 4:3 image without distortion.

■ **[Zoom2]**
Displays a 16:9 letterbox (anamorphic) image full-screen without distortion.

■ **[Auto]**
Automatic recognition of current signal image ratio.

■ **[4:3]**
Displays the image at the standard 4:3 without distortion.

■ **[Full]**
Displays 16:9 full screen image.

■ **[Point To Point]**
Displays the actual input signal image size.

Signal name	HDMI
525 (480) / 60i，60p	○
625 (576) / 50i，50p	○
750 (720) / 60p，50p	○
1,125 (1,080) / 60i，50i	○
1,125 (1,080) / 60p，50p，24p	○

○ Mark : Applicable input signal
●Signals other than above may not be displayed properly.
●The above signals are reformatted for optimal viewing on your display.

Supported file format in Media Player

■ **Photo**
JPG/JPEG

■ **Music**
MP3/AC3/AAC/WMA/PCM

■ **Video**
AVI/MKV/MP4/TS/VOB/MPG/DAT (MPEG-1/MPEG-2/MPEG-4/H.264/H.265/Xvid/VC1 /AVS/RMVB)

■ **Text**
TXT

∗1 Copy-protected files cannot be played back. WMA Pro and WMA Lossless are not supported.
∗2 Some subtitles or chapter functions may not be available.
∗3 This TV supports this container recorded with
∗4 Panasonic products. For details, read the manual of the products.

■ **Subtitles**
MicroDVD, SubRip, TMPlayer (.srt, .sub, .txt)
− The video file and subtitles text file are inside the same folder, and the file names are the same except for the file extensions.
− If there are more than one subtitles text file inside the same folder, they are displayed in the following order of priority: ".srt", ".sub", ".txt".

> **Note**
> ●Even if these conditions are fulfilled, some files may not play depending on how they are encoded.
> ●Do not use two-byte characters or other special codes for data.
> ●Connected devices may become unusable with this TV if the file or folder names are changed.

HDMI connection

This TV incorporates HDMI™ technology. HDMI (high-definition multimedia interface) is the world's first complete digital consumer AV interface complying with a non-compression standard.
HDMI allows you to enjoy high-definition digital images and high-quality sound by connecting the TV and the equipment.

■ Applicable HDMI features

● Input audio signal:
  2ch Linear PCM (sampling frequencies - 48 kHz,
  44.1 kHz, 32 kHz)
● Input video signal:
  ➡ **"Input signal that can be displayed" (p. 16)**
  Match the output setting of the digital equipment.
● Audio Return Channel＊(HDMI 1 terminal only)

■ DVI connection

If the external equipment has only a DVI output, connect
to the HDMI terminal via a DVI to HDMI adaptor cable.
When the DVI to HDMI adaptor cable is used, connect
the audio cable to the audio input terminal (use AV1 IN
AUDIO terminals).

Note

● Audio settings can be made on [HDMI 1/2
  Input(HDMI)] in the [Sound] menu.
● These HDMI connectors are "type A".
● These HDMI connectors are compatible with HDCP
  (High-Bandwidth Digital Content Protection) copyright
  protection.
● Equipment having no digital output terminal may be
  connected to the input terminal of video to receive
  analogue signals.

＊Audio Return Channel (ARC) is a function to send
  digital sound signals via an HDMI cable.

USB Flash Memory

For playing back in Media Player
Format: FAT16, FAT32
Compliance:
  Supports only USB1.1 or USB2.0 standard.
  Maximum USB capacity supported is 16GB.
  USB Hub or card adapter is not supported.

Note

● Data modified with a PC may not be displayed.
● Do not remove the device while the TV is accessing
  data. Otherwise this can damage the device or TV.
● Do not touch the pins on the device.
● Insert the device in the correct direction. Otherwise this
  can damage device or TV.
● Electrical interference, static electricity, or erroneous
  operation may damage the data or device. Panasonic
  is not liable for any deterioration or damage of data or
  device during operations with the TV.
● It is recommended to connect the USB Flash Memory
  directly to the TV's USB port.
● Some USB devices or USB HUB may not be used with
  this TV.
● You cannot connect any devices by using USB card
  reader.

Troubleshooting

Before requesting service or assistance, please follow
these simple guides to resolve the problem.
If an error message appears, follow the message's
instructions.
If the problem still persists, please contact your local
Panasonic dealer for assistance.

Screen

**Red, blue, green or black spots on the
screen.**
➡ This is the characteristic of liquid crystal panels. The
  liquid crystal panel is built with very high precision
  technology. Occasionally, a few non-active pixels
  may appear on the screen as points of red, green,
  blue or black. This does not affect the performance
  of your TV and it is not a quality problem.

Chaotic image, noisy.
➡ Set [P-NR] in the [Picture] menu to remove noise
  (p. 13).
➡ Check nearby electrical products (car, motorcycle,
  fluorescent lamp).

No image is displayed.
➡ Check the settings of [Contrast], [Brightness] or
  [Colour] in the [Picture] menu (p.13).
➡ Check the TV is in AV mode. If the TV is in AV mode,
  check the selected input mode match the output of
  the external equipment (p. 13).

Blurry or distorted image.
(No sound or low volume.)
➡ Reset channels. ➡ **(p. 14)**

Unusual image is displayed.
➡ Turn the TV off with Mains power On / Off switch
  (p.10), then turn it on again. If the problem
  persists, initialise all settings. ➡ **[Reset] (p. 14).**

**Pictures from equipment connected via
HDMI are unusual.**
➡ Check the HDMI cable is connected properly.
➡ Turn the TV and equipment off, then turn them on
  again.
➡ Check an input signal from the equipment (p. 16).
➡ Use equipment compliant with EIA/CEA-861/861D.

Sound

No sound is produced.
➡ Check the sound mute setting (p. 9) and volume.

Low level or distorted sound.
➡ Sound signal reception may be deteriorated.

**Sound output via HDMI connection is
unusual.**
➡ Set the sound setting of the connected equipment to
  "2ch L.PCM".
➡ Check the [HDMI 1/2 Input(HDMI)] setting in the
  [Sound] menu (p.13).
➡ If digital sound connection has a problem, select
  analogue sound connection (p.17).

General

The TV goes into Standby mode.
➔ This TV is equipped with auto power standby function (p. 16).

The remote control does not work or is intermittent.
➔ Replace the batteries (p. 5).
➔ Point the remote control directly at the remote control signal receiver of the TV (within about 7 m and 30 degree angle).
➔ Situate the TV away from sunshine or block sources of bright light from shining on the remote control signal receiver of the TV.

Parts of the TV become hot.
➔ Even if the temperature of parts of the front, top and rear panels has risen, these temperature rises do not cause any problems in terms of performance or quality.

The TV panel moves slightly when it is pushed with a finger.

Clattered sound might be heard.
➔ There is some flexibility around the panel to prevent damage. This is not a malfunction.

Overcurrent error message appears.
➔ The connected USB device might cause this error. Remove the device and turn the TV off with Mains power On / Off switch, then turn it on again.
➔ Check foreign objects are not inside the USB port.

Maintenance

First, remove the mains plug from the socket outlet.

Regular care

● Gently wipe the surface of the display panel, cabinet and pedestal by using a soft cloth.
● Wipe the mains plug with a dry cloth at regular intervals. Moisture and dust may lead to fire or electrical shock.

For stubborn dirt

First clean the dust on the surface. Dampen a soft cloth with clean water or diluted neutral detergent (1 part detergent to 100 parts water). Wring the cloth and wipe the surface. Finally, wipe away all the moisture.

Caution
● Do not use a hard cloth or rub the surface too hard as this could scratch the surface.
● Do not subject the TV's surfaces to water or detergent. Liquid inside the TV could lead to product failure.
● Do not subject the surfaces to insect repellent, solvent, thinner or other volatile substances. This may degrade surface quality or cause peeling of the paint.
● The surface of the display panel is specially treated and may be easily damaged. Take care not to tap or scratch the surface with your fingernail or other hard objects.
● Do not allow the cabinet and pedestal to make contact with a rubber or PVC substance for a long time. This may degrade surface quality.

Specifications

Model no.

- 24-inch model **:** TH-24M400H
- 32-inch model : TH-32M400H

Power source

AC 100 - 240 V, 50 / 60 Hz

Power consumption
(Rated power / Standby power)

- 24-inch model : 40 W / 0.50 W
- 32-inch model : 50 W / 0.50 W

Display panel

Panel
LED backlight Liquid Crystal Display

Visible screen size (diagonal)
- 24-inch model : 60 cm
- 32-inch model : 80 cm

Display resolution
- 24-inch model   32-inch model : 1 366 (W) × 768 (H)

Dimensions (W × H × D)

24-inch model
551 × 372 × 143 mm (With Pedestal)
551 × 331 × 81 mm (TV only)

32-inch model
726 x 481 x 199 mm (With Pedestal)
726 x 428 x 82 mm (TV only)

Mass

24-inch model
2.5kg (With Pedestal)
2.4kg (TV only)

32-inch model
3.9 kg (With Pedestal)
3.8 kg (TV only)

Connection terminals

AV1 IN (VIDEO)

VIDEO
1.0 V [p-p]

AUDIO L - R
0.5 V [rms]

HDMI 1 / 2 input
TYPE A Connectors

USB
USB 2.0
DC ⎓ 5 V, Max. 500 mA

VIDEO OUT
0.5 V [rms]

Sound

Audio output
- 24-inch model : 6 W (3 W + 3 W)
- 32-inch model : 10 W (5 W + 5 W)

Receiving systems / Band name

6 Systems	Function
1 PAL B, G, H 2 PAL I 3 PAL D, K 4 SECAM B, G 5 SECAM D, K 6 SECAM K1	Reception of broadcast transmissions and Playback from Video Cassette Tape Recorders

GB20600-2006 Mode-C=3780 8 MHz UHF (Hong Kong) free-to-air TV Broadcast reception

Receiving channels (Analogue TV)

VHF BAND

2-12 (PAL/SECAM B)
0-12 (PAL B AUST.)
1-9 (PAL B N.Z.)
1-12 (PAL/SECAM D)

UHF BAND

21-69 (PAL G, I/SECAM G ,K)
28-69 (PAL B AUST.)
13-57 (PAL D, K)

CATV

S1-S20 (OSCAR)
S21-S41 (HYPER)
Z1-Z37 (CHINA)
5A, 9A (AUST.)

Aerial input

VHF / UHF

Operating conditions

Temperature

0 °C - 40 °C

Humidity

20 % - 80 % RH (non-condensing)

Note

● Design and Specifications are subject to change without notice. Mass and Dimensions shown are approximate.
● TH-24M400H and TH-32M400H comply with China Terrestrial Television National Standard (GB20600-2006) Mode-C=3780

Information on Disposal in other Countries outside the European Union

This symbol is only valid in the European Union. If you wish to discard this product, please contact your local authorities or dealer and ask for the correct method of disposal.

Customer's Record

The model number and serial number of this product may be found on its rear panel. You should note this serial number in the space provided below and retain this book, plus your purchase receipt, as a permanent record of your purchase to aid in identification in the event of theft or loss, and for Warranty Service purposes.

Model Number _____

Serial Number _____