Thank you for purchasing this product. Please read these instructions carefully before using this product, and save this manual for future use.

If you have any questions, visit:
www.panasonic.ca/english/support
IMPORTANT SAFETY INSTRUCTIONS

Read these operating instructions carefully before using the unit. Follow the safety instructions on the unit and the applicable safety instructions listed below. Keep these operating instructions handy for future reference.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer’s instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. 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 are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

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.

THE FOLLOWING APPLIES IN THE U.S.A. AND CANADA

This device complies with Part 15 of FCC Rules and Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:
(1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of this device.
Contains FCC ID: 2ADKJWF4101
Contains IC: 12493A-WF4101
This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.
This equipment complies with FCC/IC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines in Supplement C to OET65 and RSS-102 of the IC radio frequency (RF) Exposure rules. This equipment has very low levels of RF energy that is deemed to comply without maximum permissible exposure evaluation (MPE). But it is desirable that it should be installed and operated keeping the radiator at least 20 cm (7 7/8") or more away from person’s body (excluding extremities: hands, wrists, feet and ankles).
CAN ICES-3(B)/NMB-3(B)
Precautions

**WARNING**

**Unit**
- To reduce the risk of fire, electric shock or product damage,
- Do not expose this unit to rain, moisture, dripping or splashing.
- Do not place objects filled with liquids, such as vases, on this unit.
- Use only the recommended accessories.
- Do not remove covers.
- Do not repair this unit by yourself. Refer servicing to qualified service personnel.

**AC power supply cord**
- The power plug is the disconnecting device. Install this unit so that the power plug can be unplugged from the socket outlet immediately.

**CAUTION**

**Unit**
- This unit utilizes a laser. Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
- Do not place sources of naked flames, such as lighted candles, on this unit.

**Placement**
- To reduce the risk of fire, electric shock or product damage,
- Do not install or place this unit in a bookcase, built-in cabinet or in another confined space. Ensure this unit is well ventilated.
- Do not obstruct this unit's ventilation openings with newspapers, tablecloths, curtains, and similar items.
- Do not place the unit on amplifiers/receivers or equipment that may become hot.

**Batteries**
- Mishandling of batteries can cause electrolyte leakage and may cause a fire.
- Do not expose this unit to high temperatures or direct sunlight.
- Do not bend, or subject this unit to strong impacts.
- Do not disassemble or alter this unit in any way.
- Do not heat or expose to flame.
- Do not leave the battery(ies) in a car exposed to direct sunlight for a long period of time with doors and windows closed.
- Do not take apart or short circuit.
- Do not recharge alkaline or manganese batteries.
- Do not use batteries if the covering has been peeled off.
- Remove batteries if you do not intend to use the remote control for a long period of time. Store in a cool, dark place.

**AC adaptor**
- This AC adaptor operates on AC between 110 V and 240 V. But
- In the U.S.A. and Canada, the AC adaptor must be connected to a 120 V AC power supply only.
- When connecting to an AC supply outside of the U.S.A. or Canada, use a plug adaptor to suit the AC outlet configuration.

**Wireless LAN connection**

The following limits are in place regarding the usage of this unit. You must be aware of these limits before using this unit. Panasonic will in no way be responsible for any incidental damage which may arise due to a failure to obey these limits, or to any condition of use or disuse of this unit.

- Data transmitted and received over radio waves may be intercepted and monitored.
- This unit contains delicate electronic components. Please use this unit in the manner in which it was intended and follow the following points:
  - Do not expose this unit to high temperatures or direct sunlight.
  - Do not bend, or subject this unit to strong impacts.
  - Keep this unit away from moisture.
  - Do not disassemble or alter this unit in any way.

**Restriction on use of unauthorized copied content**

This unit adopts the following technology for copyright protection.

**Cinavia Notice**

This product uses Cinavia technology to limit the use of unauthorized copies of some commercially-produced film and videos and their soundtracks. When a prohibited use of an unauthorized copy is detected, a message will be displayed and playback or copying will be interrupted.

More information about Cinavia technology is provided at the Cinavia Online Consumer Information Center at http://www.cinavia.com. To request additional information about Cinavia by mail, send a postcard with your mailing address to Cinavia Consumer Information Center, P.O. Box 86851, San Diego, CA, 92138, USA.

**To dispose or transfer this unit**

The unit may keep the user settings information in the unit. If you discard this unit either by disposal or transfer, then follow the procedure to return all the settings to the factory presets to delete the user settings. (See page 28, "To return all settings to the factory preset.")

The operation history may be recorded in the memory of this unit.

Certified to CAN/CSA STD C22.2 No.60065.
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Accessories
Check the supplied accessories before using this unit.

1 Remote control
   [BDT280] (N2QAYB001023)
   [BD94] (N2QAYB001024)
2 Batteries for remote control
   1 [BDT280] AC power supply cord
      (K2CB2YY00092)
   1 [BD94] AC adaptor
      (SAE0001)

The enclosed Canadian French label sheet corresponds to the English display on the unit.

- Product numbers are provided in this Owner's Manual correct as of December 2015. These may be subject to change.
- Do not use AC power supply cord and AC adaptor with other equipment.
- Do not use any other AC power supply cords and AC adaptors except the supplied one.

Using the remote control
Insert the batteries to the terminal so that it (+ and −) matches those in the remote control.

Point it at the remote control signal sensor on this unit. (⇒ 9)

Unit and media care

- Clean this unit with a soft, dry cloth
  • Never use alcohol, paint thinner or benzine to clean this unit.
  • Before using chemically treated cloth, carefully read the instructions that came with the cloth.

- This unit's lens
  Use the lens cleaner (not supplied) to clean the unit's lens.

- Clean discs
  DO Wipe with a damp cloth and then wipe dry with a dry cloth.
  DO NOT

- Disc handling precautions
  • Handle discs by the edges to avoid inadvertent scratches or fingerprints on the disc.
  • Do not attach labels or stickers to discs.
  • Do not use disc cleaning sprays, benzine, thinner, static electricity prevention liquids or any other solvent.
  • Do not use the following discs:
    – Discs with exposed adhesive from removed stickers or labels (rented discs, etc.).
    – Discs that are badly warped or cracked.
    – Irregularly shaped discs, such as heart shapes.
### Playable media

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<th>Contents format</th>
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<td>BD-Video</td>
<td>Video</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BD-RE</td>
<td>Video, JPEG, MPO*, AAC, ALAC, DSD, FLAC, MP3, WAV, WMA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BD-R</td>
<td>Video, MKV, Xvid, AAC, ALAC, DSD, FLAC, MP3, WAV, WMA</td>
</tr>
<tr>
<td><strong>DVD</strong></td>
<td></td>
<td>DVD-Video</td>
<td>Video</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DVD-R</td>
<td>Video, AVCHD, MKV, Xvid, JPEG, MPO*, AAC, ALAC, DSD, FLAC, MP3, WAV, WMA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DVD-R DL</td>
<td>Video, AVCHD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>+R/+RW/+R DL</td>
<td></td>
</tr>
<tr>
<td><strong>CD</strong></td>
<td></td>
<td>Music CD</td>
<td>Music [CD-DA]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CD-R</td>
<td>MKV, Xvid, JPEG, MPO*, AAC, ALAC, FLAC, MP3, Music [CD-DA], WAV, WMA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CD-RW</td>
<td></td>
</tr>
<tr>
<td><strong>USB</strong></td>
<td></td>
<td>USB devices (up to 4 TB)</td>
<td>MKV, MP4, MPEG2, Xvid, JPEG, MPO*, AAC, ALAC, DSD, FLAC, MP3, WAV, WMA</td>
</tr>
</tbody>
</table>

* BD-T280 only

* See pages 7 and 32 for more information on the types of content that can be played.
## Types of discs that cannot be played in this unit
Any other disc that is not specifically supported or previously described.
- DVD-RAM
- Super Audio CD
- Photo CD
- DVD-Audio
- Video CD and Super Video CD
- HD DVD

## Region management information
The unit can play back BD-Video/DVD-Video discs of the following regions codes, including "ALL":

Example: BD-Video DVD-Video

- The unit cannot playback discs in PAL format.

## Finalize
Any DVD-R/RW/R DL, +R/+RW/+R DL and CD-R/RW that are recorded by a recorder need to be finalized by the recorder to play on this unit. Please refer to the recorder’s owner’s manuals.

## BD-Video
- This unit supports high bit rate audio (Dolby® Digital Plus, Dolby® TrueHD, DTS-HD High Resolution Audio™ and DTS-HD Master Audio™) adopted in BD-Video.
- If "Dolby D/Dolby D +/Dolby TrueHD" is set to "PCM" and "DTS Neo:6" is set to "Off", the maximum possible number of Dolby® sound is 2ch PCM. (⇒ 24)

## Music CD
- Operation and sound quality of CDs that do not comply with CD-DA specifications (copy control CDs, etc.) cannot be guaranteed to work.
- The digital audio content side of a DualDisc does not meet the technical specifications of the Compact Disc Digital Audio (CD-DA) format so playback may not be possible.

## USB device
- This unit does not guarantee connection with all USB devices.
- This unit does not support USB device charging.
- FAT12, FAT16, FAT32, and NTFS file systems are supported.
- This unit supports USB2.0 High Speed.
- This unit supports an HDD formatted in FAT32 and NTFS. If the HDD is not recognized, the power to the HDD may not be supplied. Supply power from an external source.

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- It may not be possible to play the above media in some cases due to the type of media, the condition of the recording, the recording method, and how the files were created.
- The producers of the disc can control how discs are played, so you may not always be able to control play as described in this Owner’s Manual. Read the disc’s instructions carefully.

## 3D
- 3D videos and 3D still pictures can be played back when this unit is connected to a 3D compatible TV using a High Speed HDMI Cable.
- 2D video can be enjoyed as 3D virtually. (⇒ 22)
Control reference guide

When other Panasonic devices respond to the remote control of the unit, change the remote control code. (⇒ 27)

1. Turn the unit on and off
2. TV operation buttons
   You can operate the Panasonic TV using this unit's remote control. Some buttons may not work depending on the TV.
   - [电视机]: Turn the TV on and off
   - [AV]: Change input
   - [± VOL]: Adjust the volume
3. Select title numbers, etc./Enter numbers or characters
4. Cancel
5. Basic playback control buttons (⇒ 16)
6. Show Closed Caption setup screen
   (⇒ 22, 25)
7. Show Pop-up menu/Top menu (⇒ 16)
8. Show Option menu (⇒ 21)
9. Colored buttons (red, green, yellow, blue)
   Used for various purposes depending on the display.
10. Transmit the remote control signal
11. Open or close the disc tray (⇒ 14)
12. Show the status messages (⇒ 17)
13. Switch Secondary Video on/off (Picture-in-picture) (⇒ 22)
14. Change soundtrack (⇒ 16)
15. Show Miracast™ screen (⇒ 19)
16. Show the Home Screen of Network Service (⇒ 18)
17. Exit the Menu screen
18. Show Netflix screen (⇒ 18)
19. Show HOME menu (⇒ 15)
20. [▲, ▼, ◀, ▶]: Move the highlight for selection
    [OK]: Confirm the selection
    [■][■]: Frame-by-frame (⇒ 16)
21. Return to previous screen
22. Show Setup menu (⇒ 23)

Available keys for HDMI CEC (⇒ 21)

3. Number keys
5. Basic playback control buttons
8. Option button
9. Colored buttons (red, green, yellow, blue)
17. Exit button
20. [▲, ▼, ◀, ▶][OK] button
21. Return button
1. Disc tray (⇒ 14)
2. USB port (⇒ 14)
3. POWER LED
   The LED lights when the unit is turned on, and flashes when error occurs. (⇒ 31)
4. Remote control signal sensor
   Distance: Within approx. 7 m (23 feet)
   Angle: Approx. 20° up and down, 30° left and right
5. Open or close the disc tray (⇒ 14)
6. [BDT280] Stop (⇒ 16)
7. [BDT280] Start play (⇒ 16)
8. Standby/on switch ([I]/[I]) (⇒ 12)
   Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit still consumes a small amount of power.

Rear panel terminals (⇒ 10, 11)
Connecting to a TV
Connect the power supply cord after making all connections.

- Before making any connections, we recommend that you temporarily disconnect all the units from AC power outlet.

- Use the High Speed HDMI cables. Non-HDMI-compliant cables cannot be utilized. It is recommended that you use Panasonic’s HDMI cable. When outputting 1080p or [BDT280] 24p (4K) signal, please use HDMI cables 5.0 meters (16.4 ft.) or less.

- This unit consumes a small amount of AC power (→ 32) even when turned off in standby mode. For the purpose of energy conservation, the unit should be disconnected if you will not be using it for extended period of time.

Connecting to an amplifier/receiver

- Set “Digital Audio Output” (→ 24).

- [BDT280] When connecting to a non-3D or 4K compatible amplifier/receiver, connect this unit to a TV, then connect the TV and the amplifier/receiver. Please note, however, that the audio can only be up to 5.1ch.

- When using the TV or amplifier/receiver that does not have the indication of “(ARC)” (non-ARC-compatible) on the HDMI terminal, the amplifier/receiver and TV must also be connected using an optical digital cable in order to enjoy the TV’s sound through the amplifier/receiver.
Connecting to the network

The following services can be used when this unit is connected to broadband.

- Firmware can be updated (⇒ 13)
- You can enjoy BD-Live (⇒ 17)
- You can enjoy Network Service (⇒ 18)
- You can access other devices (Home Network) (⇒ 19)
- [BDT280] This unit supports Wi-Fi Direct® and can make a wireless connection to wireless devices without router. You can use this function when enjoying Home Network feature, etc. Internet access is not available while connected via Wi-Fi Direct®. (⇒ 19, 25)

For details about connection method, refer to the instructions supplied with the connected equipment.

### Wireless LAN connection

This unit has built-in Wi-Fi® and can be connected to a wireless router.

- For up-to-date compatibility information on your wireless router, refer to http://panasonic.jp/support/global/cs/
  (This site is in English only.)
- For additional information about this unit refer to http://www.panasonic.ca/english/support
- The unit is not compatible with public wireless LAN services provided in airports, stations, cafes, etc.
- See page 3 for the precautions for wireless LAN connection.

### LAN cable connection

- Use category 5 or above straight LAN cables (STP) when connecting to peripheral devices.
- Inserting any cable other than a LAN cable in the LAN port can damage the unit.
Connections and settings

Settings
The following settings can be performed anytime in the Setup menu (→ 25, 27).

Easy Settings
After connecting your new player for the first time and pressing [ ], the basic settings screen will appear.

Preparation
Turn on the TV and select the appropriate video input.

1 Press [ ].
   Setup screen appears.

2 Follow the on-screen instructions to continue with the settings.

Easy Network Setting
After completing “Easy Settings”, you can perform “Easy Network Setting”.

Follow the on-screen instructions to establish your connection settings.

e.g., [BDT280]
Select “Wired” or “Wireless” and press [OK].

About the wireless connection
To obtain your network name (SSID*) and encryption key (password).

The default settings may be printed on the router. If the SSID and password have been changed, consult the person responsible for setting up your network.

For more details, refer to the manual supplied with the wireless broadband router, or contact your Internet provider.

If your SSID is not displayed;
Search again by pressing the red button on the remote control.

Stealth SSIDs will not be displayed; in this case, enter manually in the following order.

1 To display the SSID input screen:
   [BDT280]
   Press [HOME] → select [OK] to select “Setup” → select “Player Settings” [BD94]
   While displaying the HOME menu, press the [SETTINGS] button on the remote control
   → select “Network” and press [OK]
   → select “Network Settings” and press [OK]
   → select “Wireless Settings” and press [OK]
   → select “Connection Setting” and press [OK]
   → select “Manual setting” and press [OK]

2 Enter your SSID.
   • If your wireless network is encrypted, go to page 13.
Connections and settings

If your wireless router supports WPS (Wi-Fi Protected Setup™);
You can easily set up a connection by pressing the green button on the remote control.

If your wireless network is encrypted;
Enter your encryption key (password).
● You can switch between capital and lower case letters by pressing the “Shift” key.
● An USB keyboard can be used, but only for the keys displayed on the screen.

Firmware updates

Occasionally, Panasonic may release updated firmware for this unit that may add or improve the way a feature operates. These updates are available free of charge.

This unit is capable of checking the firmware automatically when connected to the Internet via a broadband connection.*
When a new firmware version is available, the following message is displayed.

You can also download the latest firmware from the following website and store it to a USB device to update the firmware.
http://panasonic.jp/support/global/cs/
(This site is in English only.)

DO NOT DISCONNECT the unit from the AC power or perform any operation while the update takes place.
After the firmware is installed, unit will restart and the following screen will be displayed.

* SSID:
An SSID (Service Set IDentification) is a name used by wireless LAN to identify a particular network.
Transmission is possible if the SSID matches for both devices.

Symbols

<table>
<thead>
<tr>
<th>3 6 9</th>
<th>2 5 8</th>
<th>0 1 4</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>#</td>
<td>@</td>
<td>.</td>
<td></td>
</tr>
</tbody>
</table>

Firmware updates

| New Version: X.XX |
| Current Version: X.XX |
| Do you want to start firmware update? |
| For the update information, please visit the following website: |
| http://panasonic.jp/support/global/cs/ |

* You must agree to the terms of use for the Internet function and the privacy policy. (BD7256) ⇒ 15, “Notice”, BD94) ⇒ 26, “Notice”)
Inserting or removing media

Notes
- When inserting a media item, ensure that it is facing the correct way, which is the right side facing up.
- If you connect a Panasonic product with a USB connection cable, the setup screen may be displayed on the connected equipment. For details, refer to the instructions for the connected equipment.

CAUTION
Do not place objects in front of the unit. The disc tray may collide with objects when it is opened, and this may cause malfunction.
HOME menu

Major functions of this unit can be operated from the HOME menu.

Preparation
Turn on the TV and select the appropriate video input.

1 Press [ubit] to turn on the unit.
   - After network service introduction banner is shown, the HOME menu is displayed.
   - When connected to the network, the banner content may be changed.
   - You can disable the “Start-up Banner” (⇒ 27).

2 Press [OK] or [▲, ▼, ◀, ▶] to select the item.
   - If there are any other items, repeat this step.

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<tr>
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<td>Media Renderer (⇒ 20)</td>
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<tbody>
<tr>
<td>Service</td>
</tr>
<tr>
<td>Displays the Home Screen of Network Service. (⇒ 18)</td>
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<tr>
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</tbody>
</table>

Setup

| Player Settings |
| (⇒ 23) |
| USB Management |
| (⇒ 17) |
| Wallpaper |
| Changes the background of HOME menu. |

Notice
Displays the terms of service for the cloud services.

To show the HOME menu
Press [HOME].

- Items to be displayed may vary with the media.
Playback

1 Insert the media.
Playback starts depending on the media.

2 Select the item to play and press [OK].
Repeat this step if necessary.

- DISCS CONTINUE TO ROTATE WHILE MENUS ARE DISPLAYED. Press [STOP] when you have finished playback to protect the unit’s motor, your TV screen and so on.
- BD-T280 When the following conditions are met, a still picture will be played back in 4K. The resolution of the still picture will be changed automatically.
  - The unit is connected to a 4K compatible TV
  - “HDMI Resolution” is set to “Auto” (⇒ 23)
  - The still picture is being played back in 2D
- It is not possible to play back AVCHD and MPEG2 videos which have been dragged and dropped or copied and pasted to the media.

Operations during playback
The following functions may not work depending on the media and contents.

Stop
Press [STOP].
The stopping point is memorized.

Resume play function
Press [►PLAY] to restart from this point.
- The point is cleared if the media is removed.
- On BD-Video discs including BD-J, the resume play function does not work.

Pause
Press [IIPAUSE].
- Press [IIPAUSE] again or [►PLAY] to restart play.

Search/Slow motion
Search
While playing, press [SEARCH◄◄] or [SEARCH►►].

Slow motion
While paused, press [SEARCH►►].
- Xvid, MKV, MP4 and MPEG2: Not effective.

The speed increases up to 5 steps.
- Music, MP3, etc.: The speed is fixed to a single step.
- Press [►PLAY] to revert to normal playback speed.

Skip
While playing or paused, press [◄◄] or [►►].
Skip to the title, chapter or track.

Frame-by-frame
While paused, press [►] (◄◄). 
- Press and hold to fast forward.
- Press [►PLAY] to revert to normal playback speed.
- Xvid, MKV, MP4 and MPEG2: Not effective.

Changing soundtrack
Press [AUDIO].
You can change the audio channel number or soundtrack language, etc.

Show top menu/pop-up menu
Press [POP-UP MENU/TOP MENU].
- Select the item and press [OK].
Show the status messages

While playing, press [STATUS].
The status messages give you information about what is currently being played. Each time you press [STATUS], the display information may change or disappear from the screen.

- Depending on media and contents, the display may change or not appear.

e.g., BD-Video

T: Title, C: Chapter, PL: Playlist
B: Elapsed time in the title
C: Current position
D: Total time

e.g., JPEG

Enjoying BD-Live

With “BD-Live” discs, you can enjoy bonus contents that use Internet access. For this BD-Live function, connection of a USB device is necessary along with Internet connection.

1 Perform network connection and settings. (⇒ 11, 12)
2 Connect a USB device with 1 GB or more free space.
   - The USB device is used as the local storage.
3 Insert the disc.

Deleting data on the USB device

Select “USB Management” in the HOME menu (⇒ 15), then select “BD-Video Data Erase” and press [OK].

- The usable functions and the operating method may vary with each disc, please refer to the instructions on the disc and/or visit their website.
- “BD-Live Internet Access” may need to be changed for certain discs (⇒ 26).

Enjoying 3D video and photos

Preparation
Connect this unit to a 3D compatible TV. (⇒ 10)
- Perform the necessary preparations for the TV.
- Play back following the instructions displayed on the screen.
- 3D Settings (⇒ 22, 25)

- Please refrain from viewing 3D images if you do not feel well or are experiencing visual fatigue.
  In the event that you experience dizziness, nausea, or other discomfort while viewing 3D images, discontinue use and rest your eyes.
- 3D video might not output the way it is set in “HDMI Resolution” and “24p(4K)/24p Output” (⇒ 23).
- When playing back 3D photos from “Photos” screen, select from the “3D” list. (Still pictures in “2D” is played back in 2D.)
  If “2D” and “3D” indications are not displayed, press the red button on the remote control to switch the view of playback contents.

Slideshow

Play a slideshow of photos and adjust various settings during the playback.

1 Insert the media.
2 Select “Photos”.
3 Select an item and press the green button.
   The following items can be set.

<table>
<thead>
<tr>
<th>Item</th>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start Slideshow</td>
<td>Start the slideshow. You can display still pictures in the selected folder one by one at a constant interval.</td>
</tr>
<tr>
<td>Display Interval</td>
<td>Change the display interval.</td>
</tr>
<tr>
<td>Transition Effect</td>
<td>Select the effect when sliding pictures.</td>
</tr>
<tr>
<td>Repeat Play</td>
<td>Set whether to repeat the slideshow.</td>
</tr>
</tbody>
</table>

- Still pictures displayed as “Cannot be played back with this unit.”
Network Service (Enjoying Netflix, etc.)

Network Service allows you to access some specific websites supported by Panasonic. This unit has no full browser function and some features of websites may not be available. Some services, such as Netflix require a registered account. For details of your Netflix account, refer to Netflix.

- When playing content in the media, Network Service cannot be accessed by pressing [INTERNET].
- An USB keyboard can be used, but only for the keys displayed on the screen. It may not be used depending on the service.
- In the following cases, settings are possible using the Setup menu items.
  - When restricting the use of Network Service (⇒ 26, “Network Service Lock”)
  - When correcting the displayed time (⇒ 26, “Time Zone”, “DST”)
  - When using another device such as a smartphone in combination with the unit by using a certain app on the device (⇒ 26, “Remote Device Operation”)
- When using a slow Internet connection, the video may not be displayed correctly. A high speed Internet service with a speed of at least 6 Mbps is recommended.
- Be sure to update the firmware as soon as a firmware update notice is displayed on the screen. If the firmware is not updated, you may not be able to use Network Service function properly. (⇒ 13)
- Network Service Home Screen is subject to change without notice.
- The services through Network Service are operated by their respective service providers, and service may be discontinued either temporarily or permanently without notice. Therefore, Panasonic will make no warranty for the content or the continuity of the services.
- Some features of websites or content of the service may not be available.
- Some content may be inappropriate for viewers.
- Some content may only be available for specific countries and may be presented in specific languages.

Network Service provides a variety of selected Internet services such as the following.
- Online movie rental service
- Video browsing service

Preparation
- Network connection (⇒ 11)
- Network settings (⇒ 12)

1 Press [INTERNET].
   - Netflix can be accessed directly by pressing [NETFLIX] button even when this unit is off.

2 Select the item and press [OK].

To exit from Network Service
Press [HOME].
Home Network feature

Before using the following features, be sure to configure the connected equipment on your Home Network.

Using Miracast™

You can enjoy the content you are viewing on a Miracast-compatible smartphone, etc. on the big screen of your TV.
- Compatible with Android™ devices, ver. 4.2 and above and Miracast certified.
For information on whether the smartphone, etc. supports Miracast, contact the manufacturer of the device.

1 Press [MIRACAST].
2 Press [HOME].
   ⇒ Select “Network”.
   ⇒ Select “Miracast”.

2 Operate the Miracast compatible device.
   - On the device, enable Miracast and select this unit as the device to be connected.
   For details, refer to the instructions supplied with the device.

To exit from Miracast
Press [HOME].

Playing back contents on the DLNA server

You can share photos, videos and music stored in the DLNA Certified media server (PC with Windows 7 installed, smartphone, etc.) connected to your home network.
- About support format of DLNA (⇒ 33).

Preparation
1 Perform network connection (⇒ 11) and network settings (⇒ 12) of this unit.
2 Add the contents and folder to the libraries of the Windows Media® Player or the smartphone, etc.
   - Playlist of Windows Media® Player can play back only the contents that are stored in the libraries.

1 Press [HOME].
2 Select “Network”.
3 Select “Home Network”.
4 Select “DLNA Client”.
   - The list can be updated by pressing the red button on the remote control.
   - The connection method can be switched to Wi-Fi Direct by pressing the green button on the remote control.
5 Select the equipment and press [OK].
6 Select the item to play and press [OK].
   - You may be able to use convenient functions depending on the content by pressing [OPTION].

To exit from Home Network
Press [HOME].
You can use a smartphone or tablet as the Digital Media Controller (DMC) to playback contents from DLNA server on the Renderer (this unit).

Possible applications:

You can register up to 16 devices.

1. Press [HOME].
2. Select “Network”.
3. Select “Home Network”.
4. Select “Media Renderer”.
5. Select “Home Network” or “Wi-Fi Direct” and press [OK], then follow the indications on the screen.
6. Operate the DMC compatible devices.

To exit from Media Renderer screen
Press [HOME].
“HDMI CEC”
This unit supports “HDMI CEC” (Consumer Electronics Control) function. You can use this function by connecting the equipment that supports “HDMI CEC”. See the owner’s manuals for connected equipment for operational details.

Preparation
1. Set “HDMI CEC” to “On” (⇒ 27). (The default setting is “On”.)
2. Set the “HDMI CEC” operations on the connected equipment (e.g., TV).
3. Turn on all “HDMI CEC” compatible equipment and select this unit’s input channel on the connected TV so that the “HDMI CEC” function works properly.
Repeat this procedure when the connections or settings are changed.

Option menu
A variety of playback operations and settings can be performed from this menu. Available options differ depending on the playing contents and the condition of the unit.

1. Press [OPTION].
   - When playing music, select “Playback Settings” and press [OK].

   BDT320
   e.g., BD-Video

2. Select an item and change the settings.

   To exit the screen
   Press [OPTION].

Regarding Language: (⇒ 34)

Operation Menu

- Soundtrack
  Show or change the soundtrack.

- Audio channel
  Select the audio channel number.

- Subtitle
  Change the subtitle settings.

- Angle
  Select the number of the angle.

- Repeat Play
  Select the item that you want to repeat.
  - You can repeat the playback of a chapter, playlist, the entire disc, etc., but the items displayed will differ depending on the type of the media.
  - Select “Off” to cancel.

Automatic input switching

Power on link
When the unit starts playback, the TV will automatically switch the input channel and the screen of the unit will be displayed. Additionally when the TV is off, the TV will automatically turn on.

Power off link
All connected equipment compatible with “HDMI CEC”, including this unit, automatically turns off when you switch the TV off.

Easy control only with TV remote control
By using the TV remote control, you can perform the same operations as you use the remote control of this unit. (⇒ 8)

This unit supports the “HDMI CEC” (Consumer Electronics Control) function. However, operation cannot be guaranteed on all HDMI CEC devices.
Settings

- **Shuffle**
  Select whether or not to play random.

- **Start Slideshow**
  Start the slideshow.

- **Status**
  Show the status messages.

- **Audio**
  Select the soundtrack and audio channel number during the playback of DLNA.

- **Wi-Fi Reception**
  The radio wave status during the playback of DLNA is displayed. (Only when a wireless connection is used)

- **Rotate Right**
  Rotate the still picture.

- **Rotate Left**
  Rotate the still picture.

- **Wallpaper**
  Set the still picture to the wallpaper of HOME menu. (⇒ 15)

- **Video**
  The recording method of original video appears.

- **Primary Video**
  The recording method of original primary video appears.

- **Secondary Video**
  The recording method of original secondary video appears.

- **Zoom**
  Videos and pictures are magnified.

- **Top Menu**
  Display Top Menu.

- **Pop-up Menu**
  Display Pop-up Menu.

- **Menu**
  Display Menu.

- **Closed Caption (⇒ 25)**
  You can only set “Manual setting” and “CC Reset” in the Setup menu.

### Video Settings

- **Picture Mode**
  Select the picture quality mode during play.
  - If you select “User”, you can change settings in “Picture Adjustment”.

- **Picture Adjustment**
  Specific picture quality settings can be changed.

- **Progressive**
  Select the method of conversion for progressive output to suit the type of material being played.
  - When the content is distorted, change the settings from “Auto” to “Video”.

- **24p**
  Movies and other material recorded on DVD-Video at 24p are output at 24p.
  - **BDT280**: Only when you have selected “24p(4K)” or “24p” in “24p(4K)/24p Output” (⇒ 23).
  - **BD94**: Only when you have selected “On” in “24p Output” (⇒ 24).

- **Reset to Default Video Settings**
  Return video settings to the factory defaults.

### 3D Settings

#### Signal Format

<table>
<thead>
<tr>
<th>Original</th>
<th>Keep original picture format.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Side by side</td>
<td>3D picture format comprising of left and right screens.</td>
</tr>
<tr>
<td>2D to 3D</td>
<td>Converts 2D pictures to 3D effect.</td>
</tr>
</tbody>
</table>

- **Distance**
  Set the amount of depth perception.

- **Pop-Out Level**
  3D position for the Option menu or message screen, etc. can be adjusted during 3D playback.
Setup menu
Change the unit’s settings if necessary. The settings remain intact even if you switch the unit to standby.
Some items are common to the Option menu. You can get the same effect with both menus.

1 Press [HOME].
   • [BDT280] “Player Settings” (step 3) can be accessed directly by pressing [SETTINGS] button.
2 Press [OK] to select “Setup”.
3 Select “Player Settings”.

   BDT280

4 Select an item and change the settings.

To exit the screen
Press [HOME].

Video

■ Picture Mode (⇒ 22)

■ Picture Adjustment (⇒ 22)

■ HDMI Output
Press [OK] to show the following settings:

  ➤ HDMI Resolution
  The items supported by the connected devices are indicated on the screen as “*”. When any item without “*” is selected, the images may be distorted.
  • If “Auto” is selected, the best suited output resolution to the connected TV is automatically selected.
  • To enjoy high-definition video up-converted to 1080p, you need to connect the unit directly to 1080p compatible HDTV (High Definition TV). If this unit is connected to an HDTV through other equipment, the other equipment must also be 1080p compatible.

  ➤ 24p(4K)/24p Output
  This setting is for selecting the output method for content recorded in 24p*, such as movies.

  | 24p(4K) | Outputs signals by upconverting them to 4K*. |
  | 24p   | Outputs in 24p. |

  • Connect the compatible TV for each (4K or 1080/24p) output to the HDMI AV OUT terminal of this unit.
  • “24p(4K)” works only when playing back in 2D.
  • When playing DVD-Video, set this setting to “24p(4K)” or “24p”, and then “24p” in “Video Settings” (⇒ 22) to “On”.
  • When BD-Video/DVD-Video images other than 24p are played, images are output at 60p.
Settings

BD94

24p Output
When this unit is connected to a TV supporting 1080/24p output, movies and other material recorded at 24p*1 are output at 24p.
- When playing DVD-Video, set to “On” and then set “24p” in “Video Settings” (⇒ 22) to “On”.
- When BD-Video/DVD-Video images other than 24p are played, images are output at 60p.

Deep Color Output
This setting is for selecting whether to use Deep Color Output when a TV that supports Deep Color is connected.

Contents Type Flag
Depending on the playback content, the TV will output adjusting to the optimal method when a TV that supports this function is connected.

--

Audio

Dynamic Range Compression
You can listen at low volumes but still hear dialogue clearly.
(Dolby Digital, Dolby Digital Plus and Dolby TrueHD only)
- “Auto” is effective only when playing Dolby TrueHD.

Digital Audio Output
Press [OK] to show the following settings:

- Dolby D/Dolby D +/-Dolby TrueHD
- DTS/DTS-HD

DSD Output Mode
Select the audio signal to output.
- Select “PCM” or “Off”, when the connected equipment cannot decode the respective audio format. This unit decodes the audio format and transmits to the connected equipment.
- If you do not make proper settings the audio may be static or noisy.

BD-Video Secondary Audio
Select whether or not to mix the primary and secondary audio (including the button click sound).
If “Off” is selected, the unit outputs the primary audio only.

Downmix
Select the downmix system of multi-channel to 2-channel sound.
- Select “Surround encoded”, when the connected equipment supports the virtual surround function.
- The downmix effect is not available when “Digital Audio Output” is set to “Bitstream”.
- The audio will be output in “Stereo” in the following cases:
  - AVCHD playback
  - Playback of secondary audio (including the button click sound).

DTS Neo:6
2ch (2.1ch) audio is expanded to 7ch (7.1ch).
- This function works when the following conditions are met:
  - Audio recorded at 96 kHz or lower is output.
  - “Digital Audio Output” is set to “PCM” when audio other than PCM is output.

---

*1 A progressive image recorded at a rate of 24 frames per second (motion-picture film). Many BD-Video movie contents are recorded in 24 frames/second in accordance with the film materials.

*2 A high resolution image/display technology of approximately 4000 (width) × 2000 (height) pixels.
Settings

3D BD-Video Playback
Select the playback method of 3D compatible video software.

3D Playback Precautions
Set to display or hide the 3D viewing warning screen when playing back the 3D compatible video software.

Pop-Out Level (frared)

Language

Audio Language
Choose the language for audio.
- If “Original” is selected, the original language of each disc will be selected.
- When the selected language is not recorded on the disc, or depending on how the navigation is created on the disc, it may playback in a different language than the selected language.
- Enter a code (frared) when you select “Other

Subtitle Language
Choose the language for the subtitle.
- When “Auto” is selected, a subtitle for the language selected in the “Audio Language” is displayed only when the language other than the language selected in the “Audio Language” is played back.
- When the selected language is not recorded on the disc, or depending on how the navigation is created on the disc, it may playback in a different language than the selected language.
- Enter a code (frared) when you select “Other

Menu Language
Choose the language for the disc menus.
- Enter a code (frared) when you select “Other

Subtitle Text
Select a desired item according to the language used for MKV/Xvid subtitles text.
- This item is displayed only after playing back a file.

On-screen Language
Choose the language for menus and on-screen messages.

Closed Caption
Closed captioning services are dependent on contents, and the unit can display closed captions of both digital and analog types.
Press [OK] to show the following settings:

- Closed Caption Display
Set whether or not to display closed captions.

- Closed Caption Type
Select the closed caption type that matches the one of the content to be played back.

- Analog CC
Select the channel of analog closed captions.

- Digital CC
Select the channel of digital closed captions.

- Manual setting
Set the display style of closed captions.

- CC Reset
Restore the default “Closed Caption” settings.

Network

Easy Network Setting ( infrared)

Network Settings
Perform network-related settings individually.
Press [OK] to show the following settings:

- LAN Connection Mode
Select the LAN connection method.
Settings

- **Wireless Settings**
  This allows the wireless router and connection settings to be set up. Current connection settings and connection state can be checked. Press [OK] to show the following settings:

  - **Connection Setting**
    The wireless router connection wizard will be displayed.

  - **Double Speed Mode Setting (2.4GHz)**
    Set the connection speed for a 2.4 GHz wireless format.
    - If you connect using the "Double Speed Mode (40MHz)" , 2 channels use the same frequency band, and there is consequently a greater risk of reception interference. This can cause the connection speed to drop or become unstable.

- **IP Address/DNS Settings**
  This is for checking the state of the network connection and setting the IP address and DNS-related.
  Press [OK] to show the respective setting.

- **Proxy Server Settings**
  This is for checking the state of connection with the Proxy server and performing settings.
  Press [OK] to show the respective setting.

- **Network Service Settings ( ⇒ 18)**
  Press [OK] to show the following settings:

  - **Time Zone**
    Set the unit’s time to match your location.
    - Some Network Service contents require the time zone to be set. Set time zone if necessary.

  - **DST**
    Select “On” when using Daylight Saving time.

- **Remote Device Settings ( ⇒ 18, 20)**
  Press [OK] to show the following settings:

  - **Remote Device Operation**
    Enable to start Network Service on this unit by using another device such as Smartphone, etc.
    BDT280: Enable to operate the unit by DMC.

  - **Setting Unit Name**
    Set the name of this unit to be displayed on the connected equipment.

  - **Registration Type**
    BDT280: Registering/deregistering of the displayed equipment can be performed when “Manual” in “Registration Type” is selected.

<table>
<thead>
<tr>
<th>Auto</th>
<th>Manual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allow connections to all the equipment accessing this unit.</td>
<td>Set the permission for individual equipment connections accessing this unit.</td>
</tr>
</tbody>
</table>

- **BD-Live Internet Access ( ⇒ 17)**
  You can restrict Internet access when BD-Live functions are used.
  - If “Allow (Limited)” is selected, Internet access is permitted only for BD-Live contents which have content owner certificates.

<table>
<thead>
<tr>
<th>BDT94</th>
<th>Notice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Displays the terms of service for the cloud services.</td>
<td></td>
</tr>
</tbody>
</table>

- **Network Drive Connection**
  This unit can access a hard disk shared folder on a network and play back videos, still pictures, and music.
  For the setting and operation method of connected equipment, refer to the following website.
  http://panasonic.jp/support/global/cs/ (This site is in English only.)

- **BD-Video Ratings**
  Set an age limit of BD-Video play.

- **Network Service Lock**
  You can restrict the usage of Network Service.
Settings

Easy Settings
You can execute basic settings.

Display Settings
Press [OK] to show the following settings:

- **TV Aspect**
  Set to match the type of TV connected.
  When connected to a 4:3 aspect TV and playing 16:9 ratio image:
  - **4:3 Pan & Scan**
    The sides are cut off so the picture fills the screen.
    When playing BD-Video, video is output as “4:3 Letterbox”.
  - **4:3 Letterbox**
    Black bands appear at the top and bottom of the picture.

When connected to a 16:9 widescreen TV and playing 4:3 ratio image:

- **4:3 Pan & Scan**
  Video is displayed as a 4:3 ratio image in the center of the screen.
- **4:3 Letterbox**
  Video is displayed as a horizontally stretched 16:9 image.

- **Screen Saver Function**
  This is to prevent image retention on the screen.
  - When this is set to “On”:
    If a list of playback content is displayed and there is no operation for 10 minutes or more, the screen switches to HOME menu automatically.
  - While playing and pausing, etc., this function is not available.

- **Status Messages**
  Choose whether to show status messages automatically.

- **HDMI CEC**
  Set to use “HDMI CEC” function when connected to a device that supports “HDMI CEC”.
  - Select “Off” when you do not want to use “HDMI CEC”.

- **Start-up Banner**
  Select whether to display the banner after turning on this unit. (⇒ 15)

- **Quick Start**
  Speed of start-up from standby mode is increased.
  - When set to “On”, the internal control unit will be powered and the idle power consumption will increase so compared to when set to “Off”. (Power consumption ⇒ 32)

- **Remote Control Code**
  Change the remote control code if other Panasonic products react to this remote control.

- **Firmware Update (⇒ 13)**
  Press [OK] to show the following settings:
  - **Automatic Update Check**
    When this equipment remains connected to the Internet, it will check for the latest firmware version when it is turned on and you can update it if necessary.
  - **Update Now**
    You can update the firmware manually if a firmware update is available.

- **System Information**
  Press [OK] to show the following settings:
  - **License**
    Information about the software used by this unit is displayed.
  - **Firmware Version Information**
    Display firmware version of this unit and wireless LAN module.

- **Restore Default Settings**
  This returns all values in the Setup menu and the Option menu to the default settings, except for some settings of network, ratings, remote control code, on-screen language, etc.
**Troubleshooting guide**

Before requesting service, please perform the following steps.

- **Unit does not respond to remote control or unit's buttons.**

  Disconnect AC power supply cord, wait 1 minute, then reconnect AC power supply cord.

  **Do you have the latest firmware installed?**
  Panasonic is constantly improving the unit’s firmware to ensure that our customers are enjoying the latest technology. (⇒ 13)

  **Make the following checks and visit our website for more information.**
  www.panasonic.ca/english/support

  **Or visit our website to find a service center.**
  You can find a service center near you easily on our website.

  **Other support information:**
  “CONTACT INFORMATION” (⇒ 36).

  The following do not indicate a problem with this unit:
  - Regular disc rotating sounds.
  - Image disturbance during search.
  - [BDT280] Image disturbance when replacing 3D discs.

- **Cannot eject disc.**

  1. Turn the unit on.
  2. Press and hold [OK], the yellow button and the blue button on the remote control at the same time for more than 5 seconds.
     - POWER LED starts to flash, and “00 RET” is displayed on the screen.
  3. Press [►] (right) repeatedly on the remote control until “06 FTO” is displayed on the screen.
  4. Press [OK].

- **The TV tuner mode is not displayed when the TV is turned on.**

  - This phenomenon may occur, depending on the TV setting, when “Quick Start” is set to “On”.
  - Depending on the TV, this phenomenon may be prevented by reconnecting the HDMI cable to a different HDMI input terminal or by changing the HDMI auto connection setting.

- **This unit is turned off automatically.**

  - To save on electricity, this unit is turned off automatically if there is no button operation for about 20 minutes when not playing back (such as when paused or displaying the menu, displaying still pictures, etc.).
  - (Compatible with ENERGY STAR SPECIFICATIONS)

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**General operation**

**To return to the factory defaults.**

- Select “Yes” in “Restore Default Settings” in the Setup menu. (⇒ 27)

**To return all settings to the factory preset.**

- Reset the unit as follows:
  1. Turn the unit on.
  2. Press and hold [OK], the yellow button and the blue button on the remote control at the same time for more than 5 seconds.
     - POWER LED starts to flash, and “00 RET” is displayed on the screen.
  3. Press [►] (right) repeatedly on the remote control until “08 FIN” is displayed on the screen.
  4. Press and hold [OK] for more than 5 seconds.

**The remote control does not work properly.**

- Change the batteries in the remote control. (⇒ 5)
- The remote control and this unit are using different codes. Turn on this unit by using the standby/on switch on this unit, and check “Remote control □” which is displayed on the screen when you press a button on the remote control.
  - Press and hold [OK] and the displayed number (“□”) for at least 5 seconds.

- The remote control mode is not displayed when the TV is turned on.

  - This phenomenon may occur, depending on the TV setting, when “Quick Start” is set to “On”.
  - Depending on the TV, this phenomenon may be prevented by reconnecting the HDMI cable to a different HDMI input terminal or by changing the HDMI auto connection setting.
You have forgotten your ratings password. You want to cancel the ratings level.

- The ratings level returns to the factory defaults.
  1. Turn the unit on.
  2. Press and hold [OK], the yellow button and the blue button on the remote control at the same time for more than 5 seconds.
     - POWER LED starts to flash, and “00 RET” is displayed on the screen.
  3. Press [ ] (right) repeatedly on the remote control until “03 VL” is displayed on the screen.
  4. Press [OK].

The TV screen turns black.

- In the following cases, HDMI authentication takes place and a black screen is displayed:
  - [BDT280] When “24p(4K)/24p Output” is set to “24p(4K)” or “24p”.
  - [BD94] When “24p Output” is set to “On”.
  - [BDT280] When the display is switched between 2D and 3D images.
  - [BDT280] When you quit the 4K playback of a still picture by displaying another screen, including the HOME menu.

This unit does not recognize the USB connection correctly.

- Disconnect and re-connect the USB cable. If it still does not recognize the connection, turn this unit off and on again.
- USB devices may not be recognized by this unit when connected using the following:
  - a USB hub
  - a USB extension cable
- If you connect USB HDD to this unit, use the USB cable that is supplied with the HDD.

The images from this unit do not appear on the TV.

**Picture**

- An incorrect resolution is selected in “HDMI Resolution”. Reset the setting as follows:
  1. Turn the unit on.
  2. Press and hold [OK], the yellow button and the blue button on the remote control at the same time for more than 5 seconds.
     - POWER LED starts to flash.
  3. Press [8] and the blue button on the remote control at the same time for more than 5 seconds.
     - When Dolby Digital Plus, Dolby TrueHD, and DTS-HD® audio are not output properly, select “Yes” in “Restore Default Settings” (27) and make proper settings.
  4. [BDT280] When “3D BD-Video Playback” in the Setup menu is set to “Auto”, images may not be output depending on the connection method. After removing the disc from this unit, select “Set before play” in the Setup menu, and select “2D Playback” in the setup screen displayed when playing 3D discs. (25)
  5. [BDT280] When outputting in 24p (4K), images may be distorted depending on the HDMI cable. Use an HDMI cable that supports 4K output.

Video is not output in high-definition.

- Confirm that “HDMI Resolution” in the Setup menu is set properly. (23)

[BDT280] 3D video is not output.

- Connect to a full high-definition TV.
- Is there a non-3D compatible amplifier/receiver connected between this unit and a TV? (10)
- Are the settings on this unit and the TV correct? (17)
- Is the amplifier/receiver that is connected between this unit and TV on?
- Depending on the connected TV, the video being played back might switch to 2D video due to changes in resolution etc. Check the 3D setting on the TV.
Reference

### Playback

**Disc cannot be played.**
- The disc is dirty. (⇒ 5)
- The disc is not finalized. (⇒ 7)

**Still pictures (JPEG) do not play back normally.**
- The images that were edited on the PC, such as Progressive JPEG, etc., may not be played back.

**I can't play back BD-Live.**
- Confirm that this unit is connected to the broadband Internet. (⇒ 11)
- Connect this unit to the network by a wired connection.
- Confirm the “BD-Live Internet Access” settings. (⇒ 26)
- Confirm a USB device is connected to the USB port. (⇒ 14)

### Network

**I can't connect to the network.**
- Confirm the network connection and settings. (⇒ 11, 12, 25)
- There may be interference that prevents the unit from detecting your home network. Place the unit and the wireless router closer to each other. This unit may be able to detect your network name (⇒ 13, “SSID”).
- Check the owner’s manuals for each device and connect accordingly.

---

### Audio

**Cannot switch audio.**
- The audio cannot switch, if “Digital Audio Output” is set to “Bitstream” or “On”. (⇒ 24)
- Set “Digital Audio Output” to “PCM” or “Off”. (⇒ 24)
  - For “DSD Output Mode”

**Cannot hear the desired audio type.**
- Check the connections and the “Digital Audio Output” settings. (⇒ 10, 24)

---

### Reference

**3D video is not output correctly as 2D.**
- Select “Set before play” in the Setup menu, and select “2D Playback” in the setup screen displayed when playing 3D discs. (⇒ 25, “3D BD-Video Playback”)
- Discs that have recorded titles with Side by side (2 screen structure) and that can be enjoyed in 3D are played back in accordance with the settings of the TV.

**No subtitles.**
- When progressive output is on, closed captions/subtitles cannot be displayed.

**The subtitles overlap closed captions recorded on discs.**
- Turn off the subtitles or the closed captions. (⇒ 21, 25)

**Closed captions are not displayed.**
- Confirm that the source content supports CC.
- Confirm the “Closed Caption Display” is set to “On”. (⇒ 22, 25)
- Change the “Closed Caption Type” setting. (⇒ 22, 25)
- Confirm the “Analog CC” or “Digital CC” is set properly (⇒ 22, 25).

**A black band is displayed around the edge of the screen.**
**The aspect ratio of the screen is abnormal.**
- Confirm the “TV Aspect” is set properly. (⇒ 27)
- Adjust the aspect setting on the TV.

---

**Disc cannot be played.**
- The disc is dirty. (⇒ 5)
- The disc is not finalized. (⇒ 7)

**Still pictures (JPEG) do not play back normally.**
- The images that were edited on the PC, such as Progressive JPEG, etc., may not be played back.

**I can't play back BD-Live.**
- Confirm that this unit is connected to the broadband Internet. (⇒ 11)
- Connect this unit to the network by a wired connection.
- Confirm the “BD-Live Internet Access” settings. (⇒ 26)
- Confirm a USB device is connected to the USB port. (⇒ 14)

**Network**

**I can't connect to the network.**
- Confirm the network connection and settings. (⇒ 11, 12, 25)
- There may be interference that prevents the unit from detecting your home network. Place the unit and the wireless router closer to each other. This unit may be able to detect your network name (⇒ 13, “SSID”).
- Check the owner’s manuals for each device and connect accordingly.

---

**Audio**

**Cannot switch audio.**
- The audio cannot switch, if “Digital Audio Output” is set to “Bitstream” or “On”. (⇒ 24)
- Set “Digital Audio Output” to “PCM” or “Off”. (⇒ 24)
  - For “DSD Output Mode”

**Cannot hear the desired audio type.**
- Check the connections and the “Digital Audio Output” settings. (⇒ 10, 24)
When using wireless LAN connection, video from the DLNA Certified media server is not played back or video frames are dropped during playback.

- Higher transfer rate router such as 802.11n (2.4 GHz) wireless router may solve the problem. If you use 802.11n (2.4 GHz) wireless router, it is necessary to set the encryption type to “AES”.
- Simultaneous use with a microwave, cordless telephone etc. at 2.4 GHz may result in connection interruptions or other problems.
- On the “Wireless Settings” screen (⇒ 26), the continuous lighting of at least 4 “Reception” indicators is the target for a stable connection. If 3 or fewer indicators are lit or the connection is being interrupted, change the position or angle of your wireless router and see if the connection state improves. If there is no improvement, connect to a wired network and perform the “Easy Network Setting” (⇒ 12) again.

Messages on the screen

Cannot play.
- You inserted an incompatible disc (Discs recorded in PAL video, etc.).

Cannot display on this unit.
- You tried to play a non-compatible image.
- Re-insert the media.

No disc inserted.
- The disc may be upside down.

This operation is not available.
- Some operations are unsupported by the unit. (For example, reverse slow motion, etc.)

IP address is not set.
- The “IP Address” in “IP Address/DNS Settings” is “---. ---. ---. ---”. Set the “IP Address”, “Subnet Mask”, and “Default Gateway”. (Select the automatic address acquisition if necessary.)

The current wireless network security setting is weak. It is recommended to change to a stronger security setting.
- Set a stronger network security level referring to the wireless router owner’s manuals.

POWER LED

When the POWER LED is flashing, check the message on the TV screen. If a message is not displayed on the TV screen, determine the type of the error by checking the way the POWER LED is flashing.

Flashes 6 times
- The remote control and this unit are using different codes.
- Turn on this unit by using the standby/on switch on this unit, and check “Remote control □” which is displayed on the screen when you press a button on the remote control. Press and hold [OK] and the displayed number (“□”) for at least 5 seconds.

Flashes
- The copyright protected disc cannot be played back.
- One of the devices connected to this unit (TV, amplifier, etc.) does not support copyright protection.

Flashes 3 times
- The disc in use cannot be played back since the copyright information is invalid.
# Specifications

## General

<table>
<thead>
<tr>
<th>Signal system</th>
<th>NTSC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature range</td>
<td>+5 °C to +35 °C (+41 °F to +95 °F)</td>
</tr>
<tr>
<td>Operating humidity range</td>
<td>10 % to 80 % RH (no condensation)</td>
</tr>
<tr>
<td>HDMI AV output</td>
<td>Output connector: Type A (19 pin) 1 system</td>
</tr>
<tr>
<td>USB slot</td>
<td>USB2.0:1 system</td>
</tr>
<tr>
<td>BDT94 Ethernet</td>
<td>10BASE-T/100BASE-TX 1 system</td>
</tr>
<tr>
<td>Wireless LAN</td>
<td>Standard Compliance: IEEE802.11 b/g/n</td>
</tr>
<tr>
<td>Frequency range</td>
<td>2.4 GHz band</td>
</tr>
<tr>
<td>Security</td>
<td>WPA/WPA2 (Encryption Type: TKIP/AES, Authentication Type: PSK), WEP (64 bit/128 bit)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LASER Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class I LASER Product</td>
</tr>
<tr>
<td>Wave length: 790 nm (CDs)/ 660 nm (DVDs)/405 nm (BDs)</td>
</tr>
<tr>
<td>Laser power: No hazardous radiation is emitted with the safety protection</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Power supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>BDT94 AC 120 V, 60 Hz</td>
</tr>
<tr>
<td>BD94 DC 12 V, 0.8 A (DC IN terminal)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Power consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>BDT94 Approx. 13 W</td>
</tr>
<tr>
<td>BD94 Approx. 11 W</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Power consumption in standby mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approx. 0.5 W</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Power consumption in quick start standby mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>BDT94 Approx. 5 W</td>
</tr>
<tr>
<td>BD94 Approx. 3.5 W</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dimensions (W×H×D)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BDT94 312 mm×43 mm×180 mm (Approx. 12 5/16”×1 11/16”× 7 2/16”)</td>
</tr>
<tr>
<td>BD94 245 mm×38.5 mm×175 mm (Approx. 9 10/16”×1 8/16”× 6 14/16”)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mass (Weight)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BDT94 Approx. 1.0 kg (2.2 lbs)</td>
</tr>
<tr>
<td>BD94 Approx. 0.8 kg (1.7 lbs)</td>
</tr>
</tbody>
</table>

* Specifications are subject to change without notice.

## File format

<table>
<thead>
<tr>
<th>File format</th>
<th>Extension</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKV</td>
<td>.MKV, .mkv</td>
<td>The video file and subtitles text file are inside the same folder, and the file names are the same except for the file extensions. Some MKV/Xvid files may not be played back correctly, depending on the video resolution, frame rate condition, subtitle format and so on.</td>
</tr>
<tr>
<td>Xvid</td>
<td>.AVI, .avi</td>
<td></td>
</tr>
<tr>
<td>mp4 (H.264+AAC)</td>
<td>.MP4, .mov</td>
<td>Some mp4/MPEG files may not be played back correctly, depending on the video resolution, frame rate condition and so on.</td>
</tr>
<tr>
<td>MPEG (TS/PS)</td>
<td>.mp4, .mpegs, .m2ts, .mts, .ts</td>
<td></td>
</tr>
<tr>
<td>JPEG</td>
<td>.JPG, .jpg, .jpeg</td>
<td>MOTION JPEG and Progressive JPEG are not supported. You may not be able to play back the file if you have edited the folder structure or the file name on a PC or other device.</td>
</tr>
<tr>
<td>MPO</td>
<td>.MPO, .mpo</td>
<td>3D still picture</td>
</tr>
<tr>
<td>MP3</td>
<td>.MP3, .mp3</td>
<td>This unit supports ID3 tags, but only titles, artist names and album names can be displayed.</td>
</tr>
<tr>
<td>FLAC</td>
<td>.FLAC, .flac</td>
<td>Maximum sampling rate: 192 kHz/24 bit</td>
</tr>
<tr>
<td>WAV</td>
<td>.WAV, .wav</td>
<td>Maximum sampling rate: 192 kHz/24 bit</td>
</tr>
<tr>
<td>AAC</td>
<td>.M4A, .m4a, .AAC, .aac</td>
<td>This unit supports ID3 tags. Maximum sampling rate: 48 kHz/320 kbps</td>
</tr>
<tr>
<td>WMA</td>
<td>.WMA, .wma</td>
<td>This unit supports ID3 tags. Maximum sampling rate: 48 kHz/385 kbps</td>
</tr>
<tr>
<td>DSD</td>
<td>.DSF, .dsf, .DFF, .diff</td>
<td>Maximum sampling rate: 5644 kHz/8 ch</td>
</tr>
<tr>
<td>ALAC</td>
<td>.M4A, .m4a</td>
<td>Maximum sampling rate: 192 kHz/24 bit/2 ch</td>
</tr>
</tbody>
</table>

* With certain recording states and folder structures, the play order may differ or playback may not be possible. 

### File format

- **File format**
- **Extension**
- **Reference**

| MKV | .MKV, .mkv | The video file and subtitles text file are inside the same folder, and the file names are the same except for the file extensions. Some MKV/Xvid files may not be played back correctly, depending on the video resolution, frame rate condition, subtitle format and so on. |
| Xvid | .AVI, .avi | |
| mp4 (H.264+AAC) | .MP4, .mov | Some mp4/MPEG files may not be played back correctly, depending on the video resolution, frame rate condition and so on. |
| MPEG (TS/PS) | .mp4, .mpegs, .m2ts, .mts, .ts | |
| JPEG | .JPG, .jpg, .jpeg | MOTION JPEG and Progressive JPEG are not supported. You may not be able to play back the file if you have edited the folder structure or the file name on a PC or other device. |
| MPO | .MPO, .mpo | 3D still picture |
| MP3 | .MP3, .mp3 | This unit supports ID3 tags, but only titles, artist names and album names can be displayed. |
| FLAC | .FLAC, .flac | Maximum sampling rate: 192 kHz/24 bit |
| WAV | .WAV, .wav | Maximum sampling rate: 192 kHz/24 bit |
| AAC | .M4A, .m4a, .AAC, .aac | This unit supports ID3 tags. Maximum sampling rate: 48 kHz/320 kbps |
| WMA | .WMA, .wma | This unit supports ID3 tags. Maximum sampling rate: 48 kHz/385 kbps |
| DSD | .DSF, .dsf, .DFF, .diff | Maximum sampling rate: 5644 kHz/8 ch |
| ALAC | .M4A, .m4a | Maximum sampling rate: 192 kHz/24 bit/2 ch |
Audio information

The audio output differs depending on the settings on the unit. (⇒ 24, “Digital Audio Output”)

- The number of channels listed is the maximum possible number of output channels when connected to an amplifier/receiver compatible with the respective audio format.

<table>
<thead>
<tr>
<th>Output channel(^1)</th>
<th>“Digital Audio Output”</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>“Bitstream”/”On”(^2)</td>
</tr>
<tr>
<td>Outputs using BD-Video :</td>
<td>7.1ch PCM(^1)</td>
</tr>
<tr>
<td>original audio(^1)</td>
<td>5.1ch PCM</td>
</tr>
</tbody>
</table>

\(^1\) When “BD-Video Secondary Audio” is set to “On”, the audio will be output as Dolby Digital, DTS Digital Surround\(^\text{™}\) or 5.1ch PCM.

\(^2\) The maximum possible number of Dolby sound is 2ch PCM.

\(^3\) When “DTS Neo:6” is set to “Cinema” or “Music”, 2ch (2.1ch) audio can be expanded to 7ch (7.1ch) and output. (⇒ 24)

\(^4\) For “DSD Output Mode”

Supported format for DLNA

- File formats that are not supported by your DLNA server cannot be played.

**Video**

<table>
<thead>
<tr>
<th>Container</th>
<th>Video codec</th>
<th>Audio codec</th>
<th>Example of file extension</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKV</td>
<td>H.264</td>
<td>AAC</td>
<td>.mkv</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DTS® PCM</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vorbis FLAC</td>
<td></td>
</tr>
<tr>
<td>Xvid*</td>
<td>MPEG-4</td>
<td>MP3 Dolby Digital</td>
<td>.avi</td>
</tr>
<tr>
<td></td>
<td>Advanced Simple Profile (ASP)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AVCHD</td>
<td>H.264</td>
<td>Dolby Digital</td>
<td>.mts</td>
</tr>
<tr>
<td>MP4</td>
<td>H.264</td>
<td>AAC</td>
<td>.mp4, .mov</td>
</tr>
<tr>
<td>PS</td>
<td>MPEG2</td>
<td>Dolby Digital Linear PCM</td>
<td>.mpg, .mpeg</td>
</tr>
<tr>
<td>TS</td>
<td>MPEG2</td>
<td>AAC</td>
<td>.m2ts, .ts</td>
</tr>
<tr>
<td></td>
<td>H.264</td>
<td>Dolby Digital</td>
<td></td>
</tr>
</tbody>
</table>

**Photo**

<table>
<thead>
<tr>
<th>Format</th>
<th>Example of file extension</th>
</tr>
</thead>
<tbody>
<tr>
<td>JPEG</td>
<td>.jpg</td>
</tr>
</tbody>
</table>

**Audio**

<table>
<thead>
<tr>
<th>Audio codec</th>
<th>Example of file extension</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP3</td>
<td>.mp3</td>
</tr>
<tr>
<td>FLAC</td>
<td>.flac</td>
</tr>
<tr>
<td>WAV</td>
<td>.wav</td>
</tr>
<tr>
<td>AAC</td>
<td>.m4a</td>
</tr>
<tr>
<td>WMA</td>
<td>.wma</td>
</tr>
<tr>
<td>ALAC</td>
<td>.m4a</td>
</tr>
<tr>
<td>DSD</td>
<td>.dsf, .dff</td>
</tr>
<tr>
<td>Linear PCM</td>
<td></td>
</tr>
</tbody>
</table>

\* Only when the file is transcoded by DLNA server.
### Display languages list

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<thead>
<tr>
<th>Display Language</th>
<th>Display Language</th>
<th>Display Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG English</td>
<td>JPN Japanese</td>
<td>ARA Arabic</td>
</tr>
<tr>
<td>FRA French</td>
<td>CHI Chinese</td>
<td>HIN Hindi</td>
</tr>
<tr>
<td>DEU German</td>
<td>KOR Korean</td>
<td>PER Persian</td>
</tr>
<tr>
<td>ITA Italian</td>
<td>MAL Malay</td>
<td>IND Indonesian</td>
</tr>
<tr>
<td>ESP Spanish</td>
<td>VIE Vietnamese</td>
<td>MRR Maori</td>
</tr>
<tr>
<td>NLD Dutch</td>
<td>THA Thai</td>
<td>BUL Bulgarian</td>
</tr>
<tr>
<td>SVE Swedish</td>
<td>POL Polish</td>
<td>RUM Romanian</td>
</tr>
<tr>
<td>NOR Norwegian</td>
<td>CES Czech</td>
<td>GRE Greek</td>
</tr>
<tr>
<td>DAN Danish</td>
<td>SLK Slovak</td>
<td>TUR Turkish</td>
</tr>
<tr>
<td>POR Portuguese</td>
<td>HUN Hungarian</td>
<td>* Others</td>
</tr>
<tr>
<td>RUS Russian</td>
<td>FIN Finnish</td>
<td></td>
</tr>
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</table>

### Language code list

<table>
<thead>
<tr>
<th>Language Code</th>
<th>Language Code</th>
<th>Language Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abkhazian: 6566</td>
<td>Gujarati: 7185</td>
<td>Rhaeto-Romance:</td>
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<tr>
<td>Afar: 6565</td>
<td>Hausa: 7265</td>
<td>Romanian: 8279</td>
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<tr>
<td>Afrikaans: 6570</td>
<td>Hebrew: 7387</td>
<td>Russian: 8285</td>
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<tr>
<td>Albanian: 6581</td>
<td>Hindi: 7273</td>
<td>Samoan: 8377</td>
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<td>Amharic: 6577</td>
<td>Hungarian: 7285</td>
<td>Sanskrit: 8365</td>
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<td>Arabic: 6582</td>
<td>Icelandic: 7383</td>
<td>Scots Gaelic: 7168</td>
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<td>Armenian: 7289</td>
<td>Indonesian: 7378</td>
<td>Serbian: 8382</td>
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<td>Assamese: 6593</td>
<td>Interlingua: 7365</td>
<td>Shona: 8378</td>
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<td>Irish: 7165</td>
<td>Sindhi: 8366</td>
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<td>Javanese: 7487</td>
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<td>Kannada: 7578</td>
<td>Somali: 8379</td>
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<td>Bhutan: 6590</td>
<td>Kashmiri: 7581</td>
<td>Spanish: 6983</td>
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<td>Bihari: 6672</td>
<td>Kirghiz: 7589</td>
<td>Sundanese: 8385</td>
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<td>Swahili: 8387</td>
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<td>Tagalog: 8476</td>
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<td>Lappland: 7679</td>
<td>Tajik: 8471</td>
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<td>Latin: 7665</td>
<td>Tamil: 8465</td>
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<td>Cambodian: 7577</td>
<td>Latvian, Lettish: 7666</td>
<td>Tat: 8484</td>
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<td>Telugu: 8469</td>
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<td>Lithuanian: 7684</td>
<td>Tajik: 8467</td>
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<td>Corsican: 6779</td>
<td>Macedonian: 7775</td>
<td>Telugu: 8469</td>
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<td>Croatian: 7282</td>
<td>Malagasy: 7771</td>
<td>Thai: 8472</td>
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<td>Czech: 6783</td>
<td>Malay: 7773</td>
<td>Tibetan: 6676</td>
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<tr>
<td>Danish: 6685</td>
<td>Malayalam: 7776</td>
<td>Tigrinya: 8473</td>
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<tr>
<td>Dutch: 7876</td>
<td>Maltese: 7784</td>
<td>Tonga: 8479</td>
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<td>English: 6978</td>
<td>Marathi: 7785</td>
<td>Turkish: 8482</td>
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<td>Esperanto: 6979</td>
<td>Moldavian: 7779</td>
<td>Turkmen: 8475</td>
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<td>Mongolian: 7780</td>
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<td>Faroese: 7079</td>
<td>Mongole: 7781</td>
<td>Ukrainian: 8575</td>
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<td>Nauru: 7865</td>
<td>Urdu: 8582</td>
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<td>Norwegian: 7879</td>
<td>Vietnamese: 8673</td>
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<td>Oriya: 7982</td>
<td>Volapük: 8878</td>
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<td>Galician: 7176</td>
<td>Pashto, Pushto: 8083</td>
<td>Welsh: 6789</td>
</tr>
<tr>
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Panasonic Streaming Player One (1) year

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MODEL NUMBER ____________________________
SERIAL NUMBER __________________________

User memo:

DATE OF PURCHASE _________________________
DEALER NAME _____________________________
DEALER ADDRESS __________________________
TELEPHONE NUMBER ________________________
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