Surround Sound System
Instruction Manual

CECH-ZVS1A / CECH-ZVS1B / CECH-ZVS1E

PlayStation.3
WARNING

This system is not disconnected from the AC power source as long as it is connected to the wall outlet, even if the system itself has been turned off.

To reduce the risk of fire, do not cover the ventilation opening of the apparatus with newspapers, tablecloths, curtains, etc.
Do not place lighted candles or other sources of an open flame on the apparatus.

To reduce the risk of fire or electric shock, do not expose this apparatus to dripping or splashing liquids, and do not place objects filled with liquids, such as vases, on the apparatus.

As the main plug is used to disconnect the system from the AC power source, connect the system to an easily accessible AC outlet. Should you notice an abnormality in the system, disconnect the main plug from the AC outlet immediately.

Do not install the appliance in a confined space, such as a bookcase or built-in cabinet.

Do not expose battery or apparatus with battery installed to excessive heat sources such as direct sunlight or fire.

CAUTION

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.

The nameplate is located on the bottom exterior.

Precautions

AC adaptor and AC power cord use

• Do not plug the AC power cord for the system into an electrical outlet until you have made all other connections. Make sure the TV or other component is unplugged from the electrical outlet prior to connecting it to the system.
• Do not connect the AC power cord to a voltage transformer or inverter. Connecting the AC power cord to a voltage transformer for overseas travel or an inverter for use in an automobile may cause heat to build up in the AC adaptor and may cause burns or a malfunction.
• Do not use an AC adaptor or AC power cord other than the supplied AC adaptor and AC power cord. Do not modify the cord.
• Do not touch the plug of the AC power cord with wet hands.
• Do not touch the AC power cord, AC adaptor or the system, if connected to an electrical outlet, during an electrical storm.
• Do not place heavy items on the cord.
• Do not place the AC power cord near heating equipment and do not expose the cord to heat.
• Unplug the AC power cord from the electrical outlet before cleaning or moving the system, or when you do not intend to use the system for an extended period of time. When disconnecting, grasp the power cord by the plug and pull straight out of the electrical outlet. Never pull by the cord and do not pull out at an angle.

Use and Handling

• Although the system heats up during operation, this is not a malfunction. If you continuously use this system at high volume levels, the operating temperature at the back and bottom of the unit will rise considerably. To avoid burning yourself, do not touch the system.
• Place the system in a location with adequate ventilation to prevent heat buildup and prolong the life of the system.
• Do not place the system on surfaces that are unstable, tilted or subject to vibration.”
• Do not place the system near equipment such as a CRT (tube) TV, VCR, or tape deck. (If the system is being used in combination with a CRT (tube) TV, VCR, or tape deck, and is placed too close to that equipment, noise may result, and picture quality may suffer. This is especially likely when using an indoor aerial.) (Use of an outdoor aerial is recommended.)
• The system is magnetically shielded to allow it to be installed near a TV. However, colour irregularities may still be observed on certain types of TVs. If colour irregularity is observed, turn off the TV, and then turn it back on after 15 to 30 minutes. If colour irregularity is observed, again, move the system further away from the TV.

• Do not use the openings on the rear to pick up or hold the system and do not insert your fingers or hands into them as this may cause injury or may damage the system.

• Use caution when placing the system on surfaces that have been specially treated (such as with wax, oil, or polish), as staining or discolouration of the surface may result.

**Cleaning**

Follow these instructions to help prevent the product exterior from deteriorating or becoming discoloured.

• Wipe with a soft, dry cloth.

• Do not place any rubber or vinyl materials on the product exterior for an extended period of time.

• Do not use solvents or other chemicals. Do not wipe with a chemically-treated cleaning cloth.
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Getting Started

Unpacking

- Surround sound system (1)
- Remote control (RM-ANU095) (1)
- AC adaptor (1)
- AC power cord (1)
- Instruction manual (this document) (1)
- Optical digital cable (2.5 m) (1)

Preparing the remote control

Before using the remote control for the first time, remove the insulation film from the battery case. (The battery is factory installed.)

Replacing the battery

The battery will last about six months with normal use. When the battery charge is low, the remote control may not operate properly or the distance within which you can operate the remote control may become shorter. In this case, follow the procedure below to replace the battery.

1. Take out the battery case while pushing the tab and holding onto the notch with your fingernail.
2 Replace the CR2025 battery with a new one, with the + side facing up.

![Lithium battery CR2025 (sold separately)]

3 Push the battery case back in position until you hear a click.
Part names and functions

Front

1 **POWER indicator**
   Lights as follows:
   - Green: The system is turned on.
   - No light: The system is turned off.

2 **Display**

3 **IR receiver**

   **Caution**
   - Do not expose the IR receiver to direct sunlight or excessive light, or the remote control may not work.

4 **Power button**

5 **INPUT button**
   Press to select the input source.
   Press the INPUT button repeatedly to switch between digital input and analogue input.

6 **VOL + button / VOL – button**

7 **Sound field button**
   Press to select the sound field.
   Every time you press the button, the sound field changes cyclically as follows:
   DYNAMIC → STEREO → VIVID → STD → DYNAMIC…
Rear

1 Audio input connectors
Audio output equipment such as a PSP® (PlayStation® Portable) system can be connected to this input using the appropriate adaptor cable (sold separately).

2 DIGITAL input connector
Audio input from a PS3™ system.

3 DC IN 18V connector

Display

1 Audio format indicators
Indicates the audio format that is being input to the system.

AAC: MPEG-2 AAC
PLII: Dolby Pro Logic II
D: Dolby Digital
DTS
LPCM: Linear PCM

2 NIGHT
Lights up in NIGHT mode.

3 OPT
Lights up when the input is set to “DIGITAL.”

4 Message display area
Displays volume, settings menu, sound field, selected input source, etc.
Remote control

You can operate the surround sound system with the supplied remote control.

Hint
• Point the remote control towards the IR receiver (R) of the surround sound system.

1 Power button
2 DISPLAY button
   You can change the behaviour of the display.
   Press the DISPLAY button repeatedly to switch between “ON” and “OFF.” The default setting is “ON.”
   • ON: The display stays turned on.
   • OFF: The display appears for a few seconds when you operate the system. At all other times, the display stays turned off.

Hint
• The display stays turned on when the muting or protection function is working, even if you set “DISPLAY” to “OFF.”

3 Up button / Down button
   Press to select the setting.

4 ENTER button
   Press to enter the selected item.

5 MUTING button
   Press to turn off the sound temporarily.
   Press the MUTING button repeatedly to switch between “ON” and “OFF.”

6 VOL + button / VOL – button

7 Sound field buttons

8 NIGHT button

9 DIALOG button

10 RETURN button
   Press to return to the previous item in the menu, or exit from the menu.

11 MENU button

12 INPUT button

Remote control
You can operate the surround sound system with the supplied remote control.

Hint
• Point the remote control towards the IR receiver (R) of the surround sound system.

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2 DISPLAY button
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   • ON: The display stays turned on.
   • OFF: The display appears for a few seconds when you operate the system. At all other times, the display stays turned off.

Hint
• The display stays turned on when the muting or protection function is working, even if you set “DISPLAY” to “OFF.”

3 Up button / Down button
   Press to select the setting.

4 ENTER button
   Press to enter the selected item.

5 MUTING button
   Press to turn off the sound temporarily.
   Press the MUTING button repeatedly to switch between “ON” and “OFF.”

6 VOL + button / VOL – button

7 Sound field buttons

8 NIGHT button

9 DIALOG button

10 RETURN button
   Press to return to the previous item in the menu, or exit from the menu.

11 MENU button

12 INPUT button
Positioning

Place the system in front of the TV.

Hints
- Allow a space of 5 cm or more between the rear of the system and the TV or a wall.
- Do not block the IR receiver of the TV with the system. If you do so, you may not be able to operate the TV with the TV’s remote control.
- During installation, do not use the openings on the rear to pick up or hold the system.
- Place the system on a flat and stable location. Do not place the system at an angle, as this may cause an undesirable vibration.
Connecting the PlayStation®3 system

Connect the DIGITAL OUT (OPTICAL) connector of your PS3™ system to the DIGITAL input connector of the surround sound system using an optical digital cable.

Connecting the AC power cord

Do not plug the AC power cord for the surround sound system into an electrical outlet until you have made all other connections.

1  Connect the AC power cord to the AC adaptor.

2  Plug the connector of the AC adaptor into the DC IN 18V connector on the rear of the surround sound system.

3  Plug the AC power cord into the AC power outlet.

Caution

• After connecting the AC power cord, wait about 20 seconds before pressing the power button to turn on the system.
• Connect the system to an easily accessible electrical outlet. Should you notice an abnormality in the system, disconnect the plug from the electrical outlet immediately.
Setting up the audio output of the PS3™ system

1. Select [Sound Settings] under [Settings] in the XMB™ (XrossMediaBar) menu on the PS3™ system.

2. Select [Audio Output Settings].

3. Select [Optical Digital].

4. Select the following output formats.
   - Dolby Digital 5.1 Ch.
   - DTS 5.1 Ch.
   - AAC
   - Linear PCM 2 Ch. 44.1 kHz
   - Linear PCM 2 Ch. 48 kHz

Outputting sound of the PS3™ system from the system and the TV

1. Select [Sound Settings] under [Settings] in the XMB™ menu on the PS3™ system.

2. Select [Audio Multi-Output].

3. Select [On].

Hints

- The HDMI OUT connector and the AV MULTI OUT connector of the PS3™ system can also output Linear PCM 2 ch.
- Turn the volume of the TV’s speaker down to a minimum level when you use the surround sound system. When you are finished using the surround sound system, return the TV’s speaker to the desired volume level.
- To set the [Audio Multi-Output] to [On], the system software of the PS3™ system must be version 3.30 or higher.
Playing sound from the PS3™ system

Selecting the input source

Press the INPUT button to select “DIGITAL” or “ANALOG.”

The selected input source appears in the display. Press the INPUT button repeatedly to switch between “DIGITAL” and “ANALOG.”

<table>
<thead>
<tr>
<th>Input source</th>
<th>Playable component</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIGITAL</td>
<td>PS3™ system connected to the DIGITAL input connector.</td>
</tr>
<tr>
<td>ANALOG</td>
<td>PSP® system connected to the audio input connectors.</td>
</tr>
</tbody>
</table>

Enjoying the surround sound effect

This system can create surround sound effects which are suitable for games played on the PS3™ system. You can select one of the system’s optimized pre-programmed sound fields. The default setting is “DYNAMIC.”

Press one of the sound field buttons you want to use.

The selected sound field appears in the display.

Available sound fields

<table>
<thead>
<tr>
<th>Sound field</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>DYNAMIC</td>
<td>This mode provides a wide range of tones with low/high frequencies and dynamic sounds.</td>
</tr>
<tr>
<td>STEREO</td>
<td>This mode is suitable for any sound quality, optimized for video games implementing 2 ch stereo sound. Multiple channels are down-mixed.</td>
</tr>
<tr>
<td>VIVID</td>
<td>This mode provides a wide sound range and enhances the surround sound channels.</td>
</tr>
<tr>
<td>STD (standard)</td>
<td>This mode reproduces the sound track with the kind of dynamic range that the recording engineer intended.</td>
</tr>
</tbody>
</table>

Hint

- You can set a different sound field for each input source.
Other effects

Enjoying the sound clearly at low volume (NIGHT mode)

You can enjoy sound effects and hear the dialogue clearly even at low volume levels using this function. The default setting is “OFF.”

Press the NIGHT button repeatedly to switch between “ON” and “OFF.”
- ON: Turns on the NIGHT mode function.
- OFF: Turns off the function.

Listening to in-game speech and narration clearly (DIALOG mode)

This function allows you to hear in-game speech and narration with greater clarity. The default setting is “MID.”

Press the DIALOG button to select the setting.
Every time you press the button, the dialogue mode changes cyclically as follows:
MID → HIGH → LOW → MID...
- LOW: Set the speech level to minimum.
- MID: Set the speech level to standard.
- HIGH: Set the speech level to maximum.

Caution
- This effect is disabled when the sound field is set to “STEREO.”
System Settings

Using the menu

1. Press the MENU button to turn on the menu.
2. Press the up button / down button repeatedly to select the item to be adjusted, and press the ENTER button to enter your selection.
3. Press the MENU button to turn off the menu.

You can set the following items with the MENU button on the remote control. The default settings are underlined.

**MENU**

- **SW LVL** –6, –5, ... 0, ... +5, +6
- **DRC** ON
- **BASS** –6, –5, ... 0, ... +5, +6
- **TREBLE** –6, –5, ... 0, ... +5, +6
- **SYNC** ON
- **DUAL** M/S
- **DIMMER** ON
- **A.STBY** ON

**Hint**

- These settings are retained even if you disconnect the AC power cord.

**Adjusting various settings**

- **SW LVL (Subwoofer Level)**
  You can adjust the level of the subwoofer. The setting range is from “–6” to “+6” in 1-step increments.

- **DRC (Dynamic Range Control)**
  Narrows the dynamic range of the sound track. Useful for gaming at low volume. DRC only applies to Dolby Digital sources.
  ON: Reproduces the sound track with the kind of dynamic range that the recording engineer intended.
  OFF: No compression of dynamic range.

- **BASS**
  You can adjust the bass level. The setting range is from “–6” to “+6” in 1-step increments.

- **TREBLE**
  You can adjust the treble level. The setting range is from “–6” to “+6” in 1-step increments.

- **SYNC**
  You can delay the audio using this function when the audio is out of sync with the video.
  ON: Adjusts the difference between audio and video.
  OFF: No adjustment.

**Hint**

- You may not be able to adjust the delay between sound and video perfectly using this function.
DUAL
You can enjoy multiplex broadcast audio when the system receives an AC-3 multiplex broadcast signal.

M/S: Main channel is output from the left speaker and sub channel is output from the right speaker.
MAIN: Plays only the main channel.
SUB: Plays only the sub channel.

DIMMER
The brightness of the display can be set to one of 2 levels.
ON: Dim.
OFF: Normal.

A.STBY
You can reduce power consumption using this function. The surround sound system enters standby mode automatically when there is no audio output for 30 minutes.

ON: Turns on the “A.STBY” function.
OFF: Turns off the function.

Hint

• “A.STBY” begins to flash in the display about two minutes before the system enters standby mode.
Additional Information

Troubleshooting

Go through this section if you experience difficulty in operating the system. Also visit http://eu.playstation.com/help-support. Should any problem persist, contact SCEE Consumer Services (back cover) for assistance.

POWER

The power is not turned on.
- Check that the AC adaptor and the AC power cord are connected securely.

The system is turned off automatically.
- The auto standby function is working (page 16).

SOUND

Dolby Digital or DTS multi-channel audio is not reproduced.
- Check that the Blu-ray Disc, DVD, etc., is recorded in Dolby Digital or DTS format.
- Check that [Audio Output Settings] under (Settings) (Sound Settings) on the PS3™ system are set correctly (page 12).

The surround effect cannot be produced.
- Depending on the digital signal, the surround processing may not work (page 13).

Audio lags video.
- Set “SYNC” to “OFF” if “SYNC” is set to “ON.”

No sound or only a very low-level sound of the PS3™ system is heard from the system.
- Press the VOL + button and check the volume level.
- Press the MUTING button or the VOL + button to cancel the muting function.
- Check that the input source is correctly selected.
- Check that the cable connecting the system and the PS3™ system is fully inserted.

Sound is interrupted or there is noise.
- Check “Digital input formats supported by this system” (page 18).

The remote control does not function
- Point the remote control at the IR receiver on the surround sound system.
- Remove any obstacles in the path between the remote control and the system.
- Replace the battery in the remote control with a new one, if it is weak.
- Make sure you select the correct input on the remote control.

OTHER

“PROTECT” appears in the display
- Press the power button to turn off the power. After “STANDBY” disappears, make sure that the ventilation slots are not blocked.

If the surround sound system still does not operate properly after performing the above measures
- Reset the system by following the procedure below.

1 Press the power button to turn on the power.

2 Press the power button while pressing the INPUT button and the VOL – button. “RESET” appears and the system is reset. Menu, sound field, etc., return to the default settings.
## Specifications

### Digital input formats supported by this system
Digital input formats supported by this system are as follows.

- Dolby Digital
- DTS
- MPEG-2 AAC
- Linear PCM (2 ch)*

* Linear PCM accepts sampling frequencies of no more than 48 kHz.

### Amplifier section
POWER OUTPUT (reference)

<table>
<thead>
<tr>
<th>Channel</th>
<th>Power Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>L/R:</td>
<td>10 W</td>
</tr>
<tr>
<td></td>
<td>(per channel at 6 ohms, 1 kHz)</td>
</tr>
<tr>
<td>Subwoofer:</td>
<td>15 W + 15 W</td>
</tr>
<tr>
<td></td>
<td>(at 8 ohms, 100 Hz)</td>
</tr>
</tbody>
</table>

### Speaker
Front speaker unit

<table>
<thead>
<tr>
<th>Speaker system</th>
<th>Full range, bass reflex</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speaker units</td>
<td>50 mm × 90 mm</td>
</tr>
<tr>
<td>Rated impedance</td>
<td>6 ohms</td>
</tr>
</tbody>
</table>

Subwoofer unit

<table>
<thead>
<tr>
<th>Speaker system</th>
<th>Subwoofer system, passive radiator type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speaker units</td>
<td>65 mm × 2 (subwoofer)</td>
</tr>
<tr>
<td></td>
<td>65 mm × 4 (passive radiator)</td>
</tr>
<tr>
<td>Rated impedance</td>
<td>8 ohms</td>
</tr>
</tbody>
</table>

### General

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Analogue (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital (Optical) (1)</td>
<td></td>
</tr>
<tr>
<td>Power requirements</td>
<td>18 V DC (2.6 A) (100 V - 240 V AC, 50/60 Hz using the supplied AC adaptor)</td>
</tr>
<tr>
<td>Power consumption</td>
<td>In standby mode: 0.5 W or less</td>
</tr>
</tbody>
</table>

### Main unit

<table>
<thead>
<tr>
<th>Dimensions (approx.)</th>
<th>720 mm × 85 mm × 87 mm (w/h/d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mass (approx.)</td>
<td>2.4 kg</td>
</tr>
</tbody>
</table>

### AC adaptor

<table>
<thead>
<tr>
<th>Input</th>
<th>AC 100 V - 240 V, 50/60 Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output</td>
<td>DC 18 V, 2.6 A</td>
</tr>
<tr>
<td>Dimensions (approx.)</td>
<td>121 mm × 53 mm × 33 mm (w/h/d)</td>
</tr>
<tr>
<td>Mass (approx.)</td>
<td>240 g</td>
</tr>
</tbody>
</table>

Design and specifications are subject to change without notice.
This product may fall within the scope of national export control legislation. You must comply fully with the requirements of such legislation and of all other applicable laws of any jurisdiction in relation to this product.

For customers in Europe

The manufacturer of this product is Sony Computer Entertainment Inc., 2-6-21 Minami-Aoyama, Minatoku Tokyo, 107-0062 Japan.
The Authorized Representative for EMC and product safety in Europe is Sony Deutschland GmbH, Hedelfinger Strasse 61, 70327 Stuttgart, Germany.
Distributed in Europe by Sony Computer Entertainment Europe Ltd, 10 Great Marlborough Street, London, W1F 7LP, United Kingdom.

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GUARANTEE

For manufacturer’s warranty details, please refer to the PlayStation®3 system instruction manual.
Online user’s guide
Accessible via: eu.playstation.com/manuals
This guide contains detailed information about using the PS3™ system.

Support
http://eu.playstation.com/help-support
The official site for PlayStation® product support provides the latest questions and answers about your product.

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