ÜBEREINSTIMMUNGSERKLÄRUNG

EN 61000-3-3, EN 60065, EN 55013, EN 55020, EN 61000-3-2 and EN 93/68/EEC.


Wir erklären unter unserer Verantwortung, daß dieses Produkt, das auf die hier Erklärung bezogen ist, die folgenden Normen: 73/23/EEC, 89/336/EEC und 93/68/EEC.


Wij verklaren uitsluitend op onze verantwoordelijkheid, dat deze apparatuur overeenkomt met de richtlijnen 73/23/EEC, 89/336/EEC en 93/68/EEC.


Härmed intygas helt på eget ansvar att denna apparat följer de gällande riktlinjerna:

Align the plug correctly. Do not place the plug with the end of pins facing up.

Handle the power cord carefully. Hold the plug when unplugging the cord.

Falten Sie das Kabel am Stecker, wenn Sie das Gerät von der Netzsteckdose trennen.

Choice of wires depends on the voltage in the electrical system.

Mangele el cordon de energia cunsidérate que desconecte del torna.

Haltet die Netzkabel wöchentlich.

Niego dismanto o modificasi de ninguna manera.

Hata tilla die elektronik sorgfältig.

Håll kablevare vid elkabeln.

La ventila operieringen mycket inte utfärds.

Keep the set free from moisture, water, and other liquids.

Falten Sie das Gerät von Feuchtigkeit, Wasser und Staub fern.

Protège l'appareil contre l'humidité, l'eau et les impuretés.

Bortfara vatten och andra brettare när apparaten används.

Lade ikke enhedens galler, som er forstøvet.

Wenden Sie die Beschichtung der Elektroden nicht mit feuchten, sauberen Tuch ab.

Ne pas les laisser dans un endroit dangereux.

No deixe o suporte sujar.

Do not set foreign objects in the set.

Keine Fremdkörper in das Gerät hinein treiben.

Ne pas mettre en contact des objets étrangers avec l'appareil.

Non avete mai, né modificare l'apparecchio in nessun modo.

Keine fremden Gegenständen ins Gerät bringen.

Niet de apparatuur beïnvloeden of op een andere manier aanraken.

No objects filled with liquids, such as vases, shall be placed on the apparatus.

Please be care the environmental aspects of battery disposal.

The apparatus shall not be exposed to dripping or splashing for use.

No objects filled with liquids, such as vases, shall be placed on the apparatus.

NOTE ON USE / HINWEIS ZUM GEBRAUCH / OBSERVATIONS RELATIVES / NOTA SULL'USO NOTAS SOBRE EL USO / ALVORENS TE GEBRUIKEN / OBSERVERA

SVENSKA NEDERLANDS ESPAÑOL ITALIANO FRANÇAIS DEUTSCH ENGLISH
Getting Started

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Getting Started

Thank you for choosing the DENON AVC-A11XV Digital Surround A/V amplifier. This remarkable component has been engineered to provide superb surround sound listening with home theater sources such as DVD, as well as providing outstanding high fidelity reproduction of your favorite music sources. As this product is provided with an immense array of features, we recommend that before you begin hookup and operation that you review the contents of this manual before proceeding.

Accessories

- Check that the following parts are included in addition to the main unit:
  1. Operating instructions.......................................1
  2. Service station list.............................................1
  3. Power supply cord ............................................1
  4. Remote control unit (RC-995) ...........................1
  5. R03/AAA alkaline batteries...............................4
  6. Omnidirectional microphone.............................1
  7. List of preset codes..........................................1

Before using

Pay attention to the following before using this unit:

- Moving the set
  To prevent short circuits or damaged wires in the connection cords, always unplug the power supply cord and disconnect the connection cords between all other audio components when moving the set.

- Before turning the Power switch on
  Check once again that all connections are proper and that there are no problems with the connection cords. Always set the power switch to the standby position before connecting and disconnecting connection cords.

- Store these instructions in a safe place. After reading, store these instructions along with the warranty in a safe place.

Note:
For heat dispersal, do not install this equipment in a confined space such as a bookcase or similar unit.

Caution on installation

Noise or disturbance of the picture may be generated if this unit or any other electronic equipment using microprocessors is used near a tuner or TV. If this happens, take the following steps:

- Install this unit as far as possible from the tuner or TV.
- Set the antenna wires from the tuner or TV away from this unit’s power supply cord and input/output connection cords.
- Noise or disturbance tend to occur particularly when using indoor antennas or 300 ohms feeder wires. We recommend using outdoor antennas and 75 ohms coaxial cables.

Cautions on handling

- Switching the input function when input terminals are not connected.
  A clicking noise may be produced if the input function is switched when nothing is connected to the input terminals. If this happens, either turn down the MASTER VOLUME control knob or connect components to the input terminals.

- Muting of PRE OUT terminals and SPEAKER terminals.
  The PRE OUT terminals and SPEAKER terminals include a muting circuit. Because of this, the output signals are greatly reduced for several seconds after the power switch is turned on or input function, surround mode or any other set-up is changed. If the volume is turned up during this time, the output will be very high after the muting circuit stops functioning. Always wait until the muting circuit turns off before adjusting the volume.

Preparing the remote control unit

The included remote control unit (RC-995) can be used to operate not only the AVC-A11XV but other remote control compatible DENON components as well. In addition, the memory contains the control signals for other remote control units, so it can be used to operate non-DENON remote control compatible products.
Getting Started

Inserting the batteries

1. Remove the remote control unit’s rear cover.
2. Set four R03/AAA batteries in the battery compartment in the indicated direction.
3. Put the rear cover back on.

Notes on Batteries:
- Replace the batteries with new ones if the set does not operate even when the remote control unit is operated nearby the set. (The included battery is only for verifying operation.)
- When inserting the batteries, be sure to do so in the proper direction, following the “+” and “−” marks in the battery compartment.
- To prevent damage or leakage of battery fluid:
  - Do not use a new battery together with an old one.
  - Do not use different types of batteries.
  - Do not short-circuit, disassemble, heat, or dispose of batteries in flames.
- If the battery fluid should leak, carefully wipe the fluid off the inside of the battery compartment and insert new batteries.
- When replacing the batteries, have the new batteries ready and insert them as quickly as possible.

Motion sensor

The RC-995 remote control is equipped with a motion sensor that activates the backlighting function when it is picked up and/or handled. Occasionally, you might hear a faint “clicking” sound from within, this is the motion sensor, and is a normal condition.

Operating range of the remote control unit

- Point the remote control unit at the remote sensor on the main unit as shown on the diagram.
- The remote control unit can be used from a straight distance of approximately 7 meters from the main unit, but this distance will be shorter if there are obstacles in the way or if the remote control unit is not pointed directly at the remote sensor.
- The remote control unit can be operated at a horizontal angle of up to 30 degrees with respect to the remote sensor.

Part names and functions

Front panel

For details on the functions of these parts, refer to the pages given in parentheses ( ).

- Power ON/STANDBY switch
- Power indicator
- Power switch
- Headphones jack (PHONES)
- V. AUX INPUT terminals
- SETUP MIC jack
- USER MODE 1 button
- USER MODE 2 button
- USER MODE 3 button
- MASTER VOLUME control knob
- MULTI EQ XT indicator
- Master volume indicator
- Display
- Remote control sensor
- FUNCTION knob
- SOURCE button
- ZONE2 SELECT button
- ZONE3/REC SELECT button
- PURE DIRECT button
- DIRECT/STEREO button
- STANDARD button
- HOME THX CINEMA button
- 7CH STEREO button
- DSP SIMULATION button
- CH SELECT/ENTER button
- SURROUND BACK button
- SURROUND PARAMETER button
- TONE DEFECT button
- DIMMER button
- STATUS button
- ROOM EQ button
- CURSOR button
- SYSTEM SETUP button
- EXT. IN button
- ANALOG button
- INPUT MODE button
Getting Started

Display

Remote control unit

For details on the functions of these parts, refer to the pages given in parentheses ( ) .

Power buttons ....................................... (9)
System buttons ........................................ (9)
Mode selector buttons (20, 32)
Input source button (20, 32)
Surround mode button (20, 32)
System buttons (32 ~ 35)

NOTE:
• With the AV/C-A11XV, the “ZONE4”, “VCR4”, “AUX”, “RDS”, “M.SEL” and “SCALE” buttons cannot be used.
• For instructions on setting the remote control unit back light’s lighting time ( page 36).

1. Input signal indicator
   The respective indicator will light corresponding to the input signal.

2. Input signal channel indicator
   The channels included in the input source will light. This lights when the digital signal is inputted.

3. Information display
   This displays the surround mode, function name or setting value, etc.

4. Output signal channel indicator
   The audio channels that can be output light.

5. Speaker indicator
   This lights corresponding to the settings of the surround speakers of the various surround modes.

6. Decoder indicator
   This lights when each decoder is operating.

7. Master volume indicator
   This displays the volume level. The Setup item number is displayed in System Setup.

8. IEEE1394 indicator
   This lights during playback in a IEEE1394 connection.

9. Multi (zone) indicator
   ZONE3 mode is selected in ZONE3/REC SELECT.

10. Recording output source indicator
    REC OUT mode is selected in ZONE3/REC SELECT.

11. DENON LINK indicator
    This lights during playback in a DENON LINK connection.

12. AL24 indicator
    The AL24 indicator lights when the PURE DIRECT, DIRECT, STEREO, MULTI, CH PURE DIRECT, MULTI, CH IN mode is selected in the PCM input signal.

13. Input mode indicator
    This lights corresponding to the setting of the input mode.

14. Room EQ button
    (22)

15. SYSTEM SETUP button
    ......................................... (9)

16. TEST TONE button
    ....................................... (55)

17. ROOM EQ button (23)

18. SYSTEM SETUP button (9)

19. SYSTEM buttons (32 ~ 35)

20. Tuner system buttons (33)

21. VIDEO SELECT button (21)

22. Input mode selector buttons (21, 22)

Remote control signal transmitter (3)

Number/SYSTEM CALL button (20, 32)

Master volume control buttons (20, 39)

CH SELECT/ENTER button (21, 31, 32)

ON SCREEN button (21, 25)

SURROUND PARAMETER button (24)

Muting button (21, 39)

SPEAKER button (21)

Remote control unit signal transmitter (3)
This section contains the basic steps necessary to configure the AVC-A11XV according to your listening room environment and the source equipment and loudspeakers you are using.

For optimum performance, we recommend using the Auto Setup function.

If you wish, you can set the various settings manually without using Auto Setup (page 53 – 57).

Easy Setup and Operation

**Easy to setup flow**

1. Placing the speakers
2. Connecting the speakers
3. Connecting a monitor and a DVD player
4. Starting the Auto Setup
5. Playing a DVD with surround sound

**Auto setup flow**

- **Placing the speakers**
- **Connecting the speakers**
- **Connecting a monitor and a DVD player**
- **Starting the Auto Setup**
- **Playing a DVD with surround sound**

---

**Easy Setup and Operation**

**Speaker system layout**

- **Basic system layout (For a THX Ultra2 system)**

  The following is an example of the basic layout for a system consisting of eight speaker systems and a television monitor:

  - **Subwoofer**
  - **Center speaker system**
  - **Surround back speaker systems**
  - **Surround speaker systems**
  - **Front speaker systems**

  Set these at the sides of the TV or screen with their front surfaces as flush with the front of the screen as possible.

  Two surround back speakers are required to use the THX Ultra2 Cinema, THX Music mode and THX Games mode.

  Set the surround back speakers so that the distance to the listening position is the same for both the left and right speakers. It is also recommended that the deviations of the distance from the listening position to L and R channel speakers (front left (FL) and front right (FR), surround left (SL) and surround right (SR), surround back left (SBL) and surround back right (SBR)) is less than 60 cm (2 ft).

  With the AVC-A11XV it is also possible to use the surround speaker selector function to choose the best layout for a variety of sources and surround modes.

- **Surround speaker selector function**

  This function makes it possible to achieve the optimum sound fields for different sources by switching between two systems of surround speakers (A and B). The settings of the different speakers (A only, B only or A+B) are stored in the memory for the different surround modes, so they are set automatically when the surround mode is selected.

1. Using A only
   - (Multi surround speaker system)
2. Using B only
   - (Single surround speaker system)
**Easy Setup and Operation**

### Speaker connections

- **Connect** the speaker terminals with the speakers making sure that like polarities are matched (\(<\) with \(<\), \(>\) with \(>\)). Mismatching of polarities will result in weak central sound, unclear orientation of the various instruments, and the sense of direction of the stereo being impaired.
- **When connecting**, take care that none of the individual conductors of the speaker cable come in contact with adjacent terminals, with other speaker cable conductors, or with the rear panel.

**NOTE:** NEVER touch the speaker terminals when the power is on. Doing so could result in electric shocks.

### Speaker Impedance

- Speakers with an impedance of from 6 to 16 Ω/ohms can be connected for use as front, center, surround and surround back speakers.
- Be careful when using two pairs of surround speakers (A + B) at the same time, since use of speakers with an impedance of less than 8 Ω/ohms will lead to damage.
- The protector circuit may be activated if the set is played for long periods of time at high volumes when speakers with an impedance lower than the specified impedance are connected.

#### Connecting the speaker cables

1. Loosen by turning counterclockwise. Either tightly twist or terminate the core wires.
2. Insert the cable.
3. Tighten by turning clockwise.

---

### Protector circuit

This unit is equipped with a high-speed protection circuit. The purpose of this circuit is to protect the speakers under circumstances such as when the output of the power amplifier is inadvertently short-circuited and a large current flows, when the temperature surrounding the unit becomes unusually high, or when the unit is used at high output over a long period which results in an extreme temperature rise.

When the protection circuit is activated, the speaker output is cut off and the power supply indicator flashes. Should this occur, please follow these steps: be sure to switch off the power of this unit, check whether there are any faults with the wiring of the speaker cables or input cables, and wait for the unit to cool down if it is very hot. Improve the ventilation condition around the unit and switch the power back on.

If the protection circuit is activated again even though there are no problems with the wiring or the ventilation around the unit, switch off the power and contact a DENON service center.

#### Note on speaker impedance

The protector circuit may be activated if the set is played for long periods of time at high volumes when speakers with an impedance lower than the specified impedance (for example speakers with an impedance of lower than 4 Ω/ohms) are connected. If the protector circuit is activated, the speaker output is cut off. Turn off the set's power, wait for the set to cool down, improve the ventilation around the set, then turn the power back on.

---

### Connections

- The AVC-A11X can be configured for 10 speaker playback using two pairs of surround speakers (A+B) and one pair of surround back speakers as shown below.
- The output of each power amplifier can be assigned to any desired channel to best suit the application. For details, refer to “Setting the Channel Setup” and “Setting the Power Amplifier Assignment” (page 49, 50).
- When making connections, also refer to the operating instructions of the other components.
Easy Setup and Operation

Connecting a DVD player and monitor TV

Diagram of DVD player connections with various output ports such as S VIDEO, COAXIAL, AUDIO OUT, VIDEO OUT, COMPONENT VIDEO OUT, OPTICAL OUT, and HDMI OUT.
Easy Setup and Operation

The Auto Setup and Room EQ function of this unit performs an analysis of the speaker system and measures the acoustic characteristics of your room to permit an appropriate automatic setting.

The AVC-A11XV’s Audyssey MultEQ XT function has the feature that it provides the optimum listening environment at all listening positions in the home theater, where there are often multiple listeners viewing programs together. To achieve this, it is first necessary to use a microphone to measure test tones generated from the different speakers at the various listening positions. All this measured data is analyzed with a unique method to comprehensively improve acoustic characteristics in the listening area. For optimum effectiveness, measurements should be performed at six or more points. Move the microphone successively within the listening area surrounded by the speakers as shown on the diagram below to measure the test tones. When listening to music or viewing movies with the whole family, move the microphone successively to the different positions in which the members of the family sit (“ ” on the diagram indicates the points of installation) and measure repeatedly (Example 1). Even if the number of people using the home theater is small, taking multiple measurements at or near the listening positions makes it possible to correct the sound more effectively (Example 2).

The AVC-A11XV’s Room EQ function offers three correction curves: “Audyssey”, “Front” and “Flat”. These can be selected after performing the auto setup procedure. Details of the different correction curves are described below.

• Audyssey: This adjusts the frequency response of all speakers to correct the effects of room acoustics.
• Front: This adjusts the characteristics of each speaker to the characteristics of the front speakers.
• Flat: This the frequency response of all speakers flat. This is suitable for multi-channel music reproduction, from discrete music sources such as Dolby Digital 5.1, DTS, DVD-Audio and Super Audio CD.

**About the main listening position** (*M*)
The main listening position is the point where a listener sits most often or the listening position when only one person is listening. Measurements on the AVC-A11XV start from this point. Correction for the speaker distance (“Delay Time”) is set based on this point.

**Connecting a microphone**

1. Connect the optional microphone for Auto Setup to the SETUP MIC jack on the front panel of the unit.

2. Mount the auto setup microphone onto a camera tripod, etc., and place it at ear height at the main listening position in the listening room with the sound receptor facing the ceiling.

**MEMO**

- To make the Speaker system settings without using the Auto Setup function (page 53 - 57).
- When performing Auto Setup, an optional microphone is required for setup.

**NOTE:**
- Do not disconnect the microphone until the settings are completed.
- Do not change the connection of speakers or the subwoofer’s volume after performing these measurements.
Easy Setup and Operation

Starting Auto Setup

1. Press the SETUP button.
   • Display the "System Setup Menu".
   • Press the CURSOR D or H button to select the "Auto Setup / Room EQ", then press the ENTER button.
   • Display the "Auto Setup / Room EQ" menu screen.

   The message "Connect Microphone" is displayed if no microphone is connected. If so, connect the auto setup microphone.

2. Press the CURSOR D or H button to select the "Auto Setup", then press the ENTER button.
   • Display the "Auto Setup" screen.

3. Press the CURSOR D or H button to select the "Extra Setup", then press the CURSOR F button.
   • Switch to the "Extra Setup" screen.

The AVC-A11XV has seven available amplifier channels, some of which can be assigned for powering speakers in ZONE2 and ZONE3, depending on the speaker system complement in the main room. If this functionality is not needed, skip this "Extra Setup" procedure and proceed to "Preliminary Measurements" (page 9, 10).

4. Press the CURSOR D or H button to choose the setting you want to change, then press the ENTER button.
   • Switch to the setting screen.

   For instructions on making the "Channel Setup" settings (page 49).
   For instructions on making the "Setting the Power Amplifier Assignment" settings (page 49, 50).

5. Once the settings are completed, press the ENTER button at the each setting screen.
   • The "Extra Setup" menu reappears.

6. Press the CURSOR D or H button to select the "Exit", then press the ENTER button.
   • Return to the "Auto Setup" screen.

Extra Setup

The speakers measured with this Auto Setup procedure are based on the setting of these "Channel Setup" and "Power Amp Assign" functions.

Preliminary Measurements

• This procedure is used to automatically determine the background noise, whether or not speakers are connected, and the polarities of the connected speakers.
• To avoid affecting the measurements, turn off the air-conditioner or any other device that makes noise and take the measurements with the room as quiet as possible.

1. Press the CURSOR D or H button to select the "Start", then press the CURSOR F button.
   • Start the preliminary measurements.

2. Press the ENTER button.
   • Switch to the "Speaker Detect Check" screen.

   (First screen)

3. The screen shown at the below appears once the preliminary measurements are completed.

4. Press the ENTER button.
   • Switch to the "Speaker Detect Check" screen.

(Second screen)
Easy Setup and Operation

3 Check the results of the speaker detection, then press the ENTER button.
   • Switch to the second screen.

4 If the check ends, press the ENTER button again.

NOTE:
• If the results are not as expected or if an error message is displayed, select "Retry" and perform the measurements again. (For details on the error messages ( page 11).)
If the results of remeasurement are still not as expected or if an error message is displayed, turn off the power switch and check the speaker connections. Then start the measurements again from the beginning.
• Measurement is cancelled when MASTER VOLUME is operated while the Auto Setup is performed.

Speaker system measurement
With these measurements, the “Speaker Configuration”, “Delay Time”, “Channel Level”, “Crossover Frequency” and “Room EQ” are analyzed automatically. The main listening position is measured first, so leave the microphone where it is.

1 Press the CURSOR Δ or ▼ button to select the “OK Start”, then press the CURSOR F button.
   • Measurements for the first point start.

2 Next the measurements for the second point will be taken.
   • Place the microphone at the second listening position. For instructions on the position in which the microphone should be placed ( page 8).

3 Press the CURSOR ◄ button.
   • Measurements for the second point start.

4 Perform step 2, 3 repeatedly.
   • The more measurement points, the better the resulting room correction effect. We recommend a minimum of 6 measurement points. 8 measurement points provides the best room correction effect.

5 After measuring at the number of points according to your listening environment, press the CURSOR Δ or ▼ button to select the “Calculate”, then press the CURSOR F button.
   • The speaker system is analyzed.

The amount of time required for the analysis depends on the number of speakers and the number of measuring points. The greater the number of speakers and measuring points, the longer the time required. For example, for ten speaker systems and 6 measuring points, the calculations require approximately 6 minutes.
Measurements can be ended when there are 5 or less measurement locations; however, to obtain better results, measurements at 6 or more locations is recommended.
Once the calculations are completed, a screen for confirming the results of the measurements appears.

The more measurement points, the better the resulting room correction effect. We recommend a minimum of 6 measurement points. 8 measurement points provides the best room correction effect.
Easy Setup and Operation

Check of the measurement result

The results of the measured items can be checked.

1. Press the CURSOR △ or ↓ button to select the items, then press the ENTER button.
   • Example: Speaker Config. Check

2. Press the ENTER button.
   • Switch to the verification screen.
   • Example: Speaker Config. Check

3. If the check ends, press the ENTER button again.

4. Press the CURSOR △ or ↓ button to select whether or not to save the data you have checked.

Store:
Set with the checked measurement value.
All parameters are stored up.

Cancel:
Cancel the auto setup settings.

5. Press the CURSOR ◄ button.
   • After the data is stored, the “Auto Setup / Room EQ” menu screen appears automatically.

   • Sometimes due to the electrical complexities of subwoofers and the interaction with the room, THX recommends setting the level and the distance of the subwoofer manually.
   • Sometimes due to interaction with the room, you may notice irregular results when setting the level and/or distance of the main speakers. If this happens, THX recommends setting them manually.
   • Please note that any THX main speakers should be set to Small 80 Hz. If you set up your speakers using Auto Setup, please make sure manually that any THX speakers are set to Small with 80 Hz crossover.

Example: Speaker Config. Check

   • When measurements have been made using the measurement microphone, speakers with a built-in filter such as subwoofers might be set with a value that differs from the physical distance because of the internal electrical delay.

NOTE:
• Do not turn off the power while the data is being stored. If the power is turned off while the data is being stored, the Room EQ parameters stored in the memory will be cleared, and it will not be possible to select the “Audyssey”, “Front” or “Flat” equalizer settings.

About the error message

These error messages will be displayed when performing the measurements of Auto Setup and the automatic measurements can not be completed because of the speaker arrangement, measurement environment, or other factors. Please check the following matters, reset the pertinent items, and measure again. Be sure to turn off the AVC-A11XV’s power before checking the speaker connections.

Example: Speaker Config. Check

   • The speakers required for producing suitable reproduction have not been detected.
   • The front L and front R speakers were not properly detected.
   • Only one channel of the surround (A) and surround (B) speakers was detected.
   • Sound was output from the R channel when only one surround back speaker was connected.
   • The surround back or the surround (B) speaker was detected, but the surround (A) speaker was not detected.
   • If multiple errors occur, press the CURSOR ◄ or ◄ button to check the contents.

   • Check that the pertinent speakers are properly connected.

   • The speaker polarity is connected in reverse.
   • If multiple errors occur, press the CURSOR ◄ or ◄ button to check the contents.

   • Check the polarity of the pertinent speakers.

   • For some speakers, the screen below may be displayed even though the speakers are properly connected.

   • Check the placement and orientation of the loudspeakers.
   • Adjust the subwoofer’s output level.

   • The measurement microphone is not connected, or all of speakers have not been detected.

   • Connect the measurement microphone to the microphone connector.
   • Check the speaker connection.

Playing a DVD with surround sound

1. Disconnect the microphone from the unit.
2. Select the input source to be played.
3. Select the play mode.
4. Start DVD playback.
5. Adjust the volume.
Connecting Other Sources

Cable indications

The hookup diagrams on the subsequent pages assume the use of the following optional connection cables (not supplied).

<table>
<thead>
<tr>
<th>Audio cable</th>
<th>Video cable</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong> Analog terminal (Stereo) (White) (Red) Pin-plug cable</td>
<td><strong>H</strong> Video terminal (Yellow) Video cable (75 Ω/ohms video pin-plug cable)</td>
</tr>
<tr>
<td><strong>B</strong> Analog terminal (Monoaural, for subwoofer) (White) (Red) Pin-plug cable</td>
<td><strong>I</strong> S video terminal S video terminal</td>
</tr>
<tr>
<td><strong>C</strong> Digital terminal (Coaxial) (Orange) Coaxial cable (75 Ω/ohms pin-plug cable)</td>
<td><strong>J</strong> Component video terminal (Green) (Blue) (Red) Component video cable</td>
</tr>
<tr>
<td><strong>D</strong> Digital terminal (Optical) Optical cable (Optical fiber cable)</td>
<td><strong>K</strong> DVI-D terminal 24-pin DVI-D cable</td>
</tr>
<tr>
<td><strong>E</strong> DENON LINK terminal DENON LINK cable</td>
<td><strong>L</strong> HDMI terminal HDMI cable</td>
</tr>
<tr>
<td><strong>F</strong> IEEE1394 terminal 4-pin, 5400 IEEE1394 cable</td>
<td><strong>G</strong> Speaker terminal Speaker cable</td>
</tr>
</tbody>
</table>

NOTE:
- Do not plug in the Power supply cord until all connections have been completed.
- When making connections, also refer to the operating instructions of the other components.
- Be sure to connect the left and right channels properly (left with left, right with right).
- Note that binding pin-plug cables together with Power supply cords or placing them near a power transformer will result in generating hum or other noise.

The video conversion function

The AVC-A11XV is equipped with a function for up and down converting video signals.

Because of this, the AVC-A11XV's MONITOR OUT terminal can be connected to the monitor (TV) with a set of cables offering a higher quality connection, regardless of how the player and the AVC-A11XV's video input terminals are connected.

Generally speaking, analog video connections using the component video terminals offer the highest quality playback, followed by connections using the S-Video terminals, then connections using the regular video terminals (yellow).

The flow of the video signals.

- **This unit's input terminals**
- **Component Video terminals**
- **S-Video terminal**
- **Video terminal**
- **This unit's output terminals**

- **HDMI terminal**
- **HDMI cable**

NOTE:
- **Connecting a LD (laser disc) player with a Dolby Digital RF Output.**
  The AVC-A11XV does not have a DD RF demodulator function. Therefore, you need to use a commercially available outboard DD RF demodulator and connect its digital output to one of the AVC-A11XV available digital inputs. Refer to the demodulator's owner's manual for further information.

- **Connecting Other Sources**
  • If the monitor equipped with HDMI terminal is not compatible with the 480i/576i resolution, connect the player and the AVC-A11XV using a component cable and set the player's resolution to one which the monitor can handle.
  • If you do not want to use the function for converting analog video signals to HDMI signals, select "OFF" for "Analog to HDMI Convert" at "Setting the HDMI Out Setup" (page 46).

  In this case, the function for video up conversion to the component video terminal operates.

- **The analog video to HDMI conversion function:**
  • The AVC-A11XV's video up-conversion function lets you output analog video input signals (component – 480i/576i, 480p/576p, 1080i or 720p, S-Video and composite video – 480i/576i) to the HDMI monitor output terminal with the original resolution.
  • The on screen display signals are output from the HDMI monitor output terminal with a resolution of 480i/576i. Because of this, if the monitor equipped with HDMI terminal is compatible with the 480i/576i resolution, all the signals the AVC-A11XV handles can be output to the monitor with a single HDMI cable. The resolutions with which the monitor is compatible can be checked using the STATUS button on the main unit or the ON SCREEN button on the remote control unit.

  • If the monitor equipped with HDMI terminal is not compatible with the 480i/576i resolution, connect the player and the AVC-A11XV using a component cable and set the player’s resolution to one which the monitor can handle.

  • To change the setting of the video conversion mode for the MAIN ZONE (page 45).

- **Connecting Other Sources**
  • If you do not want to use the function for converting analog video signals to HDMI signals, select “OFF” for “Analog to HDMI Convert” at “Setting the HDMI Out Setup” (page 46).

In this case, the function for video up conversion to the component video terminal operates.
Connecting Other Sources

Connecting a TV tuner

On screen display for component video outputs and HDMI output

• When viewing component video signals or HDMI signals via the AVC-A11XV, the on screen display is displayed on the monitor when the "System Setup" operations are performed and when the remote control unit's ON SCREEN button is operated.
• To view the on screen display using an HDMI monitor, set "Analog to HDMI Convert" at "HDMI Out Setup" to "ON" default.
• When only component video signals are input to the AVC-A11XV or when "Component" is selected at the "Setting the Video Convert Mode", the characters of the on screen display are not displayed over the picture.

Connecting equipment with HDMI (High-Definition Multimedia Interface) terminals [To convert analog video signals to HDMI signals]

• The AVC-A11XV is equipped with a function for converting analog video signals into HDMI signals. You can do this by either a component or a video or a S-video connection.
• Audio signals are not output from the HDMI monitor output terminal, so also make analog or digital audio connections. To play sound using digital audio connections, assign the digital terminal (coaxial or optical) at "Setting the Digital In Assign" (page 42).

NOTE:
• Use an HDMI terminal compatible with an HDMI input resolution of 480i or 576i.
• If your monitor is not equipped with an HDMI terminal, connect the AVC-A11XV to the monitor using the component video, S-video, or composite video terminals.
Connecting Other Sources

Connecting the external inputs (EXT. IN) terminals

- These terminals are for inputting multi-channel audio signals from an outboard decoder, or a component with a different type of multi-channel decoder, such as a DVD Audio player, or a multi-channel Super Audio CD player, or other future multi-channel sound format decoder.
- The method of video signal connection is the same as that for DVD player (page 7).
- For instructions on playback using the external input (EXT. IN) terminals (page 21).

Playback using the DENON LINK connector Digital transfer and multi-channel playback of DVD audio discs and other multi-channel sources is possible by connecting the AVC-A11XV to a DENON DVD player equipped with a DENON LINK connector using the connection cable included with the DVD player.
- With discs on which special copyright protection measures have been taken, however, the digital signals may not be output from the DVD player. In this case, connect the DVD player's analog multi-channel output to the AVC-A11XV's EXT. IN terminals for playback. Also refer to your DVD player's operating instructions.

Connecting a video camera component or video game component

- For best picture quality choose the component video connection to your DVD recorder. S-video and composite video outputs are also provided. If you choose to use the component video connection, it needs to be assigned. For more information about Component Input Assignment (page 45).
- If you wish to perform analog dubbing from a digital source, such as a DVD recorder to an analog recorder such as a cassette deck, you will need to connect analog inputs and outputs as shown below, in addition to the digital audio connections.

NOTE:
- When recording to DVD recorder, it is necessary that the type of cable used with the playback source equipment be the same type that is connected to the AVC-A11XV VCR-1 (to 3) OUTPUT terminal.
  (Example) VCR-1 IN → S-video cable : VCR-1 OUT → S-video cable
  VCR-1 IN → video cable : VCR-1 OUT → video cable
- Do not connect the output of the component connected to the OPTICAL 2 OUT terminal on the AVC-A11XV's rear panel to any terminal other than the OPTICAL 2 IN terminal.
Connecting Other Sources

Connecting a VCR

- There are three sets of video deck (VCR) terminals, so three video decks can be connected for simultaneous recording or video copying.

**NOTE:**
- When recording to VCR, it is necessary that the type of cable used with the playback source equipment be the same type that is connected to the AVC-A11XV VCR-1 (to 3) OUTPUT terminal.
  (Example) VCR-2 IN → S-video cable : VCR-2 OUT → S-video cable
  VCR-2 IN → video cable : VCR-2 OUT → video cable
- Do not connect the output of the component connected to the OPTICAL 3 OUT terminal on the AVC-A11XV's rear panel to any terminal other than the OPTICAL 3 IN terminal.

Connecting a CD player
Connecting Other Sources

Connecting equipment with DVI (Digital Visual Interface) terminals

- Connection with equipment that has a DVI Digital Visual Interface-D connector permits the transfer of digital images. Make an analog or digital audio connection also.

- When connecting via a DVI-D cable, no digital audio will be output from the HDMI Monitor Out connector.
- If your digital TV monitor only supports DVI-D, please obtain and use an HDMI-DVI conversion cable or adaptor, available from your dealer.

NOTE:
- Commercially-available DVI cables are available in 24-pin and 29-pin types. The AVC-A11XV supports the 24-pin DVI-D cable.
- The AVC-A11XV supports HDCP. Use an HDCP-compatible HDMI monitor.

Connections with an HDMI/DVI-D conversion cable (adapter)

- The HDMI video stream signals (video signals) are theoretically compatible with DVI-D. When connecting to a monitor, etc., equipped with DVI-D terminals, it is possible to connect using an HDMI/DVI-D conversion cable, but depending on the combination of devices used the image might not be output.
- When using an HDMI/DVI-D conversion adapter, the image may not be output properly due to poor contact with the connected cable, etc.
- For stable signal transfer, we recommend using cables that are a maximum of 5 meters in length.

Connecting Other Sources

Connecting IEEE1394 devices
Connecting Other Sources

Connecting the CONTROL terminals

These terminals are used for an external controller.

Perform the following operation before using an external controller connected to the RS-232C terminal:

1. Press the ON/STANDBY button on the main unit and set the unit to the operating mode.
2. Perform the operation to turn off the power from the external control.
3. Check that the product has been set to the standby mode.

After checking the above, check the connections of the external controller. Operation is possible.

Connecting the TRIGGER OUT terminals

Turn the DC 12V voltage on and off for the individual functions and surround modes. For details, see "Setting the Trigger Out." (page 61).

Connecting the MULTI ZONE terminals

For instructions on operations using the MULTI ZONE functions (page 37 ~ 39).

ZONE2 (or ZONE3) pre-out connections

- If another power amplifier or pre-main (integrated) amplifier is connected, the ZONE2 (or ZONE3) pre-out (variable/fixed level) terminals can be used to play a different program source in ZONE2 (or ZONE3) the same time (page 38).
- The ZONE2 (or ZONE3) video out is only for the ZONE2 (or ZONE3).

NOTE:

- For the AUDIO output, use high quality pin-plug cables and wire in such a way that there is no humming or noise.
- For instructions on installation and operation of separately sold devices, refer to the devices’ operating instructions.

INFRARED RETRANSMITTER

INFRARED SENSOR

Extension terminal for future use.
Connecting Other Sources

ZONE2 / ZONE3 speaker out connections

- When the power amplifier is assigned to the ZONE2 or ZONE3 output channel at "Power Amp Assign" in the "System Setup Menu", the MAIN ZONE speaker terminals can be used as the ZONE2 or ZONE3 speaker out terminals (page 49, 50).
- The connections diagram below is an example for when the surround back speaker is assigned to the ZONE2 stereo 2 channel. In this case, Surround Back Speaker OUT cannot be used for MAIN ZONE.
Basic Operation

Playback

Operating the remote control unit
The RC-995 remote control has a backlit LCD screen whose contents change according to the mode or function selected, with the appropriate remote commands for that mode or function.

Operate the this unit
The AMP button is the main mode for controlling the AV-C-A11XV in the main room (MAIN ZONE).

SURROUND MENU
To select specific surround modes.
Press the SURROUND button to display the screen below to choose a specific surround mode.

NUMBER / SYSTEM CALL MENU
Operate the "Number / System call" menu function.
Press the NUMBER / SYSTEM CALL button to display the screen below.

SOURCE MENU
To operate the system's source components.
Press the SOURCE button to display the screen shown below, so that you can select an input source.

Playing the input source
1
Select the input source to be played.
Example: CD
(Main unit) (Remote control unit)
To select the input source when ZONE2 SELECT or ZONE3/REC SELECT is selected, press the SOURCE button on the main unit then operate the input function selector.

2
Start playback on the selected component.
For operating instructions, refer to the component's manual.

3
Adjust the volume.
(Main unit) (Remote control unit)
The volume level is displayed on the master volume level display.

1
The volume can be adjusted within the range of –80 to +18 dB, in steps of 0.5 dB. However, when the channel level is set (page 31 or 54, 55), if the volume for any channel is set at +0.5 dB or greater, the volume cannot be adjusted up to 18 dB. (In this case the maximum volume adjustment range is “18 dB — (Maximum value of channel level).”)

2
To choose the surround sound mode
Example: THX Surround EX
Press the SURROUND button, then press the HOME THX CINEMA button.
For more information about the surround modes (page 24, 25).

3
To select the Room EQ function
Press the ROOM EQ button.
For more information about the Room EQ function (page 22).
Basic Operation

Playback using the external input (EXT. IN) terminals

Press the EXT. IN button to switch the external input.

NOTE:
• When the input mode is set to the external input (EXT. IN), the surround mode (DIRECT, STEREO, HOME THX CINEMA, STANDARD, 7CH STEREO, WIDE SCREEN or DSP SIMULATION) cannot be set.
• In play modes other than the external input mode, the signals connected to these terminals cannot be played. In addition, signals cannot be output from channels not connected to the input terminals.

Turning the sound off temporarily (MUTING)

Use this to mute the audio output temporarily.

Press the MUTING button.
• You can adjust the muting level (page 50).

NOTE:
• Cancelling the external input mode:
  Press the INPUT MODE or ANALOG button to switch to the desired input mode (page 21, 22).
  • The external input mode can be set for any input source. To watch video while listening to sound, select the input source to which the video signal is connected, then set this mode.
  • If the subwoofer output level seems too high, set the “SW ATT” surround parameter to “ON”.

Pressing the muting button

Connect the headphone to the PHONES jack.
• The pre-out output (including the speaker output) is automatically turned off when headphones are connected.

NOTE:
• When the input mode is set to the external input (EXT. IN), the surround mode (DIRECT, STEREO, HOME THX CINEMA, STANDARD, 7CH STEREO, WIDE SCREEN or DSP SIMULATION) cannot be set.
• In play modes other than the external input mode, the signals connected to these terminals cannot be played. In addition, signals cannot be output from channels not connected to the input terminals.

Listening over headphone

Use this to change the brightness of the display.

Press the DIMMER button.
• The display brightness changes in four steps (bright, medium, dim and off).

Checking the currently playing program source, etc.

Press the ON SCREEN button.
• Each time an operation is performed, a description of that operation appears on the display connected to AVC-A11XV’s VIDEO MONITOR OUT terminal. Also, the unit’s operating status can be checked during playback.
• Such information as the position of the input selector and the surround settings is output in sequence.

Combining the currently playing sound with the desired image (VIDEO SELECT)

Press the VIDEO SELECT button until the desired image appears.

Video source selected with the video select function is stored in the memory for the different input source.

NOTE:
• Cancelling simulcast playback:
  Select the “SOURCE” pressing the VIDEO SELECT button.
  • It is not possible to select HDMI and DVI-D input signals.

Switching the surround speakers

Press the SPEAKER button.
• The surround speakers switch as shown below each time the SPEAKER button is pressed.

NOTE:
• This operation is possible when the setting for using both surround speakers A and B is made at “Setting the type of speakers” (page 53).

Checking the currently playing program source, etc.

Press the ON SCREEN button.
• Each time an operation is performed, a description of that operation appears on the display connected to AVC-A11XV’s VIDEO MONITOR OUT terminal. Also, the unit’s operating status can be checked during playback.
• Such information as the position of the input selector and the surround settings is output in sequence.

Front panel display

Press the STATUS button.
• Descriptions of the unit’s operations are also displayed on the front panel display. In addition, the display can be switched to check the unit’s operating status while playing a source.

Using the dimmer function

Use this to change the brightness of the display.

Press the DIMMER button.
• The display brightness changes in four steps (bright, medium, dim and off).

Input mode

The AVC-A11XV has an AUTO signal detection mode that automatically identifies the type of incoming audio signals, but is also equipped with a manual mode that can be switched according to the type of input audio signals.

Selecting the AUTO, PCM and DTS modes

Press the INPUT MODE button.
• The mode switches as shown below each time the INPUT MODE button is pressed.

AUTO → PCM → DTS

AUTO (All auto mode)
In this mode, the types of signals being input to the digital and analog input terminals for the selected input source are detected and the program in the AVC-A11XV’s surround decoder is selected automatically upon playback. This mode can be selected for all input sources other than PHONO.
• The presence or absence of digital signals is detected, the signals input to the digital input terminals are identified and decoding and playback are performed automatically in DTS, Dolby Digital or PCM 2 channel stereo format. If no digital signal is being input, the analog input terminals are selected.
• Use this mode to play Dolby Digital signals.
Basic Operation

**Input mode display**

- **In the AUTO mode**
- **In the DIGITAL PCM mode**
- **In the DIGITAL DTS mode**
- **In the ANALOG mode**
- **In the EXT.IN mode**

**Input signal display**

- **DOLBY DIGITAL**
- **DTS**
- **PCM**

Depending on the input signal.

- The “DIG.” indicator lights when digital signals are being input properly. If the “DIG.” indicator does not light, check whether the digital input component setup is correct and whether the component’s power is turned on.
- AL24 processing is activated when PCM signals are played while the surround mode is set to PURE DIRECT, DIRECT, STEREO, MULTI CH DIRECT, MULTI CH DIRECT, or MULTI CH IN.

**Room EQ function**

The AVCA11XV’s Auto Setup / Room EQ function offers three correction curves: “Audyssey”, “Front”, “Flat”. The timbre of the speakers can also be adjusted manually using a graphic equalizer. Details of the different correction curves are described below:

- **Audyssey:**
  This adjusts the frequency response of all speakers to correct the effects of room acoustics.
- **Front:**
  This adjusts the characteristics of each speaker to the characteristics of the front speakers.
- **Flat:**
  This is suitable for multi-channel music reproduction, from discrete music sources such as Dolby Digital 5.1, DTS, DVD-Audio and Super Audio CD.

**Manual:**

Selects the setting value that was set in the Manual EQ Setup.

For details of the “Setting the Manual EQ Setup” (page 48).

**Press the ROOM EQ button.**

- The “Audyssey” is selected, the MultEQ XT indicator lights green.
- The “Front” or “Flat” is selected, the MultEQ XT indicator lights red.

The Room EQ switches as follows each time the ROOM EQ button is pressed.

- OFF  Audyssey  Front  Flat  Manual

The MultEQ XT indicator also lights red if the “Speaker Configuration”, “Delay Time”, “Channel Level” or “Crossover Frequency” is set manually after conducting the Auto Setup procedure.

- The “Audyssey”, “Front” and “Flat” Room EQ curves can be selected after performing the Auto Setup procedure.

NOTE:

- The “DIG.” indicator will light when playing CD-ROMs containing data other than audio signals, but no sound will be heard.

---

**DTS:**

(exclusive DTS signal playback mode)

Decoding and playback are only performed when DTS signals are being input.

**PCM:**

(exclusive PCM signal playback mode)

Decoding and playback are only performed when PCM signals are being input.

**ANALOG:**

(exclusive analog audio signal playback mode)

The signals input to the analog input terminals are decoded and played.

NOTE:

- Input mode when playing DTS sou ces:
  Noise will be output if DTS-compatible CDs or LDs are played in the “ANALOG” or “PCM” mode.
  When playing DTS-compatible sources, be sure to connect the source component to the digital input terminals (OPTICAL/COAXIAL) and set the input mode to “DTS”.

- The “DIG.” indicator lights when DTS signals are being input properly. The “DIG.” indicator does not light, check whether the digital input component setup is correct and whether the component’s power is turned on.
- AL24 processing is activated when PCM signals are played while the surround mode is set to PURE DIRECT, DIRECT, STEREO, MULTI CH DIRECT, MULTI CH DIRECT, or MULTI CH IN.

- The “DIG.” indicator will light when playing CD-ROMs containing data other than audio signals, but no sound will be heard.
The AVC-A11XV is equipped with many surround modes. We recommend using the surround modes as described below in order to achieve the maximum effect for the specific signal source.

### Surround Playing modes for different sources

- **THX SURROUND EX** (page 25)
  - Maximum performance for playing movies on the AVC-A11XV.
- **THX MUSIC MODE** / **THX Games Mode** / **PLIIx C+THX** (page 25)
  - These modes are suited for playing 5.1-channel sources in 7.1 channels. Select the desired surround mode for the movie and music sources.
- **DOLBY DIGITAL EX** (page 26)
  - This mode is optimized for playing sources recorded in Dolby Digital Surround EX.
- **DTS-ES DSCRT 6.1 / MTRX 6.1, +PLIIx** (page 26)
  - This is the optimum mode for playing sources recorded in DTS-ES.
- **ES DSCRT 6.1+THX / ES MTRX 6.1+THX** (page 25)
  - When playing movies, setting this mode sometimes results in a more natural sound. Select the mode as desired.
- **PURE DIRECT** (page 24)
  - By suspending all circuits and processes not required, analog input music playback can be played with optimum quality.
- **DIRECT / STEREO** (page 24)
  - Effective for achieving pure playback.
  - If there is no need for tone control or distribution of the low frequencies in function of the speaker configuration, select the DIRECT mode to achieve the best sound quality.
- **DENON Original Surround Modes** (page 29, 30)
  - Select these for 7.1-channel playback with sources recorded in stereo or monaural.
  - The effects are different for each of the surround modes. Select the one most suited for the source being used.
- **DTS NEO:6** (page 28)
  - This is a surround mode for playing 6.1- or 7.1-channel stereo sources developed by Digital Theater Systems.
  - One of two playing modes, MUSIC (for music sources) or CINEMA (for movie sources), can be selected according to your preferences.
- **DOLBY PRO LOGIC IIx** (page 27)
  - Developed by Dolby Laboratories, this surround mode provides 7.1-channel surround sound with conventional stereo (2-channel) sources.
  - Select CINEMA mode for movie surround soundtracks, MUSIC for music sources, and GAME for 2-channel game box audio sources.

### Sources recorded in Dolby Digital Surround EX

- **DTS SURROUND / DTS 96/24 / DTS+NEO:6** (page 26)
  - This mode is optimized for playing 5.1-channel or 7.1-channel music.
  - For Dolby surround recording sources, Dolby Pro-Logic II playback is conducted.

### Sources recorded in DTS-ES

- **DTS+PLIIx**
  - Developed by Dolby Laboratories, this surround mode provides 7.1-channel surround sound with conventional stereo (2-channel) sources.
  - Select CINEMA mode for movie surround soundtracks, MUSIC for music sources, and GAME for 2-channel game box audio sources.
Press the \textit{DIRECT/STEREO} button to select the \textit{STEREO} mode.

- Use this mode to adjust the tone and achieve the desired sound.

Press the \textit{PURE DIRECT} button to select the \textit{PURE DIRECT} mode.

- This mode reproduces the sound with extremely high quality. When this mode is set, all circuits and processes not required for the selected input source (FL tube, video circuit and tone control, as well as digital circuitry and other unnecessary circuits for analog audio inputs) are automatically turned off so the music signals can be reproduced with high sound quality.

Press the \textit{HOME THX CINEMA} button to select the \textit{Home THX Cinema} mode.

1. Play a program source with the \textit{Home THX Cinema} mark.

2. Press the \textit{SURROUND PARAMETER} button.

3. Press the \textit{CURSOR} \textsuperscript{D} or \textsuperscript{H} button to select the parameter.

4. Press the \textit{CURSOR} \textsuperscript{F} or \textsuperscript{G} button to select the setting.

5. Press the \textit{ENTER} or \textit{SURROUND PARAMETER} button to complete the setting.

- Playing sources recorded in Dolby surround in the Home THX cinema surround mode

- Surround parameters

- \textbf{DECODER:}

  - \textit{FL} II x C:
    - The signals are decoded in the Dolby Pro Logic II x Cinema mode before undergoing THX processing.
  - \textit{FL} II C:
    - The signals are decoded in the Dolby Pro Logic II Cinema mode before undergoing THX processing.
  - \textit{FL}:
    - The signals are decoded in the Dolby Pro Logic II mode before undergoing THX processing.
  - \textit{NEO:6} C:
    - The signals are decoded in the NEO 6 Cinema mode before undergoing THX processing.

- MODE/DB CH OUT:

  Select the surround back channel playback method or mode.

- \textbf{ON:}

  - This is the recommended play mode for using the surround back channel when DTS NEO:6 is selected.

- OFF:

  - This is the recommended play mode when Dolby Pro Logic II is selected. The surround back channel is not played.

For operating instructions, refer to the manuals of the respective components.
Basic Operation

Checking the input signal
The input signal can be checked by pressing the remote control unit's ON SCREEN button (page 21).

**SIGNAL:**
- Displays the type of signal (DTS, DOLBY DIGITAL, PCM, etc.).
- Displays the input signal's sampling frequency.

**FORMAT:**
- Displays the input signal’s number of channels. "Number of front channels / Number of surround channels / LFE on/off".
- "SURROUND" is displayed for 2-channel signal sources recorded in Dolby Surround.

**OFFSET:**
- Displays the dialog normalization offset value (page 26).

**FLAG:**
- Displays the special identification signal recorded in the input signal (page 26).
- "MATRIX" is displayed when matrix processing is conducted on the surround back channel.
- "DISCRETE" is displayed when discrete processing is conducted.
- Not displayed when no identification signal is recorded.

**NOTE:**
- **OSD-2:** The monitor's resolution is displayed when an HDMI monitor is connected to the AVC-A11XV.
- **OSD-4:** This is displayed when the auto surround mode is set to "ON" (page 47) and the input mode is set to "AUTO".
- It is not displayed when the input mode is set to "ANALOG" or "EXT. IN".

To play in the THX surround EX / Home THX Cinema surround mode for sources recorded in Dolby Digital or DTS

1. Press the HOME THX CINEMA button to select the "Home THX Cinema" mode.

2. Play a program source with the mark.
   - The Dolby Digital indicator lights when playing Dolby Digital sources.
   - The DTS indicator lights when playing DTS sources.

   For operating instructions, refer to the manuals of the respective components.
   - The channel status information during playback of Dolby Digital and DTS sources can be checked pressing the STATUS button on the main unit.

   **SIGNAL:**
   - Displays the type of signal (DTS, DOLBY DIGITAL, PCM, etc.).

   **fs:**
   - Displays the input signal's sampling frequency.

   **FORMAT:**
   - Displays the input signal's number of channels.
   - "Number of front channels / Number of surround channels / LFE on/off"
   - "SURROUND" is displayed for 2-channel signal sources recorded in Dolby Surround.

   **OFFSET:**
   - Displays the dialog normalization offset value (page 26).

   **FLAG:**
   - Displays the special identification signal recorded in the input signal (page 26).
   - "MATRIX" is displayed when matrix processing is conducted on the surround back channel.
   - "DISCRETE" is displayed when discrete processing is conducted.
   - Not displayed when no identification signal is recorded.

Surround parameters

- **MODE/SB CH OUT:**
  - Select the surround back channel playback method or mode.
    - **(1) Multi channel source**
      - **THX Surround EX:** Dolby Digital signals are played in the THX Surround EX mode.
      - **Ultra2 Cinema:** The signals are played in the THX Ultra2 Cinema mode.
      - **Music Mode:** The signals are played in the THX Music mode.
      - **Games Mode:** The signals are played in the THX Games mode.
      - **NON MATRIX:** The same signals as those of the surround channels are output from the surround back channels.
      - **MATRIX ON:** The surround channel signals undergo digital matrix processing and are output from the surround back channels.
      - **SB OFF (OFF):** No signal is played from the surround back channels.
      - **ES MTRX:** When playing DTS signals, the surround back signals undergo digital matrix processing for playback.
      - **ES DISCRETE:** When a signal identifying the source as a discrete 6.1-channel source is included in the DTS signals, the surround back signals included in the source are played.
        - **PLBX Cinema:** Processing is performed with the Cinema mode of the PLBX decoder and the Surround Back channel is reproduced.
        - **PLBX Music:** Processing is performed with the Music mode of the PLBX decoder and the Surround Back channel is reproduced.

- **(2) 2ch source**
  - **OFF:** Playback is conducted without using the surround back speaker.
  - **ON:** Playback is conducted using the surround back speaker.
  - This operation can be performed directly pressing the SURROUND BACK button.
**Basic Operation**

**AFDM (Auto Flag Detect Mode):**
- **On:**
  - This function only works with software on which a special identification signal is recorded. This software is scheduled to go on sale in the future.
  - This is a function for automatically playing in the 6.1-channel mode using the surround back speaker(s) if the software is recorded in Dolby Digital EX or DTS-ES or in the normal 5.1-channel mode without using the surround back speaker(s) when the software is not recorded in Dolby Digital EX or DTS-ES.

When AFDM is set to ‘**ON**’ and the EX/ES flag is detected automatically, the surround mode is fixed according to the playing program source.

- **OFF:**
  - When the identification signal is detected regardless of the playing program source.
  - This function only works in the Dolby Pro Logic I, Dolby Digital, DTS Surround, DTS Neo:6 and Wide Screen modes.

When AFDM is set to ‘**ON**’ and the EX/ES flag is detected automatically, you would like to select the surround mode freely, set AFDM to ‘**OFF**’.

In this case, the ‘MODE (SB CH OUT)’ parameter can be selected on the surround parameter screen regardless of the playing program source.

Example: When playing software that has a Dolby Digital EX flag

1. When AFDM is set to ‘**ON**’, the surround mode is automatically set to the “DOLBY DIGITAL + PLIC CINEMA” mode. The surround parameter screen will be displayed.

2. When you would like to play back with the “Dolby Digital EX” mode, set AFDM to “**OFF**”, and select “MTRX ON” with “SB CH OUT”.

3. Press the STANDARD button to select the “STANDARD (Dolby/DTS Surround)” mode.

4. Play a program source with the Dolby Digital indicator light on.
   - The Dolby Digital indicator lights when playing Dolby Digital sources.
   - The DTS indicator lights when playing DTS sources.
   - Press the SURROUND BACK button. Lights when the Surround Back CH is on.

5. Press the CURSOR button to select the parameter.

6. Press the ENTER or SURROUND PARAMETER button to complete the setting.

**Dolby Digital mode and DTS surround (only with digital input)**

**Surround parameters**

- **CINEMA EQ.** (Cinema Equalizer):
  - The Cinema EQ function gently decreases the level of the extremely high frequencies, compensating for overly-bright sounding motion picture soundtracks. Select this function if the sound from the front speakers is too bright.
  - This function only works in the Dolby Pro Logic I, Dolby Digital, DTS Surround, DTS Neo:6 and Wide Screen modes.

- **D.COMP.** (Dynamic Range Compression):
  - Motion picture soundtracks have tremendous dynamic range (the contrast between very soft and very loud sounds). For listening late at night, or whenever the maximum sound level is lower than usual, the Dynamic Range Compression allows you to hear all of the sounds in the soundtrack but with reduced dynamic range (This only works when playing program sources recorded in Dolby Digital or DTS). Select one of the four parameters (“OFF”, “LOW”, “MED” (medium) or “HI” (high)). Set to OFF for normal listening.
  - This function is displayed only when playing compatible sources in DTS mode.

**LFE Low Frequency Effects:**

- This sets the level of the LFE Low Frequency Effect sounds included in the source when playing program sources recorded in Dolby Digital and DTS.

  - **Dial Norm:**
    - **0 dB** for correct DTS playback.
    - **–10 dB** for correct DTS playback.

When DTS encoded movie software is played, it is recommended that the LEVEL be set to 0 dB for correct DTS playback.

- When DTS encoded music software is played, it is recommended that the LFE LEVEL be set to –10 dB for correct DTS playback.

**Dialogue Normalization**

The dialogue normalization function is activated automatically when playing Dolby Digital program sources.

Dialogue normalization is a basic function of Dolby Digital which automatically normalizes the dialog level (standard level) of the signals which are recorded at different levels for different program sources, such as DVD, DTS and other future formats that will use Dolby Digital.

When this function is activated, the following message appears on the main unit’s display:

**Display**

The number indicates the normalization level when the currently playing program is normalized to the standard level.

**TONE:**

This adjusts the tone control (page 31). This can be set individually for the separate surround mode other than PURE DIRECT, DIRECT and Home THX Cinema mode.

- **ENGLISH**

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26

**ENGLISH**
Basic Operation

Dolby Pro Logic IIx (Pro Logic IIx) mode

- To play in the PL IIx mode, set “Sp.Back” at the Speaker Configuration setting to “1spkr” or “2spkrs”.
- To play in the PL IIx mode, set “Surround Back” at the Power Amp Assign setting.

1. Press the STANDARD button to select the “Dolby Pro Logic IIx” mode.
   - The Dolby Pro Logic indicator lights.
   - Display MODE: PL IIx M

2. Play a program source with the mark.
   - For operating instructions, refer to the manuals of the respective components.

3. Press the SURROUND PARAMETER button.
   - Display the surround parameter menu.

4. Press the CURSOR < or > button to select the play mode.
   - When the “SB CH OUT” parameter is set to “ON”. (Set “SP.Back” at the System Setup to “1spkr” or “2spkrs”).
   - Display MODE: PL IIx C

5. Press the CURSOR △ or ▽ button to select the various surround parameters.
   - Example: DOLBY PL IIx music mode screen

6. Press the CURSOR < or > button to adjust the parameters setting.
   - DEFAULT setting: Press the CURSOR < button to select “Default Yes <”, then parameters set to default setting.

7. Press the ENTER or SURROUND PARAMETER button to complete the setting.

- There are four Dolby Surround Pro Logic modes (NORMAL, PHANTOM, WIDE and 3 STEREO). The AVCA11KV sets the mode automatically according to the types of speakers set during the system setup process ( page 53).

Surround parameters

Pro Logic IIx and Pro Logic II Mode:
Select one of the modes (“Cinema”, “Music”, “Pro Logic” or “Game”).

- The Cinema mode is for use with stereo television shows and all programs encoded in Dolby Surround. The Music mode is recommended for stereo music and surround-encoded stereo music sources. The Pro Logic mode emulates Dolby Laboratories’ original Dolby Pro Logic surround decoding, and may provide better results with older, legacy surround-encoded program material. The Game mode is optimized for computer and/or dedicated game box consoles, that feature stereo analog or digital outputs. It can only be used with 2-channel stereo sources.

- PANORAMA:
  - This mode extends the front stereo image to include the surround speakers for an exciting “wraparound” effect with side wall imaging. Select “OFF” or “ON”.

- DIMENSION:
  - This control gradually adjusts the soundfield either towards the front or towards the rear. The control can be set in 7 steps from 0 to 6.

- CENTER WIDTH:
  - This control adjusts the center image so it may be heard only from the center speaker, only from the left/right speakers as a phantom image, or from all three front speakers to varying degrees. The control can be set in 8 steps from 0 to 7.
Basic Operation

DTS NEO:6 mode
Surround playback can be performed for the analog input and digital input 2-channel signals.

1. Press the STANDARD button to select the “DTS NEO:6” mode.
   • The DTS NEO 6 indicator lights.

2. Play a program source.

3. Press the SURROUND PARAMETER button.
   • Display the surround parameter menu.

4. Press the CURSOR button to select the play mode.

5. Press the CURSOR button to select the various surround parameters.

6. Press the CURSOR button to adjust the parameters setting.

7. Press the ENTER or SURROUND PARAMETER button to complete the setting.

Surround parameters

DTS NEO:6 Mode:
• Cinema:
   This mode is optimum for playing movies. Decoding is performed with emphasis on separation performance to achieve the same atmosphere with 2-channel sources as with 6.1-channel sources. This mode is effective for playing sources recorded in conventional surround formats as well, because the in-phase component is assigned mainly to the center channel (C) and the reversed phase component to the surround (SL, SR and SB channels).

• Music:
   This mode is suited mainly for playing music. The front channel (FL and FR) signals bypass the decoder and are played directly so there is no loss of sound quality, and the effect of the surround signals output from the center (C) and surround (SL, SR and SB) channels add a natural sense of expansion to the sound field.

CENTER IMAGE (0.0 to 1.0: default 0.3):
The center image parameter for adjusting the expansion of the center channel in the DTS NEO:6 MUSIC mode has been added.

The Dolby Headphone
The Dolby Headphone mode is set when headphones are connected to the PHONES jack while in the DOLBY/DTS SURROUND mode.

1. Press the SURROUND PARAMETER button.
   • Display the surround parameter menu.

   • When “Default” is selected and the CURSOR button is pressed, “MODE” and “TONE” are automatically reset to the default values and “CINEMA EQ.” is set to “OFF”.

   • When playing PCM digital signals or analog signals in the DOLBY PRO LOGIC II, DOLBY PRO LOGIC IIx, DTS NEO 6 modes and the input signal switches to a digital signal encoded in Dolby Digital, the Dolby surround mode switches automatically. When the input signal switches to a DTS signal, the mode automatically switches to DTS surround.

Parameters

MODE:
• DH1:
   Reference room (small room with weak reverberations).

• DH2:
   Live room (room with a bit stronger reverberations than DH1).

• DH3:
   Large room (larger room than DH1, offers a sense of distance and sound diffusion effects).

• BYPASS:
   Stereo sound.

DECODER:
Select this when playing analog, PCM or other 2-channel sources.
The signals are converted into multichannel signals using the decoders shown below and played in the Dolby Headphone mode.

• PL II:
   Dolby Pro Logic II Cinema mode.

• PL II M:
   Dolby Pro Logic II Music mode.

• NEO:6 C:
   DTS Neo 6 Cinema mode.

• NEO:6 M:
   DTS Neo 6 Music mode.

• OFF:
   The signals are played in the Dolby Headphone mode as such (2 channels).

Recording:
When RECOUT mode is set to “SOURCE”, with this amplifier signals encoded in the Dolby Headphone mode can be output from the recording output terminals and recorded on another recorder (see page 40).
Memory and call-out functions (USER MODE function)

- The AVC-A11XV is equipped with a function for storing the selected input source, the auto surround mode and input mode in the memory and selecting these settings when you want to use them.
- Three patterns of settings can be stored in the memory pressing the USER MODE buttons.

Storing the settings in the memory

1. The following are stored in the memory:
   1. Currently set input source
   2. Currently set auto surround mode
   3. Currently set input mode

2. Press and hold the USER MODE button at which you want to store the settings.
   - In this case, press the button and hold it in until the indicator of the selected USER MODE button lights.

Calling the settings out

Press the USER MODE button at which the settings you want to call out are stored.
- The indicator for the selected USER MODE button lights.
- The indicator turns off if you perform any operations that change the settings stored at the USER MODE buttons.

Surround modes and their features

1. **WIDE SCREEN**
   - Select this to achieve an atmosphere like that of a movie theater with a large screen. In this mode, all signal sources are played in the 7.1-channel mode, including Dolby Surround and Dolby Digital 5.1-channel sources. Effects simulating the multi surround speakers of movie theaters are added to the surround channels.

2. **SUPER STADIUM**
   - Select this when watching baseball or soccer programs to achieve a sound as if you were actually at the stadium. This mode provides the longest reverberation signals.

3. **ROCK ARENA**
   - Use this mode to achieve the feeling of a live concert in an arena with mixed sound coming from all directions.

4. **JAZZ CLUB**
   - This mode creates the sound field of a live house with a low ceiling and hard walls. This mode gives jazz a very vivid realism.

5. **CLASSIC CONCERT**
   - Select this for the sound of a concert hall rich in reverberations.

6. **MONO MOVIE (NOTE)**
   - Select this when watching monaural movies for a greater sense of expansion.

7. **VIDEO GAME**
   - Use this to enjoy video game sources.

8. **MATRIX**
   - Select this to emphasize the sense of expansion for music sources recorded in stereo. Signals consisting of the difference component of the input signals (the component that provides the sense of expansion) processed for delay are output from the surround channel.

9. **7CH STEREO**
   - The front left channel signals are output to the surround and surround back signal left channels, the front right channel signals are output to the surround and surround back signal right channels, and the in-phase component of the left and right channels is output to the center channel. Use this mode to enjoy stereo sound.

Personal Memory Plus

This set is equipped with a personal memorize function that automatically memorizes the surround modes and input modes selected for the input different sources. When the input source is switched, the modes set for that source last time it was used are automatically recalled.

Depending on the program source being played, the effect may not be very noticeable. In this case, try other surround modes, without worrying about their names, to create a sound field suited to your tastes.

NOTE:
- When playing sources recoded in monaural, the sound will be one-sided if signals are only input to one channel (left or right), so input signals to both channels. If you have a source component with only one audio output (monophonic camcorder, etc.) obtain a “Y” adaptor cable to split the mono output to two outputs, and connect to the L and R inputs.

DENON original surround modes

The AVC-A11XV is equipped with a high performance DSP (Digital Signal Processor) which uses digital signal processing to synthetically recreate the sound field. One of nine preset surround modes can be selected according to the program source and the parameters can be adjusted according to the conditions in the listening room to achieve a more realistic, powerful sound.

The following surround modes are available:

- **WIDE SCREEN**
- **SUPER STADIUM**
- **ROCK ARENA**
- **JAZZ CLUB**
- **CLASSIC CONCERT**
- **MONO MOVIE (NOTE)**
- **VIDEO GAME**
- **MATRIX**
- **7CH STEREO**
Basic Operation

DSP surround simulation

1. Select the surround mode for each input channel.
   - Example: DSP surround simulation mode
     (Remote control unit) (Remote control unit)
     Example: 7CH STEREO mode
     (Remote control unit) (Remote control unit)
     The surround mode switches in the following order each time the DSP SIMULATION button is pressed:
     WIDE SCREEN — SUPER STADIUM — ROCK ARENA — CLASSIC CONCERT
     JAZZ CLUB — VIDEO GAME — CLASSIC CONCERT
   - The screen for the selected surround mode appears.

2. Press the SURROUND PARAMETER button.
   - Display the surround parameter menu.
   - The “7CH STEREO” display changes as shown below according to the surround back speaker setting.

<table>
<thead>
<tr>
<th>SURROUND BACK SPEAKER</th>
<th>DISPLAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>ON</td>
<td>7CH STEREO</td>
</tr>
<tr>
<td>OFF</td>
<td>5CH STEREO</td>
</tr>
</tbody>
</table>

   - When “Default” is selected and the CURSOR △ or ▽ button is pressed, “CINEMA EQ.” and “D.COMPR” are automatically turned off. “ROOM SIZE” is set to “medium”, “EFFECT LEVEL” to “10”, “DELAY TIME” to “30 ms” and “LFE” to “0 dB”.
   - The “ROOM SIZE” expresses the expansion effect for the different surround modes in terms of the size of the sound field, not the actual size of the listening room.
   - The “7CH STEREO” display changes as shown below according to the surround back speaker setting.

3. Press the CURSOR △ or ▽ button to select the various surround parameters.

4. Press the CURSOR ◄ or ► button to adjust the parameters setting.

5. Press the ENTER or SURROUND PARAMETER button to complete the setting.

   - The “7CH STEREO” display changes as shown below according to the surround back speaker setting.

   - The “7CH STEREO” display changes as shown below according to the surround back speaker setting.

   - The “7CH STEREO” display changes as shown below according to the surround back speaker setting.

   - The “7CH STEREO” display changes as shown below according to the surround back speaker setting.

Surround parameters

**EFFECT:**
This parameter turns the effect signals with multi surround mode speaker effects on and off in the WIDE SCREEN mode. When this parameter is turned off, the SBL and SBR channel signals are equivalent to the SL and SR channels, respectively.

**LEVEL:**
This parameter sets the strength of the effect signals in the WIDE SCREEN mode. It can be set in 15 steps, from “1” to “15”. Set this to a low level if the positioning or phase of the surround signals sounds unnatural.

**SB CH OUT:**
- **ON:** Playback is conducted using the surround back speaker.
- **OFF:** Playback is conducted without using the surround back speaker.

**NOTE:**
This operation can be performed directly pressing the SURROUND BACK button on the main unit’s panel.

**ROOM SIZE:**
This sets the size of the sound field. There are five settings: “small”, “med.s” (medium-small), “medium”, “med.l” (medium-large) and “large”, “small” recreates a small sound field, “large” a large sound field.

**EFFECT LEVEL:**
This sets the strength of the surround effect. The level can be set in 15 steps from 1 to 15. Lower the level if the sound seems distorted.

**DELAY TIME:**
In the matrix mode only, the delay time can be set within the range of 0 to 300 ms.

**SW ATT:**
This is the parameter for reducing the level of the subwoofer channel when playing in the EXT. IN input mode. Depending on the player you are using, the subwoofer channel’s playback level may seem too high. If so, set “SW ATT” to “ON”.

**NOTE:**
For DENON players, use with the default settings (“OFF”).

**Subwoofer ON/OFF:**
The subwoofer output can be controlled directly.
Basic Operation

**Basic Operation**

**Tone control**
- Use the tone control setting to adjust the bass and treble as desired.
- The tone control function will not work in the PURE DIRECT, DIRECT or Home THX Cinema mode.

**Adjusting the tone**

1. Press the SURROUND PARAMETER button.
   - Display the surround parameter menu.
   - The screen selected surround mode appears.

2. Press the CURSOR △ or ▽ button to select the “TONE”.

3. Press the CURSOR < button.
   - Switch to the “Tone Control” screen.

4. Press the CURSOR › button to select the “Tone Defeat OFF”.

5. Press the CURSOR △ or ▽ button to select the “Bass” or “Treble”.

6. Press the CURSOR < or › button to set the level.
   - To increase the bass or treble:
     - The bass or treble sound can be increased to up to +6 dB in steps of 1 dB.
   - To decrease the bass or treble:
     - The bass or treble sound can be decreased up to –6 dB in steps of 1 dB.

7. Press the ENTER button.
   - The screen selected surround mode appears.

8. Press the ENTER or SURROUND PARAMETER button to complete the setting.

**Channel level**

You can adjust the channel level either according to the playback sources or to suit your tastes, as described below.

1. Press the ENTER button.
   - Display the “Channel Vol.” screen.

2. Press the CURSOR △, ▽ or ENTER button to set the speaker.
   - The channel switches as shown below each time the ENTER button is pressed.

3. Press the CURSOR < or › button to adjust the level.
   - The adjustment range for the different channels is +12 dB to –12 dB in steps of 0.5 dB.
   - The sound from the subwoofer can be completely cut by lowering the SW (subwoofer) setting one additional from –12 dB (setting it to “OFF”).

**Tone defeat mode**

If you do not want the bass and treble to be adjusted, turn on the tone defeat mode.

- Press the TONE DEFEAT button to turn on the “Tone Defeat” mode.

- The signals do not pass through the bass and treble adjustment circuits, providing higher quality sound.

**Tone control setting**

- Use the tone control setting to adjust the bass and treble as desired.
- The tone control function will not work in the PURE DIRECT, DIRECT or Home THX Cinema mode.

**Adjusting the tone**

1. Press the SURROUND PARAMETER button.
   - Display the surround parameter menu.

2. Press the CURSOR △ or ▽ button to select the “TONE”.

3. Press the CURSOR < button.
   - Switch to the “Tone Control” screen.

4. Press the CURSOR › button to select the “Tone Defeat OFF”.

5. Press the CURSOR △ or ▽ button to select the “Bass” or “Treble”.

6. Press the CURSOR < or › button to set the level.
   - To increase the bass or treble:
     - The bass or treble sound can be increased to up to +6 dB in steps of 1 dB.
   - To decrease the bass or treble:
     - The bass or treble sound can be decreased up to –6 dB in steps of 1 dB.

7. Press the ENTER button.
   - The screen selected surround mode appears.

8. Press the ENTER or SURROUND PARAMETER button to complete the setting.

**Channel level**

You can adjust the channel level either according to the playback sources or to suit your tastes, as described below.

1. Press the ENTER button.
   - Display the “Channel Vol.” screen.

2. Press the CURSOR △, ▽ or ENTER button to set the speaker.
   - The channel switches as shown below each time the ENTER button is pressed.

3. Press the CURSOR < or › button to adjust the level.
   - The adjustment range for the different channels is +12 dB to –12 dB in steps of 0.5 dB.
   - The sound from the subwoofer can be completely cut by lowering the SW (subwoofer) setting one additional from –12 dB (setting it to “OFF”).

- When the surround back speaker setting is set to “1spkr” for “Speaker Configuration” (page 53), this is set to “SB”
Basic Operation

Fader function

This function makes it possible to lower the volume of the front channels (FL, C and FR) or the rear channels (SL, SR, SBL and SBR) together. Use it for example to adjust the balance of the sound from each position when multi-channel music sources are played.

1. Press the ENTER button.
   - Display the “Channel Vol.” screen.

2. Press the CURSOR △, ▽ or ENTER button to select “Fader”.

   FADER
   FL 0 dB 0 dB 0 dB
   C 0 dB 0 dB 0 dB
   FR 0 dB 0 dB 0 dB
   SL 0 dB 0 dB 0 dB
   SR 0 dB 0 dB 0 dB
   SBL 0 dB 0 dB 0 dB
   SBR 0 dB 0 dB 0 dB

   The channel switches in the order shown below each time the ENTER button is pressed.

3. Press the CURSOR < button to reduce the volume of the front channels, the CURSOR > button to reduce the volume of the rear channels.

   Example: When “FRONT” is selected
   FL 0 dB 0 dB 0 dB
   C 0 dB 0 dB 0 dB
   FR 0 dB 0 dB 0 dB
   SL 0 dB 0 dB 0 dB
   SR 0 dB 0 dB 0 dB
   SBL 0 dB 0 dB 0 dB
   SBR 0 dB 0 dB 0 dB

   The fader function does not affect the subwoofer channel.

- The channel whose channel level is adjusted lowest can be faded to –12 dB using the fader function.
- If the channel levels are adjusted separately after adjusting the fader, the fader adjustment values are cleared, so adjust the fader again.

Advanced Operation

Remote control unit

Operating DENON audio components

1. Press the MODE SELECTOR buttons to select the component you want to operate.
   - The function switches as shown below each time one of the MODE SELECTOR buttons is pressed.
     AMP/Z2: AMP, ZONE2
     Z3/Z4: ZONE3, ZONE4
     TUN/D-TU: TUNER, D-TUNER
     CD/CDR: CD, CDR
     TV/DBS: TV, DBS
     VCR1/VCR2: VCR1, VCR2
     DVD/DVDR: DVD, DVDR
     (*: This mode is for future use.)

   Example: Select “AMP” mode.
   AMP
   Select “ZONE2” mode.
   Z2

For details, refer to the component’s operating instructions.
It may not be possible to operate some models.

SOURCE MENU
Operate the source.

SURROUND MENU
Operate the “Surround” mode.

NUMBER / SYSTEM CALL MENU
Operate the “Number” or “System call” mode.
1. CD player (CD) system buttons

<table>
<thead>
<tr>
<th>Action</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>◀▶</td>
<td>Manual search (forward and reverse)</td>
</tr>
<tr>
<td>■</td>
<td>Stop</td>
</tr>
<tr>
<td>◀▶</td>
<td>Play</td>
</tr>
<tr>
<td>◀▶</td>
<td>Auto search (to beginning of track)</td>
</tr>
<tr>
<td>II</td>
<td>Pause</td>
</tr>
<tr>
<td>0~9, +10</td>
<td>Number</td>
</tr>
</tbody>
</table>

2. MD recorder (MD), CD recorder (CDR), Tape deck (TAPE) system buttons

<table>
<thead>
<tr>
<th>Action</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>◀▶</td>
<td>Manual search (forward and reverse)</td>
</tr>
<tr>
<td>■</td>
<td>Stop</td>
</tr>
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<td>II</td>
<td>Pause</td>
</tr>
<tr>
<td>0~9, +10</td>
<td>Number</td>
</tr>
</tbody>
</table>

3. Tuner system buttons

<table>
<thead>
<tr>
<th>Action</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A, V</td>
<td>Tuning up/down</td>
</tr>
<tr>
<td>BAND</td>
<td>Switch between AM and FM bands</td>
</tr>
<tr>
<td>MODE</td>
<td>Switch between AUTO and MANUAL</td>
</tr>
<tr>
<td>MEM</td>
<td>Preset memory</td>
</tr>
<tr>
<td>SFT</td>
<td>Switch preset channel range</td>
</tr>
<tr>
<td>CH +, –</td>
<td>Preset channel up/down</td>
</tr>
<tr>
<td>A~G</td>
<td>Preset channel</td>
</tr>
<tr>
<td>1~8</td>
<td>Preset channel</td>
</tr>
</tbody>
</table>

**Preset memory**

The included remote control unit can be used to operate devices of different brands by registering the preset number corresponding to the brand of your device. For some models, the remote control unit or the device may not operate properly. In this case, use the learning function (page 35) to store your device’s remote control signals in the included remote control unit. For instructions on resetting the preset memory (page 36).

1. Press the ON and OFF button at the same time.
2. Press the 1 button to select preset memory.
3. Press the MODE SELECTOR button for the component you want to preset, then press the ENTER button.

* Presetting is not possible for the AMP, ZONE2, ZONE3, ZONE4, TUNER, and D-TUNER modes.
Operating a component stored in the preset memory

1. Press the MODE SELECTOR button for the component you want to operate.

2. Operate the component.
   - For details, refer to the component's operating instructions.
   - Some models cannot be operated with this remote control unit.

To store the codes of another component in the memory, repeat steps 1 to 5.

NOTE:
- Depending on the model and year of manufacture, this function cannot be used for some models, even if your device is listed on the included list of preset codes.
- Some manufacturers use more than one type of remote control code. Refer to the included list of preset codes to change the number and check it out.

The preset codes are as follows upon shipment from the factory and after resetting:
- TV, VCR: HITACHI
- CD, CDR, VDP, DVD, DVD: DENON
- VCR2, DBS: SONY

<table>
<thead>
<tr>
<th>DVD preset codes</th>
<th>0000 (default)</th>
<th>0517</th>
</tr>
</thead>
<tbody>
<tr>
<td>DVD-650 DVD-2800</td>
<td>DVD-800</td>
<td></td>
</tr>
<tr>
<td>DVD-700 DVD-2800B</td>
<td>DVD-1600</td>
<td></td>
</tr>
<tr>
<td>DVD-900 DVD-2900</td>
<td>DVD-2000</td>
<td></td>
</tr>
<tr>
<td>DVD-1000 DVD-2910</td>
<td>DVD-2500</td>
<td></td>
</tr>
<tr>
<td>DVD-1400 DVD-3800</td>
<td>DVD-3000</td>
<td></td>
</tr>
<tr>
<td>DVD-1500 DVD-3910</td>
<td>DVD-3300</td>
<td></td>
</tr>
<tr>
<td>DVD-1710 DVD-A11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DVD-1910 DVD-A1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DVD-2200 DVD-A1YV</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

DVD-2800 II
DVD-2900
DVD-3800
DVD-A1XV
DVD-A1
DVD-A1II
DVD-A1III
DVD-A1IV

For details, refer to the component's operating instructions.
Some models cannot be operated with this remote control unit.

For the DVD player remote control buttons, function names may differ according to manufacturer. Compare with the remote control operation of the various components.
Advanced Operation

3. Video deck (VCR-1/VCR-2) system buttons

4. Monitor TV (TV), digital broadcast satellite (DBS) tuner and cable (CABLE) system buttons

Learning function

If an AV component is not a Denon product, or if it cannot be operated via codes provided in the AVC-A11XV remote control’s internal preset memory, or if its codes cannot be successfully learned by the AVC-A11XV remote control, then you should use the remote control that was supplied with that AV component to operate the component.

1. Press the ON and OFF button at the same time.
2. Press the 2 button to select Learning setup.
3. Press the MODE SELECTOR button for the component you want to “learn”, then press the ENTER button.
   - Buttons that allow learning will light.
   - Learning is not possible for the AMP, ZONE2, ZONE3 and ZONE4 modes.
4. Press the button that you wish to be “learned”.
   - The display will go off and the unit will enter the learning standby mode.
   - To cancel, press the ON and OFF button simultaneously.

5. Point the remote control units directly at each other and press and hold in the button on the other remote control unit which you want to “learn”.
   - “OK” appears on the remote control unit’s display and learning is completed.
   - Other keys can be “learned” by repeating steps 4 and 5.
   - The mode can be switched by pressing a MODE SELECTOR button.
   - The buttons that allow learning display reappear and the learning standby mode is set.

Other remote control unit

Other keys can be “learned” by repeating steps 4 and 5.

The preset codes of a cable box decoder can be re-coded in the DBS mode so that the cable device can be operated (page 33, 34). It is only possible to set the preset memory for either the DBS or cable device.

System call

The accessories remote control unit is equipped with “system call” function allowing a series of remote control signals to be transmitted by pressing a single button.

This function can be used for example to turn on the amplifier’s power, select the input source, turn on the monitor TV’s power, turn on the source component’s power and set the source to the play mode, all at the touch of a single button.

System call buttons
- Up to 12 signals each can be stored at the SYSTEM CALL 1 ~ 6 buttons.
- The System Call function can be used in the AMP, ZONE2, ZONE3 and ZONE4 modes.
Advanced Operation

Using the system call function

Press the button at which the system call signals have been stored.
• The stored signals are transmitted successively.

Press the ON and OFF button at the same time.

Press the system call button for the component you want to register, then press the ENTER button.

Press the button you want to register.
• The mode can be switched by pressing a MODE SELECTOR button.

Repeat steps 4 to register the desired buttons.
• Up to 12 signals each can be stored at the SYSTEM CALL 1 – 6.

Press the ENTER button after the button registration is completed.
• There will be a changeover to the system call registration screen.

Press buttons from SYSTEM CALL 1 to 6 to register the system call.
• “OK” is displayed and the set returns to the normal operating mode.

• If you exceed the number of signals that can be registered, there will be a changeover to the system call registration screen.

NOTE:
• The remote control signals of the buttons pressed while registering the system call signals are emitted, so be careful not to operate the components accidentally (cover the remote sensors, for example).

Setting the back light’s lighting time

1 Press the ON and OFF button at the same time.

2 Press the 5 button to select Light setup.

3 Press the button you want to adjust the lighting time (5 sec – 20 sec).

Lighting time
1 : 5 sec
2 : 10 sec (factory default)
3 : 15 sec
4 : 20 sec

Setting the brightness

The brightness of the display can be adjusted in 3 levels.

For 1 brightness step increase

Hold the ENTER button and press the CHANNEL + button.

For 1 brightness step decrease

Hold the ENTER button and press the CHANNEL – button.

Resetting

1 Press the ON and OFF button at the same time.

2 Press the 6 button to select resetting.

3 Press the button you want to resetting, then press the ENTER button.

• The set returns to the normal operating mode.

Resetting List
1 : Resetting the preset memory
2 : Resetting the “Learned” buttons
3 : Resetting the system call
4 : Resetting the punch through setting
+10 : All reset function (factory default)

• The MODE SELECTOR buttons that were set in preset memory will all light.

Resetting the learned buttons

1 Press the ON and OFF button at the same time.

2 Press the 6 button to select resetting.

3 Press the button you want to resetting, then press the ENTER button.

• The set returns to the normal operating mode.

4 Press the MODE SELECTOR button you want to resetting, then press the ENTER button.

Punch through

Buttons used in the CD, CDR, DVD, DVDR, VDP, VCR1 and VCR2 modes can be assigned to the buttons which are not normally used in the AMP, ZONE2, ZONE3, ZONE4, TV and DBS modes.

For example, when the CD mode is set to the punch through mode in the AMP mode, the CD mode’s PLAY, STOP, MANUAL SEARCH, AUTO SEARCH and PAUSE buttons’ signals are sent in the AMP mode. ( )

1 Press the ON and OFF button at the same time.

2 Press the 4 button to select punch through setting.

3 Press the MODE SELECTOR button for the component you want to make the punch through setting, then press the ENTER button.

4 Press the MODE SELECTOR button for the component you want to punch through, then press the ENTER button.

• The punch through is set and the set returns to the normal operating mode.

Up to 12 signals each can be stored at the SYSTEM CALL 1 – 6.

• If you exceed the number of signals that can be registered, there will be a changeover to the system call registration screen.
Resetting the system call buttons

1. Press the ON and OFF button at the same time.
2. Press the 6 button to select resetting.
3. Press the 4 button to resetting the system call buttons.
   • All buttons of system call will light.
4. Press the MODE SELECTOR button you want to resetting, then press the ENTER button.
   • The set returns to the normal operating mode.

Resetting the punch through setting

1. Press the ON and OFF button at the same time.
2. Press the 6 button to select resetting.
3. Press the 4 button to resetting the punch through setting.
   • All punched through mode buttons will light.
4. Press the MODE SELECTOR button you want to resetting, then press the ENTER button.
   • The set returns to the normal operating mode.

All reset function

1. Press the ON and OFF button at the same time.
2. Press the 6 button to select resetting.
3. Press the +10 button.
   • Clear the entire system memory, which will restore the remote control unit to the factory default settings. This operation will take approximately 20 seconds.
   • Only use this if you wish to clear all customized settings and memories and restore the unit to its out-of-the-box factory default settings.

Multi zone music entertainment system

Multi-zone playback using the ZONE2 and ZONE3 PREOUT terminals

When using the power amplifier as the MAIN ZONE output

• The AVC-A11XV is equipped with pre-out terminals for which the volume is adjustable and video output terminals (composite and S-Video) as the ZONE2/ZONE3 output terminals.
• When using just one speaker in ZONE2 (ZONE3), select “Mono” at “Channel Setup” in the “System Setup Menu” (page 49). The sound in ZONE2 (ZONE3) is monaural. In this case, the ZONE2 (ZONE3) monaural output is output from both the left and right channels of the ZONE2 (ZONE3) PREOUT connectors, so connect to either one.

[System configuration and connections example] Using external amplifier.
When using the power amplifier as the ZONE2/ZONE3 output

When the power amplifier is assigned to the ZONE2 or ZONE3 output channel at “Power Amp Assign” in the “System Setup Menu”, the MAIN ZONE speaker terminals can be used as the ZONE2 or ZONE3 speaker output terminals (page 49, 50).

[System configuration and connections example]
Using external amplifier as the ZONE2 and using this AVC-A11XV internal amplifier as the ZONE3.

Using this AVC-A11XV internal amplifier as the ZONE2 and using external amplifier as the ZONE3.

Multi-zone playback using the SPEAKER terminals

Outputting a program source to an amplifier, etc., in a ZONE2 room (ZONE2 SELECT mode)

1. Press the ZONE2 SELECT button to display the “ZONE2 SOURCE” on the display.

2. Turn the FUNCTION knob to select the source you want to output appears on the display.

3. Start playing the source to be output.

Outputting a program source to an amplifier, etc., in a ZONE3 room (ZONE3 SELECT mode)

1. Press the ZONE3/REC SELECT button to display the “ZONE3 SOURCE” on the display.

2. Turn the FUNCTION knob to select the source you want to output appears on the display.

3. Start playing the source to be output.

*x* For operating instructions, refer to the manuals of the respective components.

* The signals of the source selected in the ZONE3 mode are also output from the VCR-1, VCR-2, VCR-3 and CDR/Tape recording output terminals.
* Digital signals are not output from the ZONE2 and ZONE3 audio output terminals.
* About the MULTI ZONE connections (page 37, 38).
* Digital outputs of the OPTICAL2, 3 and 4 OUT normally switch in association with the ZONE3/REC SELECT mode, but if “ZONE2 SELECT” is selected at “Digital Out Assign”, the source switches in association with the “ZONE2 SELECT” mode for the OPTICAL2 OUT digital output connector (page 52).

*x* Refer to CONNECTIONS (page 19).
Remote control unit operations during multi-source playback

1. Select the zone which you want to operate pressing the \textit{MODE SELECTOR} button.
   \textbf{Example:} ZONE2
   (Remote control unit)

2. Press the \textit{SOURCE ON} button to turn on the zone power.
   \bullet Press the \textit{SOURCE OFF} button to turn off the zone power.

3. Select the input source you wish to output.

4. The volume of the outputs of the different zones can be adjusted with the \textit{VOLUME} button on the remote control unit.
   \bullet The output level can be controlled only if the zone volume level is set “Variable” in \textit{“Volume Control”} in the “System Setup Menu” (page 50).
   \bullet DEFAULT VOLUME SETTING
     
     \begin{itemize}
       
       \item ZONE2 : –40 dB
       \item ZONE3 : –40 dB
     \end{itemize}
   \bullet The zone volume can be adjusted within the range of \(-80\) to \(18\) \text{dB}, in steps of \(1\) \text{dB}.

Playing Super Audio CDs with an IEEE1394 cable

1. Select the input source to which IEEE1394 was assigned at \textit{“IEEE1394 Assign”} (page 43, 44) in the system setup.
   \textbf{Example:} CD
   (Main unit) (Remote control unit)
   \bullet The IEEE1394 indicator lights.

2. Select the surround mode.
   \textbf{Example:} DIRECT
   (Main unit) (Remote control unit)
   \bullet The DSD indicator lights.

3. Start playback on the selected component.
   \bullet \text{For operating instructions, refer to the component’s manual.}
   \bullet “DSD DIRECT” is shown on the display when playing DSD 2-channel signals in the DIRECT mode. “DSD MULTI DIRECT” is displayed when playing DSD multi-channel signals in the DIRECT mode (SB CH OUT “OFF”).
Advanced Operation

Recording Dolby Digital and DTS multi channel sources
- With this set it is possible to record Dolby Digital and DTS multichannel signals converted into 2-channel analog signals.
- The recording signals are output to the TAPE and VCR output terminals.
- Down-mixed analog signals converted into digital signals are output from the OPTICAL 2, 3 and 4 digital output terminals at this time.

1. Press the ZONE3/REC SELECT button until “RECOUT SOURCE” appears on the display.
2. Press the INPUT MODE button to set the input mode according to the source to be played.
3. Press the DIRECT/STEREO button to set the surround mode.
4. Set the recording mode.

Dolby Headphone recording
When REC OUT mode is set to “SOURCE”, with the AV-C11XV it is possible to output signals encoded in the Dolby Headphone mode from the recording output terminals and record them on a separate recorder.

1. The Dolby Headphone play mode is set when headphones are connected to the PHONES jack during playback in the DOLBY/DTS surround mode.
   - When this is done, signals encoded in the Dolby Headphone mode are automatically output from the recording output terminals (analog and digital) and can be recorded.

2. Select the parameters and set the desired mode.
   - Start recording.
   - Refer to the “The Dolby Headphone” (page 28).

NOTE:
- Do not disconnect the headphones during recording.

Multi-source recording / playback

Playing one source while recording another (REC OUT mode)
1. Press the ZONE3/REC SELECT button until “RECOUT SOURCE” appears on the display.
   - The “REC” indicator lights.
2. Turn the FUNCTION knob to select the source you wish to record.
3. Set the recording mode.
   - For operating instructions, refer to the manual of the component on which you want to record.
   - To cancel, turn the FUNCTION knob and select “SOURCE”.
   - Recording sources other than digital inputs selected in the REC OUT mode are also output to the ZONE3 audio/video output terminals.
   - When the REC OUT mode is selected, the ZONE3 button on the remote control unit cannot be operated.
   - When “ZONE2 SELECT” is selected at “Digital Out Assign”, the source switches in association with the “ZONE2 SELECT” mode for the OPTICAL2 OUT connector (page 52).

Last function memory
- This unit is equipped with a last function memory which stores the input and output setting conditions as they were immediately before the power is switched off. This function eliminates the need to perform complicated resetting when the power is switched on.
- The unit is also equipped with a back-up memory. This function provides approximately one week of memory storage from when the main unit’s power switch is off and with the power supply cord disconnected.

Initialization of the microprocessor
In very rare instances, the AV-C11XV internal microprocessor might lock up, or otherwise cause mis-operation. This might be caused due to an AC line surge or line spike noise, or by static electric discharge on or nearby the unit, or to connected components. If the condition cannot be corrected by powering off the unit, including disconnection of the Power supply cord for a period of ten minutes and subsequent re-connection, then the unit may have to be re-initialized. Doing so will restore the microprocessor to its original out-of-the-box state, with all custom memories and settings erased, and the original factory default settings restored. Only use this procedure if you are sure that the microprocessor requires re-initialization.

1. Switch off the unit using the main unit’s POWER switch.
2. Hold the following PURE DIRECT button and DIRECT/STEREO button, and turn the main unit’s POWER switch on.
3. Check that the entire display is flashing with an interval of about 1 second, and release your fingers from the 2 buttons.
   - The microprocessor will be initialized.

NOTE:
- Do not disconnect the headphones during recording.

Multi-source recording / playback

Playing one source while recording another (REC OUT mode)
1. Press the ZONE3/REC SELECT button until “RECOUT SOURCE” appears on the display.
2. Press the INPUT MODE button to set the input mode according to the source to be played.
3. Press the DIRECT/STEREO button to set the surround mode.
4. Set the recording mode.

Dolby Headphone recording
When REC OUT mode is set to “SOURCE”, with the AV-C11XV it is possible to output signals encoded in the Dolby Headphone mode from the recording output terminals and record them on a separate recorder.

1. The Dolby Headphone play mode is set when headphones are connected to the PHONES jack during playback in the DOLBY/DTS surround mode.
   - When this is done, signals encoded in the Dolby Headphone mode are automatically output from the recording output terminals (analog and digital) and can be recorded.

2. Select the parameters and set the desired mode.
   - Start recording.
   - Refer to the “The Dolby Headphone” (page 28).

NOTE:
- Do not disconnect the headphones during recording.

Multi-source recording / playback

Playing one source while recording another (REC OUT mode)
1. Press the ZONE3/REC SELECT button until “RECOUT SOURCE” appears on the display.
2. Press the INPUT MODE button to set the input mode according to the source to be played.
3. Press the DIRECT/STEREO button to set the surround mode.
4. Set the recording mode.

Dolby Headphone recording
When REC OUT mode is set to “SOURCE”, with the AV-C11XV it is possible to output signals encoded in the Dolby Headphone mode from the recording output terminals and record them on a separate recorder.

1. The Dolby Headphone play mode is set when headphones are connected to the PHONES jack during playback in the DOLBY/DTS surround mode.
   - When this is done, signals encoded in the Dolby Headphone mode are automatically output from the recording output terminals (analog and digital) and can be recorded.

2. Select the parameters and set the desired mode.
   - Start recording.
   - Refer to the “The Dolby Headphone” (page 28).

NOTE:
- Do not disconnect the headphones during recording.

Multi-source recording / playback

Playing one source while recording another (REC OUT mode)
1. Press the ZONE3/REC SELECT button until “RECOUT SOURCE” appears on the display.
2. Press the INPUT MODE button to set the input mode according to the source to be played.
3. Press the DIRECT/STEREO button to set the surround mode.
4. Set the recording mode.

Dolby Headphone recording
When REC OUT mode is set to “SOURCE”, with the AV-C11XV it is possible to output signals encoded in the Dolby Headphone mode from the recording output terminals and record them on a separate recorder.

1. The Dolby Headphone play mode is set when headphones are connected to the PHONES jack during playback in the DOLBY/DTS surround mode.
You can customize a variety of system setup so that it may be fitting for your listening environment. For the contents of a system menu and the initial setting of this unit (page 59 ~ 61).

Navigating through the System Setup Menu

You can change setting using the buttons on the front panel or remote control unit.

1. Press the AMP button (remote control unit).
2. Press the SETUP button to display the “System Setup Menu”. Press the CURSOR △ or ▽ button to select the menu, then press the ENTER button.
3. Press the ENTER button to enter the selected menu.
4. To change a setting, first select it using the CURSOR △ or ▽ button, then change the setting pressing the CURSOR ◄ or ► button.
5. Press the ENTER button to set the new settings.
6. Press the SETUP button to return “System Setup Menu”, and again to return the main screen.

On screen display and front display

The AVC-A11XV is equipped with an intuitive and easy-to-understand on screen display, and is equipped with an alpha-numeric front panel display tube that can also be used to check and adjust settings. We recommend that you use the on screen display when you make system adjustments. Some representative front panel and on screen display examples are shown below.
Advanced Setup – Part 1

Audio Input Setup

Make the audio-related settings.

**Setting the Digital In Assignment**

This setting assigns the digital input terminals of the AVC-A11XV for the different input sources.

1. Press the CURSOR ▲ or ▼ button to select the “Audio Input Setup” at the “System Setup Menu”, then press the ENTER button.
   • Display the “Audio Input Setup” menu screen.

2. Press the CURSOR ▲ or ▼ button to select the “Digital In Assign” at the “Audio Input Setup” menu, then press the ENTER button.
   • Display the “Digital In Assign” screen.

3. Press the CURSOR ▲ or ▼ button to select the input source, then press the CURSOR ◄ or ► button to select the digital input terminal.
   - Select from among COAX 1 to 3, OPT 1 to 5.
   - If the same digital input terminal is selected, the setting for the input source that was previously assigned switches to “OFF”.
   - The HDMI input terminal is displayed when it is assigned to the input source at “HDMI/DVI In Assign” (page 44, 45).
   - If an input source is assigned to a device connected with an IEEE1394 cable at “IEEE1394 Assign”, the digital input connector’s assignment setting switches to “OFF”.
   - If “Yes” is selected for “Default”, the settings are automatically reset to the default values.

4. Press the ENTER button to enter the setting.
   • The “Audio Input Setup” menu reappears.

**Setting the DENON LINK**

• When a DENON DVD player and the DENON LINK have been connected, be sure to make a setting to “DENON LINK” with the System Setup Digital In Assignment.
• When the input mode is AUTO and the signals are not able to transferred by DENON LINK, the unit automatically changes over the input to the selected signals (ANALOG, EXT. IN or IEEE1394).
• Refer to “DENON LINK connections” (page 16).

1. Press the CURSOR ▲ or ▼ button to select the “EXT. IN Setup” at the “Audio Input Setup” menu, then press the ENTER button.
   • Display the “EXT. IN Setup” screen.

2. Press the CURSOR ▲ or ▼ button to select the item to be set, then press the CURSOR ◄ or ► button to select the parameter.

   - **Surf. Sp:**
     - Presets the surround speakers that are used in the EXT. IN mode.
     - Select according to the specifications of the player being used. Also refer to the player’s operating instructions.
     - **Surf. A:** Select when using surround speakers A.
     - **Surf. B:** Select when using surround speakers B.
     - **Surf. A+B:** Select when using both surround speakers A and B.

   - **SW Level:**
     - Sets the playback level of the analog input signal that was input to the EXT. IN subwoofer terminal.
     - Select according to the specifications of the player being used. Also refer to the player’s operating instructions.
     - +15dB (default) recommended. 0, +5, +10 and +15 can be selected.

3. Press the ENTER button to enter the setting.
   • The “Audio Input Setup” menu reappears.
Setting the Input Function Level

The names of the input sources displayed on the front display and on the on-screen display can be changed. The names or brands of the devices connected to the input sources can be input.

1. Press the CURSOR \( \Delta \) or \( \nabla \) button to select the “Input Function Lev.” at the “Audio Input Setup” menu, then press the ENTER button.
   - Display the “Input Function Lev.” screen.

2. Press the CURSOR \( \Delta \) or \( \nabla \) button to select the input source, then press the CURSOR \( \langle \) or \( \rangle \) button to adjust the level.
   - The level can be adjusted between –12 dB and +12 dB in units of 1 dB.
   - If “Yes” is selected for “Default”, the settings are automatically reset to the default values.

3. Press the ENTER button to enter the setting.
   - The “Audio Input Setup” menu reappears.

Setting the Function Rename

The names of the input sources displayed on the front display and on the on-screen display can be changed. The names or brands of the devices connected to the input sources can be input.

1. Press the CURSOR \( \Delta \) or \( \nabla \) button to select the “Function Rename” at the “Audio Input Setup” menu, then press the ENTER button.
   - Display the “Function Rename” screen.

2. Press the CURSOR \( \Delta \) or \( \nabla \) button to select the input source whose name you want to change, then press the CURSOR \( \langle \) or \( \rangle \) button.
   - The screen switches to the character input screen.

3. Press the CURSOR \( \langle \) or \( \rangle \) button to move the cursor ( \( \text{|} \) ) to the character, number, symbol or punctuation mark you wish to input, and press the CURSOR \( \Delta \) or \( \nabla \) button to select that character.

   - A B C D E F G H I J K L M N O P Q
   - R S T U V W X Y Z a b c d e f g h i j k l m n o p q r s t u v w x y z 0 1 2 3
   - 4 5 6 7 8 9
   - ! " # $ % & ' ( ) * + , – . / : ; < = > ? @ \ [ \ ] (space)
   - Up to 8 characters can be input.

4. Repeat step 3 to input the input source name.
   - If you wish to set the input source back to as it was initially, press the CURSOR \( \nabla \) button with the input source highlighted.
   - If “Yes” is selected for “Default”, the settings are automatically reset to the default name.

5. Once all the characters have been input, press the ENTER button.
   - The “Function Rename” screen reappears.

6. Press the ENTER button to enter the setting.
   - The “Audio Input Setup” menu reappears.

Setting the IEEE1394 Assign

Assign the device connected by IEEE1394 cable to an input source. The power of the device to be assigned must be turned on ahead of time.

1. Press the CURSOR \( \Delta \) or \( \nabla \) button to select the “IEEE1394 Assign” at the “Audio Input Setup” menu, then press the ENTER button.
   - Display the “IEEE1394 Assign” screen.

2. Press the CURSOR \( \Delta \) or \( \nabla \) button to select the device, then press the CURSOR \( \langle \) or \( \rangle \) button to select the input source.

3. Press the ENTER button to enter the setting.
   - The “Audio Input Setup” menu reappears.

Example:

When “DVD” is selected and the CURSOR \( \langle \) or \( \rangle \) button is pressed
Setting the IEEE1394 Auto Function

Set whether or not to automatically play the IEEE1394 device when it is selected with the FUNCTION knob.

1. Press the CURSOR △ or ▽ button to select the “IEEE1394 Auto Func.” at the “Audio Input Setup” menu, then press the ENTER button.
   • Display the “IEEE1394 Auto Func.” screen.
2. Press the CURSOR < or > button to select the “ON” or “OFF”.
   ON: Select this to automatically play the device.
   OFF: Select this if you do not want to automatically play the device.
   • In some cases settings may be required on your player. Also refer to the player’s operating instructions.
3. Press the ENTER button to enter the setting.
   • The “Audio Input Setup” menu reappears.
4. Press the CURSOR △ or ▽ button to select the “Exit”, then press the ENTER button.
   • The “System Setup Menu” reappears.

Video Setups

Make the video-related settings.

Setting the HDMI / DVI In Assign

This setting assigns the HDMI input terminals and DVI input terminal for different input sources.

1. Press the CURSOR △ or ▽ button to select the “Video Setup” at the “System Setup Menu”, then press the ENTER button.
   • Display the “Video Setup” menu screen.
2. Press the CURSOR < or > button to select the input source, then press the CURSOR △ or ▽ button to select the input terminal.
3. Press the CURSOR △ or ▽ button to select the input source, then press the CURSOR < or > button to select the input terminal.
   • Select from among HDMI1 to 3 and DVI-D.
   • If the same HDMI or DVI input terminal is selected, the setting for the input source that was previously assigned switches to “NONE”.
4. Press the CURSOR △ or ▽ button to select the method for playing the audio signals included in the HDMI input signal, then press the CURSOR < or > button to select the “TV” or “AMP”.
5. Press the CURSOR △ or ▽ button to select the input for the playback of signals when the audio signal of HDMI can not be reproduced, then press the CURSOR < or > button to select the input signal (ANALOG or EXT. IN).
6. Press the ENTER button to enter the setting.
   • The “Video Setup” menu reappears.
7. When the audio signal of HDMI has become unlocked, the unit automatically changes over to the set connector (ANALOG or EXT. IN).
   1 ~ 3 correspond to each HDMI 1 ~ 3 input terminal.
**Advanced Setup – Part 1**

**ENGLISH**

**OFF:**
The convert function does not operate.
The video signal input from the video input terminal is only output to the video monitor output terminal.
The S-Video signal input from the S-Video input terminal is only output to the S-Video monitor output terminal.
The component input signal input from the component input terminals is only output to the component monitor output terminals.

**Video:**
The signal connected to the composite video terminal is always played.
The composite video input signal is up-converted and output from the S-Video and component monitor output terminals.

**AUTO:**
When there are multiple input signals, the input signals are detected and the input signal to be output from the video monitor output terminal is selected automatically in the following order: component video, S-Video, composite video.

**Component:**
The signal connected to the component video terminal is always played.
The component input signal is down-converted and output from the composite and S-Video monitor output terminal.
No image is output from the monitor output terminal when there is no input signal to the component input terminal.

**S-Video:**
The signal connected to the S-Video terminal is always played.
The S-Video input signal is converted and output from the composite and component monitor output terminals.

Setting the Video Convert Mode

Select the input signal to be output to the composite S-Video and component monitor output terminals using the video conversion function.

1. Press the CURSOR △ or ▽ button to select the “Component In Assign” at the “Video Setup” menu, then press the ENTER button.
- Display the “Component In Assign” screen.

2. Press the CURSOR △ or ▽ button to select the input source, then press the CURSOR ◄ or ► button to select the component video input terminal.
   - Select from among 1-RCA to 3-RCA.
   - If the same component video input terminal is selected, the setting for the input source that was previously assigned switches to “NONE”.
   - If “Yes” is selected for “Default”, the settings are reset to the default values.

3. Press the ENTER button to enter the setting.
- The “Video Setup” menu reappears.

**Setting the Component In Assign**

This setting assigns the component video input terminal of the AVC-A11XV for the different input sources.

1. Press the CURSOR △ or ▽ button to select the “Component In Assign” at the “Video Setup” menu, then press the ENTER button.
- Display the “Component In Assign” screen.

2. Press the CURSOR △ or ▽ button to select the input source, then press the CURSOR ◄ or ► button to select the component video input terminal.

3. Press the ENTER button to enter the setting.
- The “Video Setup” menu reappears.

- Down-converting from the component video signal to the S-Video and composite video signal is possible only when the resolution of a component video signal is 480i / 576i.
- For optimum video performance, THX recommends that video pass through (bypass) is used.
- When a non-standard video signal from a game machine or some other source is input, the video conversion function might not operate. If this happens, please set the conversion mode to OFF.
- When the video conversion function has been used, information such as that of text broadcasts which has been added to the video signal might not be output. If this happens, please set the conversion mode to OFF.

**Setting the Video Convert Mode**

Select the input signal to be output to the composite S-Video and component monitor output terminals using the video conversion function.

1. Press the CURSOR △ or ▽ button to select the “Video Convert Mode” at the “Video Setup” menu, then press the ENTER button.
   - Display the “Video Convert Mode” screen.

2. Press the CURSOR △ or ▽ button to select the input source, then press the CURSOR ◄ or ► button to select the mode as below.
   - AUTO
   - Component
   - S-video
   - Video
   - OFF

   - The details in each mode are as follows.

**AUTO:**
When there are multiple input signals, the input signals are detected and the input signal to be output from the video monitor output terminal is selected automatically in the following order: component video, S-Video, composite video.

**Component:**
The signal connected to the component video terminal is always played.
The component input signal is down-converted and output from the composite and S-Video monitor output terminal.
No image is output from the monitor output terminal when there is no input signal to the component input terminal.

**S-Video:**
The signal connected to the S-Video terminal is always played.
The S-Video input signal is converted and output from the composite and component monitor output terminals.

**Video:**
The signal connected to the composite video terminal is always played.
The composite video input signal is up-converted and output from the S-Video and component monitor output terminals.

**OFF:**
The convert function does not operate.
The video signal input from the video input terminal is only output to the video monitor output terminal.
The S-Video signal input from the S-Video input terminal is only output to the S-Video monitor output terminal.
The component input signal input from the component input terminals is only output to the component monitor output terminals.
Advanced Setup – Part 1

Setting the HDMI Out Setup

- Set whether to use the analog video signals to HDMI conversion function.
- When using this conversion function, set the color format and video range of the signals output from the HDMI terminal.

1. Press the CURSOR △ or ▽ button to select the “HDMI Out Setup” at the “Video Setup” menu, then press the ENTER button.
   - Display the “HDMI Out Setup” screen.

2. Press the CURSOR △ or ▽ button to select the setting, then press the CURSOR < or > button to select the parameter.

   - **Analog to HDMI Convert:**
     - **ON:** Setting for converting analog video signals into HDMI signals.
     - **OFF:** Setting for not converting analog video signals into HDMI signals.

   - **Color Space:**
     - **Y Cb Cr:** The Y Cb Cr format video signals is output via the HDMI output connector.
     - **RGB:** The RGB format video signals is output via the HDMI output connector.

   - **RGB Mode Setup:**
     - **Normal:** Signals are output via the HDMI output connector with a digital RGB video range (data range) of 0 (black) to 255 (white).
     - **Enhanced:** Signals are output via the HDMI output connector with a digital RGB video range (data range) of 0 (black) to 255 (white).

3. Press the CURSOR △ or ▽ button to set the delay time (0 ms ~ 200 ms).
   - With a movie source, for example, adjust so that the movement of the actors’ lips is synchronized with the sound.

Setting the Audio Delay

- When watching a DVD or other video source, the picture on the monitor may seem delayed with respect to the sound. In this case, adjust the audio delay to delay the sound and synchronize it with the picture.
- The audio delay setting is stored separately for each input source.

1. Press the CURSOR △ or ▽ button to select the “Audio Delay” at the “Video Setup” menu, then press the ENTER button.
   - Display the “Audio Delay” screen.

2. Press the CURSOR < or > button to set the delay time (0 ms ~ 200 ms).

3. Press the ENTER button to enter the setting.
   - The “Video Setup” menu reappears.
   - The audio delay setting does not apply when playing in the EXT. IN mode or in the analog input direct mode or stereo mode (only when the crossover frequency is set to “FIXED–THX–” (TONE DETECT “ON”, Room EQ “OFF”).
   - By default, this menu is not displayed when no digital signals are being input.

Setting the On Screen Display (OSD)

- Use this to turn the on screen display (messages other than the menu screens) on or off.
- Sets the on screen display’s display mode.

1. Use the CURSOR D or H button to select the “On Screen Display” at the “Video Setup” menu, then press the ENTER button.
   - Display the “On Screen Display” screen.

2. Press the CURSOR △ or ▽ button to select the item to be set, then press the CURSOR < or > button to select the parameter.

Function/Mode Status:
- Set whether or not to turn on the on screen display of the input source name and input mode when an input source is selected.

Master Volume Status:
- Set whether or not to turn on the on screen display of the main volume level when the main volume is operated.

Display Mode:
- **Mode 1:** Prevents flickering of the on screen display when there is no video signal.
- **Mode 2:** Flickering is not prevented.

4. Press the CURSOR △ or ▽ button to select the “Exit”, then press the ENTER button.
   - The “System Setup Menu” reappears.
Advanced Setup – Part 1

Setting the 2ch Direct / Stereo

Set this when you want to change the speaker settings when the surround mode is set to the 2-channel Direct or Stereo mode.

1. Press the CURSOR △ or ▽ button to select the “Advanced Playback” at the “System Setup Menu”, then press the ENTER button.
   - Display the “Advanced Playback” menu screen.

2. Press the CURSOR △ or ▽ button to select the “2ch Direct / Stereo” at the “Advanced Playback” menu, then press the ENTER button.
   - Display the “2ch Direct / Stereo” screen.

3. Press the CURSOR ◄ or ► button to select the “Custom”.

4. Press the CURSOR △ or ▽ button to select the setting, then press the CURSOR ◄ or ► button to select the parameter.

5. Press the ENTER button to enter the setting.
   - The “Advanced Playback” menu reappears.

Setting the Dolby Digital Setup

Sets the down-mixing method when not using a center speaker or surround speakers.

1. Press the CURSOR △ or ▽ button to select the “Dolby Digital Setup” at the “Advanced Playback” menu, then press the ENTER button.
   - Display the “Dolby Digital Setup” screen.

2. Press the CURSOR ◄ or ► button to select the “ON” if you want to use the Compression, “OFF” if you do not want to use it.

   ON:
   The dynamic range is compressed automatically according to the combination of speakers being used.

   OFF:
   The dynamic range is not compressed.

   - Set “Compression” to “ON” if it seems that sound is distorted because the input level exceeds the allowable input for the front speakers.
   - When a center speaker or surround speakers are not connected, the sounds in those channels are directed to the front speakers.

3. Press the ENTER button to enter the setting.
   - The “Advanced Playback” menu reappears.

Setting the Auto Surround Mode

The surround mode used last for the four types of input signals shown below is stored in the memory, and the signal is automatically played with that surround mode the next time it is input. Note that the surround mode setting is also stored separately for the different input sources.

1. Analog and PCM 2-channel signals (STEREO)
2. 2-channel signals of Dolby Digital, DTS or other multi-channel format (DOLBY PLIIx cinema)
3. Multichannel signals of Dolby Digital, DTS or other multi-channel format (DOLBY/DTS SURROUND)
4. PCM and DSD multi-channel signals other than Dolby Digital and DTS (MULTI CH IN)

1. Press the CURSOR △ or ▽ button to select the “Auto Surround Mode” at the “Advanced Playback” menu, then press the ENTER button.
   - Display the “Auto Surround Mode” screen.

2. Press the CURSOR ◄ or ► button to select the “ON” if you want to use the Auto Surround mode, “OFF” if you do not want to use it.

3. Press the ENTER button to enter the setting.
   - The “Advanced Playback” menu reappears.
Setting the Manual EQ Setup

Allows you to adjust the tonal quality of the various speakers (except the subwoofer) while listening to a music source.

1. Press the CURSOR △ or ▽ button to select the “Manual EQ Setup” at the “Advanced Playback” menu, then press the ENTER button.

2. Press the CURSOR < or > button to select the speaker to be set.

3. Press the CURSOR < or > button to select the frequency, then press the CURSOR △ or ▽ button to adjust the gain level.

4. Press the ENTER button to enter the setting.

Example:

When “L/R CH” is selected:

- Each frequency can be adjusted the range from –20 dB to +6 dB in 0.5 dB step.

5. Press the ENTER button to enter the setting.

Example:

When “L/R CH” is selected.

- Each frequency can be adjusted the range from –20 dB to +6 dB in 0.5 dB step.

6. Press the CURSOR △ or ▽ button to select the “Exit”, then press the ENTER button.

Example:

When “L/R CH” is selected.

- Each frequency can be adjusted the range from –20 dB to +6 dB in 0.5 dB step.

7. Press the CURSOR △ or ▽ button to select the “Exit”, then press the ENTER button.

Example:

When “L/R CH” is selected.

- Each frequency can be adjusted the range from –20 dB to +6 dB in 0.5 dB step.

Procedure for copying the “Flat” correction curve

1. Press the CURSOR △ or ▽ button to select the “Base Curve Copy”, then press the CURSOR < button.

2. Press the CURSOR △ or ▽ button to select the “Yes”.

3. Press the ENTER button to enter the setting.

- “Base Curve Copy” is displayed after performing the Auto Setup.
- To restore the settings to their defaults, select “Default Yes”, then press the CURSOR △ or ▽ button.

- “Base Curve Copy” is displayed after performing the Auto Setup.
- To restore the settings to their defaults, select “Default Yes”, then press the CURSOR △ or ▽ button.

- “Base Curve Copy” is displayed after performing the Auto Setup.
- To restore the settings to their defaults, select “Default Yes”, then press the CURSOR △ or ▽ button.

- “Base Curve Copy” is displayed after performing the Auto Setup.
- To restore the settings to their defaults, select “Default Yes”, then press the CURSOR △ or ▽ button.

- “Base Curve Copy” is displayed after performing the Auto Setup.
- To restore the settings to their defaults, select “Default Yes”, then press the CURSOR △ or ▽ button.

- “Base Curve Copy” is displayed after performing the Auto Setup.
- To restore the settings to their defaults, select “Default Yes”, then press the CURSOR △ or ▽ button.

- “Base Curve Copy” is displayed after performing the Auto Setup.
- To restore the settings to their defaults, select “Default Yes”, then press the CURSOR △ or ▽ button.

- “Base Curve Copy” is displayed after performing the Auto Setup.
- To restore the settings to their defaults, select “Default Yes”, then press the CURSOR △ or ▽ button.

- “Base Curve Copy” is displayed after performing the Auto Setup.
- To restore the settings to their defaults, select “Default Yes”, then press the CURSOR △ or ▽ button.

- “Base Curve Copy” is displayed after performing the Auto Setup.
- To restore the settings to their defaults, select “Default Yes”, then press the CURSOR △ or ▽ button.

- “Base Curve Copy” is displayed after performing the Auto Setup.
- To restore the settings to their defaults, select “Default Yes”, then press the CURSOR △ or ▽ button.

- “Base Curve Copy” is displayed after performing the Auto Setup.
- To restore the settings to their defaults, select “Default Yes”, then press the CURSOR △ or ▽ button.

- “Base Curve Copy” is displayed after performing the Auto Setup.
- To restore the settings to their defaults, select “Default Yes”, then press the CURSOR △ or ▽ button.
**Advanced Setup – Part 1**

**Option Setup**

Make other expert settings.

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**Setting the Channel Setup**

With this setting it is possible to change the number of channels played in the different zones according to the purpose. This configures the AVC-A11XV according to whether or not you have surround "B" speakers connected, and whether or not you have surround back (SB) speakers connected.

The number of channels output from the pre-out connectors exclusively for ZONE2 and 3 can be set to "Mono" or "Stereo" according to the method of playback in the various multi-zones.

- Adjustments made in this section will have an effect on the various "Setting the Power Amplifier Assignment" setting options (page 49, 50).

1. Press the CURSOR △ or ▼ button to select the “Option Setup” at the “System Setup Menu”, then press the ENTER button.
   - Display the “Option Setup” menu screen.

2. Press the CURSOR △ or ▼ button to select the “Channel Setup”, then press the ENTER button.
   - Display the “Channel Setup” screen.

3. Press the CURSOR △ or ▼ button to select the zone, then press the CURSOR < or > button to select the channel setting.

4. Press the ENTER button to enter the setting.
   - The “Option Setup” menu reappears.

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**Setting the Power Amplifier Assignment**

AVC-A11XV’s power amplifiers for seven channels (except the front channel), can be assigned to any channels in the MAIN ZONE, ZONE2 or ZONE3 and output to the speaker(s). In this way, power amplifiers not being used in the main zone can be assigned for multi-zone use, the front speakers can be connected with a "Bi-Amp", etc., so you can create the desired speaker system.

- The available power amplifier channels that can be re-assigned may differ, according to settings previously made in the “Channel Setup” menu (page 48).

1. Press the CURSOR △ or ▼ button to select the “Power Amp Assign” at the “Option Setup” menu, then press the ENTER button.
   - Display the “Power Amp Assign” screen.

2. Press the CURSOR △ or ▼ button to select the power amplifier to be assigned, then press the CURSOR < or > button to select which channel to assigned the amplifier to.

**Main Zone:**
- **Surr. B:**
  - Not Used:
    - Select if you do not have speakers connected to Surround “B”.
  - Used:
    - Select if you have speakers connected to Surround “B”.
- **S. Back:**
  - Top:
    - Select if you have one surround back speaker connected to SBL.
  - Not Used:
    - Select if you do not have surround back speakers.

**ZONE2:**
- **Stereo:**
  - Select for stereo playback in ZONE2 (two channels).
- **Mono:**
  - Select for monaural playback in ZONE2 (one channel).

**ZONE3:**
- **Stereo:**
  - Select for stereo playback in ZONE3 (two channels).
- **Mono:**
  - Select for monaural playback in ZONE3 (one channel).

- If "Mono" is selected for ZONE2 or ZONE3, monaural (single channel) sound is output from both of the ZONE2 or ZONE3 left and right channels pre-amp output terminals.

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**Surf. A:**
- The Surround A power amplifier channels can be assigned if Surround B is not activated in the main room (MAIN ZONE).
- **Front:**
  - This provides a bi-amp mode for the two main front speakers, replicating the front left and front right amplifier channels' outputs.
- **Front B:**
  - The Surround B power amplifier channels can be used to provide a second set of stereo outputs that match the front left and right speakers, providing a Speaker B option for stereo sound in another location (page 47).
- **ZONE2:**
  - This mode assigns the Surround A amplifier channels to provide ZONE2 speaker-level outputs from the Surround A speaker jacks, with the option of monaural or stereo operation depending on the “Channel Setup” setting.
- **ZONE3:**
  - This mode assigns the Surround A amplifier channels to provide ZONE3 speaker-level outputs from the Surround A speaker jacks, with the option of monaural or stereo operation depending on the “Channel Setup” setting.

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**Surf. B:**
- The Surround B amplifier channels can be re-assigned if they are not being used in the main room, and the Surround A amplifier channels are assigned to either the surround channels or to the front channels.
- **Front B:**
  - This mode sets the Surround B amplifier channels to drive a second set of stereo outputs that match the front left and right speakers, providing a Speaker B option for stereo sound in another location (page 47).

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No signals are output from the Surround A speaker terminals.

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No signals are output from the surround back speaker terminals.
Front: This provides a b-amp mode for the two main front speakers, replicating the front left and front right amplifier channels’ outputs. 

Front B: Both surround back power amplifier channels can be used to provide a second set of stereo outputs that match the front left and right speakers, providing a Speaker B option for stereo sound in another location (page 47).

ZONE2: This mode assigns the Surround Back amplifier channel to provide ZONE2 speaker-level outputs from the Surround Back speaker jacks, with the option of monaural or stereo operation depending on the “Channel Setup” setting.

ZONE3: This mode assigns the Surround Back amplifier channel to provide ZONE3 speaker-level outputs from the Surround Back speaker jacks, with the option of monaural or stereo operation depending on the “Channel Setup” setting.

SB: ZZ: When only one surround back speaker is used in the main room (connected to the SBL speaker terminals), the surround back right amplifier channel can be used to provide monaural output to a speaker located in ZONE3.

SB: ZZ: When no surround back speakers are used in the main room, this mode provides monaural sound to a speaker in ZONE2 connected to the SBL speaker terminals, with monaural sound to a speaker in ZONE3 connected to the SBR speaker terminals.

NOTE: When making b-amp connections, be sure to remove the short-circuiting bar included with the speaker.

Setting the Volume Control

1. Press the CURSOR △ or ▽ button to select the “Volume Limit” at the “Option Setup” menu, then press the ENTER button. Display the “Volume Limit” screen.

2. Press the CURSOR △ or ▽ button to select the desired setting, then press the CURSOR < or > button to select the parameter.

   - **Power On Level:**
     - Set the volume that is set when the power is turned on for the different zones.
     - You can adjust the volume level within the range of –80 to +18 dB in steps of 1.0 dB.
     - **OFF:** The volume is always muted when the power is turned on.
     - **LAST:** The volume set when the AVC-A11XV was last used is stored in the memory and set when the power is turned on.
   - **Volume Level:**
     - Set the volume level that can be used when the surround back speaker configuration is set to “1 speaker”.
     - Setting the Volume Limit for ZONE2 and ZONE3 channels at “Power Amp Assign”, “–VAR–” (only variable) is displayed and the selected levels.
     - “Variable” can be set when “Variable” is selected for “Volume Level”.
     - The volume can no longer be adjusted.
   - **Volume Limit:**
     - The upper limit for the volume for the different zones.
     - If you do not want to set a volume limit, select “OFF”.
   - **Mute Level:**
     - Set the volume attenuation level when the mute mode is set for the different zones.
     - **FULL:** The volume is fully muted.
     - **–40 dB:** The volume is lowered 40 dB from the current level.
     - **–20 dB:** The volume is lowered 20 dB from the current level.

   \[V_{\text{volume limit}} = \begin{cases} \text{variable} & \text{if variable is selected} \\ \text{fixed} & \text{if fixed is selected} \end{cases}\]

   \[V_{\text{Mute Level}} = \begin{cases} 0 & \text{if FULL} \\ -\text{variable} & \text{if variable} \end{cases}\]

   \[V_{\text{Volume Limit}} = \begin{cases} \text{variable} & \text{if variable is selected} \\ \text{fixed} & \text{if fixed is selected} \end{cases}\]

   \[V_{\text{Volume Level}} = \begin{cases} \text{variable} & \text{if variable is selected} \\ \text{fixed} & \text{if fixed is selected} \end{cases}\]

   \[V_{\text{Volume Limit}} = \begin{cases} \text{variable} & \text{if variable is selected} \\ \text{fixed} & \text{if fixed is selected} \end{cases}\]

   \[V_{\text{Volume Level}} = \begin{cases} \text{variable} & \text{if variable is selected} \\ \text{fixed} & \text{if fixed is selected} \end{cases}\]

   \[V_{\text{Volume Limit}} = \begin{cases} \text{variable} & \text{if variable is selected} \\ \text{fixed} & \text{if fixed is selected} \end{cases}\]

   \[V_{\text{Volume Level}} = \begin{cases} \text{variable} & \text{if variable is selected} \\ \text{fixed} & \text{if fixed is selected} \end{cases}\]

   \[V_{\text{Volume Limit}} = \begin{cases} \text{variable} & \text{if variable is selected} \\ \text{fixed} & \text{if fixed is selected} \end{cases}\]
Setting the Trigger Out

• Three 12 V DC Trigger Outputs on the rear panel can be used to control other devices with compatible trigger inputs, such as motorized screens, motorized screen masking, motorized drapes, and other trigger-controlled devices.

• Set the DC output supplied from the trigger out terminals for the various input sources to “ON” or “OFF”.

1 Press the CURSOR △ or ▼ button to select the “Trigger Out” at the “Option Setup” menu, then press the ENTER button.
   • Display the “Trigger Out” screen.

2 Press the CURSOR △ or ▼ button to select the trigger out terminal you want to set, then press the ENTER button.
   • Switch to the setting screen.

3 Press the CURSOR ◄ or ► button to select the zone (MAIN ZONE, ZONE2 and ZONE3).
   • The power supplied from the trigger out terminal is turned on and off.

4 Press the CURSOR △ or ▼ button to select the input source, then press the CURSOR ◄ or ► button to select the “ON” or “OFF”.

5 If “MAIN” was selected at step 3:
   Press the CURSOR △ or ▼ button to select the surround mode, then press the CURSOR ◄ or ► button to select the “ON” or “OFF”.
   • When that input source is selected, the power supplied from the trigger out terminal turns on.
   • If that surround mode is selected when an input source set to “ON” is selected, the power supplied from the trigger out terminal turns off.

6 Press the ENTER button.
   • Return to the “Trigger Out” screen.
   • Use the same procedure to make the settings for Trigger Out 2, 3.

7 Press the CURSOR △ or ▼ button to select the “Exit”, then press the ENTER button.
   • The “Option Setup” menu reappears.

ZONE2 and ZONE3 tone control and channel level setting

Adjust the sound output from ZONE2 and ZONE3.

1 Press the CURSOR △ or ▼ button to select the “Zone2/3 Tone/Ch Lev.” at the “Option Setup” menu, then press the ENTER button.
   • Display the “Zone2/3 Tone/Ch Lev.” screen.

2 Press the CURSOR △ or ▼ button to select the zone whose sound you want to adjust (ZONE2, ZONE3), then press the ENTER button.
   • Switch to the setting screen.

3 Use the same procedure to make the settings for ZONE3.

Bass:
Adjust the tone for the bass.

Channel Level:
Set so that the playback level is the same for the left and right channels. (The volume can be adjusted between –12 dB and +12 dB in steps of 1.0 dB.)

Press the CURSOR △ or ▼ button to select the item to be set, then press the CURSOR ◄ or ► button to adjust the parameter.

Example:
When “Zone2” is selected
• The “Channel Level” setting is only possible when ZONE2 or ZONE3 is set to Stereo in the “Channel Setup” menu.
Setting the Digital Out Assignment

The optical digital output connectors on the AVC-A11W’s rear panel (OPTICAL 2 to 4 OUT) normally function in association with the ZONE 3/REC SELECT mode. With this setting, the OPTICAL 2 OUT connector can be used in association with the ZONE 2 SELECT mode.

1. Press the CURSOR △ or ▽ button to select the “Digital Out Assign” at the “Option Setup” menu, then press the ENTER button.
   - Display the “Digital Out Assign” screen.

2. Press the CURSOR ◄ or ► button to select whether to associate the OPTICAL 2 OUT connector to the “ZONE 3/REC SELECT” or “ZONE 2 SELECT” mode.

3. Press the ENTER button to enter the setting.
   - The “Option Setup” menu reappears.

User Memory

The currently set settings (system setup, surround parameters, etc.) can be stored in the memory. The stored settings can be called out when needed.

1. Press the CURSOR △ or ▽ button to select the “Setup Memory / Lock” at the “Setup Memory / Lock” screen, then press the ENTER button.
   - Switch to the “Setup Memory / Lock” screen.

2. Press the CURSOR ◄ or ► button to select the “User Memory”, then press the ENTER button.
   - Switch to the “User Memory” screen.

3. Press the CURSOR ◄ button to select the “Yes”.
   - About 30 seconds are required for the settings to be stored in the memory.

4. Press the CURSOR △ or ▽ button to select the “Exit”, then press the ENTER button.
   - The “Option Setup” menu reappears.

Setup Lock

The system setup settings can be locked so that they cannot be changed easily.

1. Press the CURSOR △ or ▽ button to select the “Setup Lock” at the “Setup Memory / Lock” screen, then press the ENTER button.
   - Switch to the “Setup Lock” screen.

2. Press the CURSOR ◄ button to select “ON”, to lock the system setup settings, then press the ENTER button.
   - Return to the “Setup Memory / Lock” screen.

3. Press the CURSOR △ or ▽ button to select the “Exit”, then press the ENTER button.
   - The “Option Setup” menu reappears.

4. Press the CURSOR △ or ▽ button to select the “Exit”, then press the ENTER button.
   - Finalize the setting and exit the “Option Setup” menu.

Setup Lock

- When the setup lock function is activated, the settings listed below cannot be changed, and “Setup Locked” is displayed when related buttons are operated.
  - System setup settings
  - Surround parameter settings
  - Tone control settings
  - Channel level settings (including test tones)
  - RoomEQ

- To unlock, press the SETUP button again and display the “Setup Lock” screen, then select “OFF” and press the ENTER button.
Advanced Setup – Part 2

This Speaker Setup section describes the procedures to make speaker settings manually (without using the Auto Setup function), as well as to make manual changes to settings that have already been made by the Auto Setup function.

Speaker Setup

- If the “Auto Setup” procedure has already been performed, there is no need to make this setting.
- Perform this setting if you wish to make the settings for your speaker systems manually.

Setting the type of speakers

The composition of the signals output to each channel and the frequency response are adjusted according to the combination of speakers actually being used.

1. Press the CURSOR D or H button to select the “System Setup Menu”, then press the ENTER button.
   • Display the “System Setup Menu” screen.

2. Press the CURSOR ≥ button to select the “Speaker Config.” at the “System Setup Menu”, then press the ENTER button.
   • Display the “Speaker Config.” screen.

3. Press the CURSOR ≥ button to select the setting.
   - Display the “Speaker Config.” screen.

4. Press the CURSOR ≥ button to select the parameter.

5. Press the ENTER button to enter the setting.
   • The “Speaker Setup” menu reappears.

6. Press the CURSOR ≥ button to select “Speaker Config.” at the “System Setup Menu”, then press the ENTER button.
   • Display the “Speaker Config.” screen.

7. Press the CURSOR ≥ button to select the “Speaker Config.” at the “Speaker Setup” menu, then press the ENTER button.
   • Display the “Subwoofer Setup” screen.

8. Press the CURSOR ≥ button to select the “Subwoofer Setup” at the “Speaker Setup” menu, then press the ENTER button.
   • Display the “Subwoofer Setup” screen.

9. Press the CURSOR ≥ button to select the “Subwoofer Setup” at the “Speaker Setup” menu, then press the ENTER button.
   • Display the “Subwoofer Setup” screen.

10. Press the CURSOR ≥ button to select the setting.
    - Display the “Subwoofer Setup” screen.

11. Press the ENTER button to enter the setting.
    • The “Speaker Setup” menu reappears.

Setting the low frequency distribution

- Set the subwoofer mode according to the speaker system being used.
- Select the play mode that provides bass reproduction with body.

1. Press the CURSOR ≥ or ≥ button to select the “Subwoofer Setup” at the “Speaker Setup” menu, then press the ENTER button.
   • Display the “Subwoofer Setup” screen.

2. Press the CURSOR ≥ or ≥ button to select the setting.

3. Press the CURSOR ≥ button to select the “Subwoofer Setup” at the “Speaker Setup” menu, then press the ENTER button.
   • Display the “Subwoofer Setup” screen.

4. Press the ENTER button to enter the setting.
   • The “Speaker Setup” menu reappears.

5. Press the CURSOR ≥ button to select the “Subwoofer Setup” at the “Speaker Setup” menu, then press the ENTER button.
   • Display the “Subwoofer Setup” screen.

6. Press the CURSOR ≥ button to select the “Subwoofer Setup” at the “Speaker Setup” menu, then press the ENTER button.
   • Display the “Subwoofer Setup” screen.

7. Press the CURSOR ≥ button to select the setting.

8. Press the ENTER button to enter the setting.

9. Press the CURSOR ≥ button to select the setting.

10. Press the ENTER button to enter the setting.
    • The “Speaker Setup” menu reappears.

11. Press the CURSOR ≥ button to select the “Subwoofer Setup” at the “Speaker Setup” menu, then press the ENTER button.
    • Display the “Subwoofer Setup” screen.

12. Press the CURSOR ≥ button to select the “Subwoofer Setup” at the “Speaker Setup” menu, then press the ENTER button.
    • Display the “Subwoofer Setup” screen.

13. Press the CURSOR ≥ button to select the “Subwoofer Setup” at the “Speaker Setup” menu, then press the ENTER button.
    • Display the “Subwoofer Setup” screen.

14. Press the CURSOR ≥ button to select the setting.

15. Press the ENTER button to enter the setting.
    • The “Speaker Setup” menu reappears.

16. Press the CURSOR ≥ button to select the “Subwoofer Setup” at the “Speaker Setup” menu, then press the ENTER button.
    • Display the “Subwoofer Setup” screen.

17. Press the CURSOR ≥ button to select the “Subwoofer Setup” at the “Speaker Setup” menu, then press the ENTER button.
    • Display the “Subwoofer Setup” screen.

18. Press the CURSOR ≥ button to select the setting.

19. Press the ENTER button to enter the setting.
    • The “Speaker Setup” menu reappears.

20. Press the CURSOR ≥ button to select the “Subwoofer Setup” at the “Speaker Setup” menu, then press the ENTER button.
    • Display the “Subwoofer Setup” screen.

21. Press the CURSOR ≥ button to select the “Subwoofer Setup” at the “Speaker Setup” menu, then press the ENTER button.
    • Display the “Subwoofer Setup” screen.

22. Press the CURSOR ≥ button to select the setting.

23. Press the ENTER button to enter the setting.
    • The “Speaker Setup” menu reappears.

24. Press the CURSOR ≥ button to select the “Subwoofer Setup” at the “Speaker Setup” menu, then press the ENTER button.
    • Display the “Subwoofer Setup” screen.

25. Press the CURSOR ≥ button to select the “Subwoofer Setup” at the “Speaker Setup” menu, then press the ENTER button.
    • Display the “Subwoofer Setup” screen.

26. Press the CURSOR ≥ button to select the setting.

27. Press the ENTER button to enter the setting.
    • The “Speaker Setup” menu reappears.

28. Press the CURSOR ≥ button to select the “Subwoofer Setup” at the “Speaker Setup” menu, then press the ENTER button.
    • Display the “Subwoofer Setup” screen.

29. Press the CURSOR ≥ button to select the “Subwoofer Setup” at the “Speaker Setup” menu, then press the ENTER button.
    • Display the “Subwoofer Setup” screen.

30. Press the CURSOR ≥ button to select the setting.

31. Press the ENTER button to enter the setting.
    • The “Speaker Setup” menu reappears.

32. Press the CURSOR ≥ button to select the “Subwoofer Setup” at the “Speaker Setup” menu, then press the ENTER button.
    • Display the “Subwoofer Setup” screen.

33. Press the CURSOR ≥ button to select the “Subwoofer Setup” at the “Speaker Setup” menu, then press the ENTER button.
    • Display the “Subwoofer Setup” screen.

34. Press the CURSOR ≥ button to select the setting.

35. Press the ENTER button to enter the setting.
    • The “Speaker Setup” menu reappears.

36. Press the CURSOR ≥ button to select the “Subwoofer Setup” at the “Speaker Setup” menu, then press the ENTER button.
    • Display the “Subwoofer Setup” screen.

37. Press the CURSOR ≥ button to select the “Subwoofer Setup” at the “Speaker Setup” menu, then press the ENTER button.
    • Display the “Subwoofer Setup” screen.

38. Press the CURSOR ≥ button to select the setting.

39. Press the ENTER button to enter the setting.
    • The “Speaker Setup” menu reappears.

40. Press the CURSOR ≥ button to select the “Subwoofer Setup” at the “Speaker Setup” menu, then press the ENTER button.
    • Display the “Subwoofer Setup” screen.

41. Press the CURSOR ≥ button to select the “Subwoofer Setup” at the “Speaker Setup” menu, then press the ENTER button.
    • Display the “Subwoofer Setup” screen.

42. Press the CURSOR ≥ button to select the setting.

43. Press the ENTER button to enter the setting.
    • The “Speaker Setup” menu reappears.

44. Press the CURSOR ≥ button to select the “Subwoofer Setup” at the “Speaker Setup” menu, then press the ENTER button.
    • Display the “Subwoofer Setup” screen.

45. Press the CURSOR ≥ button to select the “Subwoofer Setup” at the “Speaker Setup” menu, then press the ENTER button.
    • Display the “Subwoofer Setup” screen.

46. Press the CURSOR ≥ button to select the setting.

47. Press the ENTER button to enter the setting.
    • The “Speaker Setup” menu reappears.

48. Press the CURSOR ≥ button to select the “Subwoofer Setup” at the “Speaker Setup” menu, then press the ENTER button.
    • Display the “Subwoofer Setup” screen.

49. Press the CURSOR ≥ button to select the “Subwoofer Setup” at the “Speaker Setup” menu, then press the ENTER button.
    • Display the “Subwoofer Setup” screen.

50. Press the CURSOR ≥ button to select the setting.

51. Press the ENTER button to enter the setting.
    • The “Speaker Setup” menu reappears.

52. Press the CURSOR ≥ button to select the “Subwoofer Setup” at the “Speaker Setup” menu, then press the ENTER button.
    • Display the “Subwoofer Setup” screen.

53. Press the CURSOR ≥ button to select the “Subwoofer Setup” at the “Speaker Setup” menu, then press the ENTER button.
    • Display the “Subwoofer Setup” screen.
Advanced Setup – Part 2

Setting the Delay Time

1. Press the CURSOR ▲ or ▼ button to select the “Delay Time” at the “Speaker Setup” menu, then press the ENTER button.
   • Display the “Delay Time” screen.

2. Press the CURSOR ◄ or ► button to select the desired unit, “Meters” or “Feet”.
   • The “Delay Time” screen appears automatically.
   • When “Meters” is selected.

3. Press the CURSOR ▲ or ▼ button to select the speaker to be set.

4. Press the CURSOR ▲ or ▼ button to set the distance between the center speaker and listening position.

   The distance changes in units of 0.03 meters (0.1 foot) or 0.3 meters (1 foot) each time the button is pressed. Select the value closest to the measured distance.
   • If “Yes” is selected for “Auto”, the settings are automatically reset to the default values.

5. Press the ENTER button to enter the setting.
   • The “Speaker Setup” menu reappears.

Setting the Channel Level

1. Press the CURSOR ▲ or ◄ button to select the “Channel Level” at the “Speaker Setup” menu, then press the ENTER button.
   • Display the “Channel Level” screen.

2. Press the CURSOR ◄ or ► button to select the “Auto” or “Manual”.

   Auto:
   • Adjust the level while listening to the test tones produced automatically from each speaker.
   • Test tones are automatically emitted from each speaker.

   Manual:
   • Select the speaker from which you want to produce the test tone to adjust the level.

   Example:
   When the “Auto” mode is selected.
Advanced Setup – Part 2

3. Press the CURSOR △ or ▽ button to select the “Surr. Sp.”, then press the CURSOR < or > button to select the surround speaker(s) from which you want to produce the test tone (A, B or A+B).

- **Surr. Sp. : A**
  - Adjusts the balance of the playback level between the channels when using surround speaker A.

- **Surr. Sp. : B**
  - Adjusts the balance of the playback level between the channels when using surround speaker B.

- **Surr. Sp. : A + B**
  - The “Surr. Sp.” can only be selected when both surround speakers A and B have been selected at the System Setup Menu (when both A and B have been set to “Large” or “Small”).

4. Press the CURSOR △ or ▽ button to select the “Test Tone Start”, then press the CURSOR < or > button to adjust all the speakers to the same volume.

5. The “Manual” mode is selected:

   - Press the CURSOR △ or ▽ button to select the speaker, then press the CURSOR < or > button to adjust the level of that speaker.

   - Example: When the volume is set to –11.5 dB while the test tone is being produced from the Front Lch speaker, the volume can be adjusted between –12 dB and +12 dB in units of 0.5 dB.

6. Press the ENTER button to enter the setting.

   - The “Channel Level” screen reappears.

5 The “Auto” mode is selected:

- Press the CURSOR △ or ▽ button to select the “Auto”. The test tones are output from the different speakers.

- Press the CURSOR < or > button to adjust the channel level so that the volume of the test tones is the same for all the speakers.

3 After completing the adjustment, press the TEST TONE button again.

**Setting the Crossover Frequency**

- Set the crossover frequency according to the low frequency response characteristics of the various (front, center, surround and surround back) speaker systems.

- If a connected main or surround loudspeaker has a low frequency response rolloff, adjust the crossover frequency for that speaker to match the specified low frequency response limit – e.g. 80 Hz.

- When a speaker is set to SMALL, low frequencies in that channel that are below the crossover frequency are directed to the system’s subwoofer(s), or to speakers that are set to LARGE, for systems with no connected subwoofer(s).

1. Press the CURSOR △ or ▽ button to select the “Crossover Frequency” at the “Speaker Setup” menu, then press the ENTER button.

   - Display the “Crossover Frequency” screen.

2. Press the CURSOR < or > button to adjust the crossover frequency for that speaker, then press the ENTER button again.

   - The “Crossover Frequency” screen appears.

**Adjusting the Test Tone using the remote control unit**

- The settings can only be performed in the “Auto” mode and by using the remote control unit.

- When adjusting the level of an active subwoofer, you may also need to adjust the subwoofer’s own volume control.

- When you adjust the channel levels while in the SYSTEM SETUP CHANNEL LEVEL mode, the channel level adjustments made will affect all surround modes. Consider this mode a Master Channel Level adjustment mode.

- After you have completed the SYSTEM SETUP CHANNEL LEVEL adjustments, you can then activate the individual surround modes and adjust channel levels that will be remembered for each of those modes. Then, whenever you activate a particular surround sound mode, your preferred channel level adjustments for just that mode will be recalled.

- Set the crossover frequency according to the low frequency response characteristics of the various (front, center, surround and surround back) speaker systems.

- When using either surround speakers A or B, or when using surround speakers A and B at the same time, be sure to adjust the balance of playback levels between each channel for the various selections of “A”, “B” and “A+B”.

- Adjusting the test tone using the remote control unit

  - As described above, this adjustment can be accomplished via the remote control unit.

  - When adjusting with the remote control unit using the test tones, make sure to adjust the crossover frequency for each channel individually.

- When adjusting the level of an active subwoofer, you may also need to adjust the subwoofer’s own volume control.

- After you have completed the SYSTEM SETUP CHANNEL LEVEL adjustments, you can activate the individual surround modes and adjust channel levels that will be remembered for each of those modes. Consider this mode a Master Channel Level adjustment mode.

- The “Auto” mode is selected:

  - Press the CURSOR △ or ▽ button to select the “Auto”.

  - The test tones are output from the different speakers.

  - Press the CURSOR < or > button to adjust the channel level so that the volume of the test tones is the same for all the speakers.

3 After completing the adjustment, press the TEST TONE button again.

**Setting the Crossover Frequency**

- Set the crossover frequency according to the low frequency response characteristics of the various (front, center, surround and surround back) speaker systems.

- If a connected main or surround loudspeaker has a specified low frequency response rolloff, adjust the crossover frequency for that speaker to match the specified low frequency response limit – e.g. 80 Hz.

- When a speaker is set to SMALL, low frequencies in that channel that are below the crossover frequency are directed to the system’s subwoofer(s), or to speakers that are set to LARGE, for systems with no connected subwoofer(s).

1. Press the CURSOR △ or ▽ button to select the “Crossover Frequency” at the “Speaker Setup” menu, then press the ENTER button.

   - Display the “Crossover Frequency” screen.

2. Press the CURSOR < or > button to adjust the crossover frequency for that speaker, then press the ENTER button again.

   - The “Crossover Frequency” screen appears.

**Adjusting the Test Tone using the remote control unit**

- The settings can only be performed in the “Auto” mode and by using the remote control unit.

- When adjusting the level of an active subwoofer, you may also need to adjust the subwoofer’s own volume control.

- When you adjust the channel levels while in the SYSTEM SETUP CHANNEL LEVEL mode, the channel level adjustments made will affect all surround modes. Consider this mode a Master Channel Level adjustment mode.

- After you have completed the SYSTEM SETUP CHANNEL LEVEL adjustments, you can then activate the individual surround modes and adjust channel levels that will be remembered for each of those modes. Then, whenever you activate a particular surround sound mode, your preferred channel level adjustments for just that mode will be recalled.

- Set the crossover frequency according to the low frequency response characteristics of the various (front, center, surround and surround back) speaker systems.

- When using either surround speakers A or B, or when using surround speakers A and B at the same time, be sure to adjust the balance of playback levels between each channel for the various selections of “A”, “B” and “A+B”.

- Adjusting the test tone using the remote control unit

  - As described above, this adjustment can be accomplished via the remote control unit.

  - When adjusting with the remote control unit using the test tones, make sure to adjust the crossover frequency for each channel individually.

- When adjusting the level of an active subwoofer, you may also need to adjust the subwoofer’s own volume control.

- After you have completed the SYSTEM SETUP CHANNEL LEVEL adjustments, you can activate the individual surround modes and adjust channel levels that will be remembered for each of those modes. Consider this mode a Master Channel Level adjustment mode.

- The “Auto” mode is selected:

  - Press the CURSOR △ or ▽ button to select the “Auto”.

  - The test tones are output from the different speakers.

  - Press the CURSOR < or > button to adjust the channel level so that the volume of the test tones is the same for all the speakers.

3 After completing the adjustment, press the TEST TONE button again.

**Setting the Crossover Frequency**

- Set the crossover frequency according to the low frequency response characteristics of the various (front, center, surround and surround back) speaker systems.

- If a connected main or surround loudspeaker has a specified low frequency response rolloff, adjust the crossover frequency for that speaker to match the specified low frequency response limit – e.g. 80 Hz.

- When a speaker is set to SMALL, low frequencies in that channel that are below the crossover frequency are directed to the system’s subwoofer(s), or to speakers that are set to LARGE, for systems with no connected subwoofer(s).
Advanced Setup – Part 2

2 Press the CURSOR < or > button to select the frequency.

**FIXED – THX:**
Set to the THX rated 80 Hz crossover frequency.
**VARIABLE 40, 60, 80, 90, 100, 110, 120, 150, 200, 250 Hz:**
Set as desired according to your speakers’ bass playback ability.

**Advanced:**
The crossover frequency can be set individually for the different speakers (page 56).

3 Press the ENTER button to enter the setting.

- **The “Speaker Setup” menu reappears.**

- **If “LFE+Main” is set at “Subwoofer Setup”, “SW:LFE+Main” (page 53, 54) is displayed at the top right of the screen.**

- **If “LFE–THX–” is selected at “Subwoofer Setup”, the frequencies can only be selected for speakers set to “Small” at “Speaker Configuration”.**

### Setting the crossover frequency individually for the different channels

1 Press the CURSOR < or > button to select the “Advanced” at the “Crossover Frequency” screen.

2 Press the CURSOR < or > button to select the speaker to be set.

3 Press the CURSOR < or > button to select the frequency.

- **If “LFE+Main” is set at “Subwoofer Setup”, the frequencies can only be selected regardless of the speaker size setting.**

- **If “LFE–THX–” is selected at “Subwoofer Setup”, the frequencies can only be selected for speakers set to “Small” at “Speaker Configuration”.**

### Selecting the surround speakers for the different surround modes

1 Press the CURSOR < or > button to select the “Surround Sp Setup” at the “Speaker Setup” menu, then press the ENTER button.

2 Press the CURSOR < or > button to select the surround mode, then press the CURSOR < or > button to select the surround speaker.

- **A:** When surround speakers A is used.
- **B:** When surround speakers B is used.
- **A + B:** When both surround speake s A and B are used.

3 Press the ENTER button to enter the setting.

- **The “Speaker Setup” menu reappears.**

- **For the “WIDE SCREEN” and “7CH STEREO” DSP simulation modes, the surround speaker s can be set separately.**

#### About Speaker type setting when using both surround speakers A and B:
- If “Small” is set for either surround speakers A or B, the output is the same as when “Small” is set for both A and B.

### Settings for using a THX Ultra2 compatible subwoofer

1 Press the CURSOR < or > button to select the “THX Audio Setup” at the “Speaker Setup” menu, then press the ENTER button.

2 Press the CURSOR < or > button to select the “Boundary Gain Compensation”, then press the ENTER button.

3 Press the CURSOR < or > button, when using a THX Ultra2 compatible subwoofer or subwoofer that frequency response extends to 20 Hz, select “Yes”. Otherwise select “No”.

For the “WIDE SCREEN” and “7CH STEREO” DSP simulation modes, the surround speaker s can be set separately.
When "Yes" is selected:

"Boundary Gain Compensation" can be selected and the compensation set to "OFF".

If the bass sound seems too strong:
Set "Boundary Gain Compensation" to "ON". This activates a filter that gently reduces very deep bass below 55 Hz to provide the flattest overall deep bass response. Select "ON" or "OFF" according to how strong you prefer the deep bass response to be.

Press the ENTER button.
• Return to the "THX Audio Setup" screen.

Press the CURSOR △ or ▽ button to select the "Exit", then press the ENTER button.
• Return to the "THX Audio Setup" screen.

Press the CURSOR △ or ▽ button to select the "Exit", then press the ENTER button.
• The "System Setup Menu" reappears.

Press the CURSOR △ or ▽ button to select the “Exit”, then press the ENTER button.
• Return to the "THX Audio Setup" screen.

Setting the Room EQ Setup

Select the setting of an Equalizer that has been set with Auto Setup or Manual EQ.

1 Press the CURSOR △ or ▽ button to select the “Room EQ Setup” at the “Auto Setup / Room EQ” menu, then press the ENTER button.
• Display the "Room EQ Setup" screen.

2 Press the CURSOR △ or ▽ button to select the “All” or “Assign”.

3 When “All” is selected:

Press the ENTER button.
• Display the "Select the EQ Curve" screen.

4 Press the CURSOR △ or ▽ button to select the Equalizer setting.

- OFF
- Audyssey
- Flat
- Manual
- Front

The Equalizer setting of "Audyssey", "Front" and "Flat" can be selected after performing the Auto Setup.

When the speaker set as “None” with the Auto Setup is changed to on manually, the equalizer of "Audyssey", "Front" and "Flat" cannot be used.

The Equalizer setting can be selected directly by the ROOM EQ button.

When headphones are connected, the Room EQ cannot be used.
**Advanced Setup – Part 2**

### Setting the Direct Mode Setup

Perform the ON/OFF setting of Room EQ when the surround mode is "DIRECT" or "PURE DIRECT".

1. Press the CURSOR △ or ▽ button to select the “Direct Mode Setup” at the “Auto Setup / Room EQ” menu, then press the ENTER button.
   - Display the “Direct Mode Setup” screen.

2. Press the CURSOR < or > button to select the “ON” or “OFF”.

3. Press the ENTER button to enter the setting.
   - The “Auto Setup / Room EQ” menu reappears.

### Setting the MIC Input Select

Sets whether the setup microphone is connected to the PIN JACK (V.AUX L channel) connector or the MINI JACK (SETUP MIC) connector.

1. Press the CURSOR △ or ▽ button to select the “Mic Input Select” at the “Auto Setup / Room EQ” menu, then press the ENTER button.
   - Display the “Mic Input Select” screen.

2. Press the CURSOR △ or ▽ button to select the “Mic” or “V.AUX L”.

3. Press the ENTER button to enter the setting.
   - The “Auto Setup / Room EQ” menu reappears.

### Check the parameter

- The results of the measured items can be checked.
- The EQ parameters that were set in Auto Setup can be checked.
- This item is displayed, after the measurement result of the “Auto Setup / Room EQ” is decided.

4. Press the CURSOR △ or ▽ button to select the Equalizer curve, then press the ENTER button.
   - Display the “EQ Check” screen.

   - The display is only an approximate picture of the response and that correction is happening at all frequencies.

5. Press the CURSOR △ or ▽ button to select the speaker channel.

6. If the check ends, pressing the CURSOR △ or ▽ button to select the “Exit”, then press the ENTER button.
   - The “EQ Parameter Check” screen reappears.

7. Press the CURSOR △ or ▽ button to select the “Exit”, then press the ENTER button.
   - The “Parameter Check” screen reappears.

8. The results of the “Auto Setup” procedure can be reset even if the settings have been changed after performing the “Auto Setup” procedure:
   - Press the CURSOR △ or ▽ button to select the “Restore Yes ☑”, then press the CURSOR < button.

9. Press the CURSOR △ or ▽ button to select the “Exit”, then press the ENTER button.
   - The “Auto Setup / Room EQ” menu reappears.

10. Press the CURSOR △ or ▽ button to select the “Exit”, then press the ENTER button.
    - The “System Setup Menu” reappears.

---

The results of the “Auto Setup” procedure can be reset even if the settings have been changed after performing the “Auto Setup” procedure:
- Press the CURSOR △ or ▽ button to select the “Restore Yes ☑”, then press the CURSOR < button.

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## Advanced Setup – Part 2

### System setup items and default values (set upon shipment from the factory)

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#### 2. Speaker Setup

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<tr>
<td>6. Surround Speaker Setup</td>
<td>Use this function when using multiple surround speaker combinations for more ideal surround sound.</td>
<td>56</td>
</tr>
<tr>
<td>7. THX Audio Setup</td>
<td>boundary gain compensation</td>
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<tr>
<td>8. Surround Back Speaker Position</td>
<td>When using two surround back speakers, set the distance of the two speakers.</td>
<td>57</td>
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## 3. Audio Input Setup

<table>
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<th>Default settings</th>
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<tr>
<td>HDMI/DVI In Assign</td>
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<td>46</td>
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<tr>
<td>HDMI Out Assign</td>
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<td>46</td>
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<tr>
<td>Audio Delay</td>
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<td>46</td>
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<tr>
<td>On Screen Display</td>
<td>Function/Mode = ON, Master Volume = ON, Mode = Mode 1</td>
<td>46</td>
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</table>

### 4. Video Setup

<table>
<thead>
<tr>
<th>Audio Input Setup</th>
<th>Default settings</th>
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</thead>
<tbody>
<tr>
<td>Digital In Assign</td>
<td>This assigns the digital input terminals for the digital input sources.</td>
<td></td>
</tr>
<tr>
<td>Digital Inputs</td>
<td>CD: COAX 1, COAX 2, COAX 3, OFF 1, OFF 2, OFF 3, OFF 4, OFF 5, TUNER</td>
<td>42</td>
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<tr>
<td>EXT.IN Setup</td>
<td>Set the EXT. IN terminal playback method.</td>
<td></td>
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<tr>
<td>Function Lev.</td>
<td>The playback level is corrected individually for the different input sources.</td>
<td></td>
</tr>
<tr>
<td>Function Rename</td>
<td>The names of the different input source can be changed as desired and displayed on the display.</td>
<td></td>
</tr>
<tr>
<td>IEEE1394 Assign</td>
<td>The connected IEEE1394 device can be automatically identified to assign the input source.</td>
<td></td>
</tr>
<tr>
<td>IEEE1394 Auto Func.</td>
<td>Set the function for associating playback of the connected IEEE1394 device on or off.</td>
<td></td>
</tr>
</tbody>
</table>

### 5. Advanced Playback

<table>
<thead>
<tr>
<th>Advanced Playback</th>
<th>Default settings</th>
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<tbody>
<tr>
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<td>The speaker settings can be changed specifically for playing in the 1-channel direct or stereo mode.</td>
<td></td>
</tr>
<tr>
<td>Dolby Digital Setup</td>
<td>Turn the audio compression on or off when down-mixing Dolby Digital signals.</td>
<td></td>
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<tr>
<td>Auto Surround Mode</td>
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<tr>
<td>Manual EQ Setup</td>
<td>This parameter is for optimizing the Room EQ with which the audio signals are produced from the speakers. All Channels and F eq equality = 0 dB</td>
<td>48</td>
</tr>
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</table>
## Advanced Setup – Part 2

### 6. Option Setup

<table>
<thead>
<tr>
<th>Option Setup</th>
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</thead>
<tbody>
<tr>
<td><strong>1. Channel Setup</strong></td>
<td>The number of channels that you wish to play back in each zone are assigned to each zone accordingly.</td>
<td>49</td>
</tr>
<tr>
<td><strong>2. Power Amp Assign</strong></td>
<td>To suit your preference, a power amp other than the front can be assigned to a playback channel, and the front channel bi-amp playback, or the ZONE2 or ZONE3 playback channel can be output from the AVC-A11XV speakers.</td>
<td>49, 50</td>
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<tr>
<td><strong>3. Volume Control</strong></td>
<td>This sets the volume level of each zone output.</td>
<td>50</td>
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<tr>
<td><strong>4. Trigger Out Setup</strong></td>
<td>This sets the Trigger Out output for the different input sources.</td>
<td>51</td>
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<tr>
<td><strong>5. Zone2/3 Tone/Ch Lev.</strong></td>
<td>Adjust the tone and channel level of the sound output from ZONE2 and ZONE3.</td>
<td>51</td>
</tr>
<tr>
<td><strong>6. Digital Out Assign</strong></td>
<td>This sets the OPTICAL2 output for digital audio recording to &quot;ZONE3/REC SELECT&quot; or &quot;ZONE2 SELECT&quot;.</td>
<td>52</td>
</tr>
<tr>
<td><strong>7. Setup, Memory/Lock</strong></td>
<td>The stores the current user settings in the memory.</td>
<td>52</td>
</tr>
</tbody>
</table>

---

### Default settings

**Main Zone**

<table>
<thead>
<tr>
<th>Zone</th>
<th>Front</th>
<th>Center</th>
<th>Sur B</th>
<th>S Back</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zone 1</td>
<td>Front</td>
<td>Center</td>
<td>Sur A</td>
<td>Sur B</td>
</tr>
<tr>
<td>Zone 2</td>
<td>Front</td>
<td>Center</td>
<td>Sur A</td>
<td>Sur B</td>
</tr>
</tbody>
</table>

**Zone2**

|-------|---------------------------------------------------------------------|

**Zone2/3 Tone/Ch Lev.**

| Zone 2 | Bass = 0 dB, Treble = 0 dB, HPF = OFF, LR = 0 dB |
| Zone 3 | Bass = 0 dB, Treble = 0 dB, HPF = OFF, LR = 0 dB |

**Volume Control**

- **Volume Limit:** This sets the upper limit for the master volume.
- **Power On Level:** This sets the volume level upon switching on the power of each zone.
- **Mute Level:** This sets the amount of attenuation of the audio output when each zone is muted.
- **Volume Level:** This sets whether the output level of ZONE2 to 3 is fixed or variable.

**Trigger Out**

- **Trigger Out 1**
  - ZONE = MAIN, All Surround Modes = ON
- **Trigger Out 2**
  - ZONE = 2
- **Trigger Out 3**
  - ZONE = 3
## Troubleshooting

If a problem should arise, first check the following.

1. Are the connections correct?
2. Have you operated the receiver according to the Operating Instructions?
3. Are the speakers, and other connected components operating properly?

If this unit is not operating properly, check the items listed in the table below. Should the problem persist, there may be a malfunction. Disconnect the power immediately and contact your store of purchase.

### Symptom | Cause | Measures
--- | --- | ---
Display not lit and sound not produced when power switch set to on | Power supply cord not plugged in securely | Connect the insertion of the power supply cord plug.
 | | — |
Display lit but sound not produced | Speaker cables not securely connected | Connect securely.
FUNCTION knob position is not appropriate | Switch to the proper position.
Volume control set to minimum | Turn volume up to suitable level.
MUTING is on | Switch off MUTING.
No digital signal is being input | Properly select a digital signal input source.
 | — |
Nothing is displayed on monitor | A/V-C11XV’s video output terminals and monitor’s input terminals are not properly connected | Check that the connections are correct.
Monitor TV’s input setting is wrong | Set the TV’s input selector to the terminals to which video signals are connected.
The PURE DIRECT mode is set | Set a surround mode other than the PURE DIRECT mode.
 | — |
No DTS sound is produced | DVD player’s audio output setting is not set to bitstream | Make the DVD player’s initial settings.
DVD player is not DTS-compatible | Use a DTS-compatible player.
A/V-C11XV’s input setting is set to analog | Set to AUTO or DTS.
 | — |
Ultrar CINEMA/THX Music Mode / THX Games Mode cannot be set | Surround back speaker set to 1 | Connect two surround back speakers.
 | — |
Copying from DVD to VCR is not possible | Copying between a source such as DVD and a VCR is not usually possible, as DVDs are often encoded with copy-protection signals that prevent VCR reencoding | Copying is not possible.
 | — |
No sound is produced from subwoofer | Subwoofer’s power is not on | Turn on the power.
Subwoofer’s initial setting is set to “NO” | Set the setting to “YES”.
Subwoofer’s output is not connected | Connect properly.
The subwoofer’s channel volume level is set to “OFF” | Turn the subwoofer’s channel volume level up.
 | — |
No sound is produced from surround speakers | Surround mode is set to a mode other than Dolby Surround | Set to Dolby Surround.
 | — |
No test tones are produced | Surround mode is set to “STEREO”. | — |
An image is not projected with an HDMI/DVI-D connection | A/V-C11XV’s HDMI output terminals and monitor’s input terminals are not properly connected | Check the HDMI connection.
No HDMI/DVI-D signal is being input | Properly select HDMI or DVI-D signal input source.
The connected monitor equipment or other equipments do not support HDCP | Check the HDMI audio playback setting at the “HDMI/DVI In Assign” settings to “AMP”, “TV”.
The output format of the connected player (HDMI/DVI-D FORMAT) does not match the supported input format of connected monitor equipments | — |
The HDMI audio is not output | The A/V-C11XV does not play HDMI audio signals | — |
The HDMI audio signals are not output from the connected monitor device | — |
Power has turned off and the power indicator is flashing red | The set’s internal temperature has risen and the protection circuit has been activated | — |
The core wires of the speaker cables are touching each other or the A/V-C11XV’s rear panel, activating the protection circuit | — |
The A/V-C11XV is malfunctioning | — |
Sound is only produced from the center speaker | You are playing a monaural source (TV, AM radio broadcast, etc) in the DOUBLYDTS SURROUND or HOME THX CINEMA mode. | — |
When playing monaural source, select a surround mode other than DOUBLYDTS SURROUND or HOME THX CINEMA. | — |

### Troubleshooting Table

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
<th>Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>No sound is produced from surround speakers</td>
<td>Surround mode is set to a mode other than Dolby Surround</td>
<td>—</td>
</tr>
<tr>
<td>No sound is produced from surround speakers</td>
<td>Surround mode is set to “STEREO”.</td>
<td>—</td>
</tr>
</tbody>
</table>
| This unit does not operate properly when remote control unit is used | Batteries dead | Replace with new batteries.
Remote control unit too far from this unit | Move closer.
Obstacle between this unit and remote control unit | Remove obstacle.
Different button is being pressed | Press the proper button.
| | Insert batteries properly. | — |
| A/V-C11XV’s video output terminals and monitor’s input terminals are not properly connected | Check the HDMI connection. | — |
| No HDMI/DVI-D signal is being input | Properly select HDMI or DVI-D signal input source. | — |
| The connected monitor equipment or other equipments do not support HDCP | Check the HDMI audio playback setting at the connected monitor device. | — |
| The output format of the connected player (HDMI/DVI-D FORMAT) does not match the supported input format of connected monitor equipments | Check the HDMI audio playback setting at the “HDMI/DVI In Assign” settings to “AMP”, “TV”. | — |
| The HDMI audio is not output | The A/V-C11XV does not play HDMI audio signals | — |
| The HDMI audio signals are not output from the connected monitor device | — |
| Power has turned off and the power indicator is flashing red | The set’s internal temperature has risen and the protection circuit has been activated | — |
| The core wires of the speaker cables are touching each other or the A/V-C11XV’s rear panel, activating the protection circuit | — |
| The A/V-C11XV is malfunctioning | — |
| Sound is only produced from the center speaker | You are playing a monaural source (TV, AM radio broadcast, etc) in the DOUBLYDTS SURROUND or HOME THX CINEMA mode. | — |
| When playing monaural source, select a surround mode other than DOUBLYDTS SURROUND or HOME THX CINEMA. | — |

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### Page Numbers

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Note on the above: MUSE 3.1 and MPEG multichannel audio are not available to North American consumers – same is true for Dolby’s AAC.

There are currently various types of multi-channel signals (signals or formats with more than two channels).

- **Types of multi-channel signals**
  - Dolby Digital (including Surround EX), DTS (including Surround ES), DVD-Audio, and Super Audio CD.
  - Note on the above: MUSE 3.1 and MPEG multichannel audio are not available to North American consumers – same is true for Dolby’s AAC.

- **Types of sources**
  - Movie audio:
    - Signals created to be played in movie theaters. In general sound is recorded to be played in movie theaters and with multiple surround speakers, regardless of the format (Dolby Digital, DTS, etc.).

- **Optimum surround sound for different sources**

  - The AVC-A11XV’s surround speaker selection function makes it possible to change the settings according to the combination of surround speakers being used and the surrounding environment in order to achieve the ideal surround sound for all sources. This means that you can connect a pair of bipolar or dipolar surround speakers (mounted on either side of the prime listening position), as well as a separate pair of direct radiating (monopolar) speakers placed at the rear corners of the listening room.

  - In this case the speakers should surround the listener from all sides to create a uniform sound field from 360°. Ideally the surround speakers should function as “point” sound sources in the same way as the front speakers. These two types of sources thus have different properties, and different speaker settings, particularly for the surround speakers, are required in order to achieve the ideal sound.

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      - Movie audio:
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- **Additional Information**

  - **Optimum surround sound for different sources**

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      - **Types of sources**
        - Movie audio:
          - Signals created to be played in movie theaters. In general sound is recorded to be played in movie theaters and with multiple surround speakers, regardless of the format (Dolby Digital, DTS, etc.).

        - **Other types of audio:**
          - These signals are designed to recreate a 360° sound field using three to five speakers.

      - Additional Information

        - **Movie theater sound field**
          - In this case the speakers should surround the listener from all sides to create a uniform sound field from 360°. Ideally the surround speakers should function as “point” sound sources in the same way as the front speakers. These two types of sources thus have different properties, and different speaker settings, particularly for the surround speakers, are required in order to achieve the ideal sound.

        - **Multiple surround speakers**
          - In this case it is important to achieve the same sense of expansion as in a movie theater with the surround channels. To do so, in some cases the number of surround speakers is increased (to four or eight) or speakers with bipolar or dipolar properties are used.

        - **SL : Surround L channel**
          - **SR : Surround R channel**
          - **SB : Surround B (back) channel**

- **Optimum surround sound for different sources**

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        - **SL : Surround L channel**
          - **SR : Surround R channel**
          - **SB : Surround B (back) channel**
• If the surround speakers are direct-radiating
• Consult the owner’s manual for your subwoofer for
• Set the front speakers with their front surfaces as
and using regular single way or 2-way speakers for the
This is recommended when mainly playing movies
q
[1] For THX Surround EX systems
• Connect the surround speakers to the surround
• We recommend installing the surround back
speaker(s) at a slightly downward facing angle. This
effectively prevents the surround back channel
signals from reflecting off the monitor or screen at
the front center, resulting in interference and
making the sense of movement from the front to
the back less sharp.
• Connect the surround speakers to the surround
speaker A terminals on the AVC-A11XV and set
settings on the setup menu to “A”. (This is the
factory default setting (page 59).)
• The signals from the surround channels reflect off
the walls as shown on the diagram at the left,
creating an enveloping and realistic surround sound
presentation.
For multi-channel music sources however, the use
of bipolar or dipolar speakers mounted at the sides
of the listening position may not be satisfactory in
order to create a coherent 360 degree surround sound
field. Connect another pair of direct radiating
speakers as described in example (3) and place
them at the rear corners of the room facing towards
the prime listening position.
• When using two surround back speakers, set them
to the back facing front and with both speakers at
the same distance from the listening point. When
using one surround back speaker, place it at the rear
center facing the front at a slightly higher position (0
to 20 cm) than the surround speakers.
• Same as surround back speaker installation method
(1).
• Connect the surround speaker s to the surround
speaker A terminals on the AVC-A11XV and set
settings on the setup menu to “A”. (This is the
factory default setting (page 59).)
• It is best to place the surround speakers directly at
the side or slightly to the front of the viewing
position, and 60 to 90 cm above the ears.
• Set the front speakers, center speaker and
subwoofer in the same positions as in example (1).
• Same as surround back speaker installation method
(1).
• Connect the surround speakers to the surround
speaker A terminals on the AVC-A11XV and set
settings on the setup menu to “A”. (This is the
factory default setting (page 59).)
• Set the center speaker in the same positions as in
example (1). (1).
• Set surround speakers B for playing multi-channel
music at the same height as the front speakers and
slightly to the rear of the listening position, and point
them toward the listening position.
• Connect the surround speakers for watching movies
to the surround speaker A terminals on the
AVC-A11XV, the surround speakers for playing multi-
channel music to the surround speaker B terminals.
Set the surround speaker selection on the setup
menu (page 56).
• To activate the appropriate speakers for movies and
music, we suggest that during setup, choose Dolby
Digital/DTS with THX and Surround Speakers A (the
bipolar or dipolar speakers mounted at the sides of
the listening position).
Choose Dolby Digital/DTS without THX and
Surround Speakers B (the direct radiating speaker(s)
mounted at the rear corners of the room).
Then, by simply activating the THX function (used
during movie playback), the Surround A speakers are
automatically activated. For multi-channel music
listening (Dolby Digital or DTS music programs), turn
off the THX enhancements by touching the THX
button on the remote control, and the Surround B
speakers will be automatically activated.
Example:
Movie sources (Dolby, DTS surround, etc.)
• “THX” or “THX 5.1” mode…….Speakers A
Music sources (DVD video, DTS CD, etc.)
• “Dolby/DTS surround”………Speakers B
The speakers can be switched at the touch of a
button by turning HOME THX CINEMA on when
playing movies and off when playing multichannel
music.

Additional Information

Setting for primarily watching
movies
For the greatest sense of surround sound
envelopment, diffuse radiation speakers such as
typical bipolar types or dipolar (THX) types, provide a wider
dispersion than is possible to obtain from a direct
radiating speaker (monopolar). Place these speakers
at either side of the prime listening position, mounted
above ear level.
• When using two surround back speakers, set them
to the back facing front and with both speakers at
the same distance from the listening point. When
using one surround back speaker, place it at the rear
center facing the front at a slightly higher position (0
to 20 cm) than the surround speakers.
• We recommend installing the surround back
speaker(s) at a slightly downward facing angle. This
effectively prevents the surround back channel
signals from reflecting off the monitor or screen at
the front center, resulting in interference and
making the sense of movement from the front to
the back less sharp.
• Connect the surround speakers to the surround
speaker A terminals on the AVC-A11XV and set
settings on the setup menu to “A”. (This is the
factory default setting (page 59).)
• The signals from the surround channels reflect off
the walls as shown on the diagram at the left,
creating an enveloping and realistic surround sound
presentation.
For multi-channel music sources however, the use
of bipolar or dipolar speakers mounted at the sides
of the listening position may not be satisfactory in
order to create a coherent 360 degree surround sound
field. Connect another pair of direct radiating
speakers as described in example (3) and place
them at the rear corners of the room facing towards
the prime listening position.
• When using different surround
speakers for movies and music
To achieve more effective surround sound for both
movies and music, use different sets of surround
speakers and different surround modes for the two
types of sources.
• Set the front speakers, center speaker and
subwoofer in the same positions as in example (1).
• Same as surround back speaker installation method
(1).
• Connect the surround speakers to the surround
speaker A terminals on the AVC-A11XV and set
settings on the setup menu to “A”. (This is the
factory default setting (page 59).)
• The signals from the surround channels reflect off
the walls as shown on the diagram at the left,
creating an enveloping and realistic surround sound
presentation.
For multi-channel music sources however, the use
of bipolar or dipolar speakers mounted at the sides
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• When using different surround
speakers for movies and music
To achieve more effective surround sound for both
movies and music, use different sets of surround
speakers and different surround modes for the two
types of sources.
• Set the front speakers, center speaker and
subwoofer in the same positions as in example (1).
• Same as surround back speaker installation method
(1).
• Connect the surround speakers to the surround
speaker A terminals on the AVC-A11XV and set
settings on the setup menu to “A”. (This is the
factory default setting (page 59).)
• The signals from the surround channels reflect off
the walls as shown on the diagram at the left,
creating an enveloping and realistic surround sound
presentation.
For multi-channel music sources however, the use
of bipolar or dipolar speakers mounted at the sides
of the listening position may not be satisfactory in
order to create a coherent 360 degree surround sound
field. Connect another pair of direct radiating
speakers as described in example (3) and place
them at the rear corners of the room facing towards
the prime listening position.
Additional Information

[2] When not using surround back speakers

- Set the front speakers with their front surfaces as flush with the TV or monitor screen as possible. Set the center speaker between the front left and right speakers and no further from the listening position than the front speakers.
- Consult the owner’s manual for your subwoofer for advice on placing the subwoofer within the listening area.
- If the surround speakers are direct-radiating (monopole) then place them slightly behind and at an angle to the listening position and parallel to the walls at a position 60 to 90 centimeters (2 to 3 feet) above ear level at the prime listening position.
- Connect the surround speakers to the surround speaker A terminals on the AVC-A11XV and set settings on the setup menu to “A”. (This is the factory default setting) (page 99.)
- The surround speakers can be switched freely during playback with the surround parameter adjustment (page 21).

Surround

The AVC-A11XV is equipped with a digital signal processing circuit that lets you play program sources in the surround mode to achieve the same sense of presence as in a movie theater.

[1] Dolby Surround

Dolby Digital

- Dolby Digital is the multi-channel digital signal format developed by Dolby Laboratories. Dolby Digital consists of up to “5.1” channels – front left, front right, center, surround left, surround right, and an additional channel exclusively reserved for additional deep bass sound effects (the Low Frequency Effects – LFE – channel), also called the “.1” channel, containing bass frequencies of up to 120 Hz. Dolby Digital’s main channels can all contain full range sound information, from the lowest bass, up to the highest frequencies – 22 kHz. The signals within each channel are distinct from the others, allowing preprint sound imaging, and Dolby Digital offers tremendous dynamic range from the most powerful sound effects to the quietest, softest sounds, free from noise and distortion.

Dolby Digital and Dolby Pro Logic

Comparison of home surround systems

<table>
<thead>
<tr>
<th>Dolby Digital</th>
<th>Dolby Pro Logic</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. recorded in Surround back channel (max.)</td>
<td>S.1 ch</td>
</tr>
<tr>
<td>No. playback channels</td>
<td>S.1 ch</td>
</tr>
<tr>
<td>Playback channels</td>
<td>L, R, C, SL, SR, SW</td>
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</table>

Audio processing

<table>
<thead>
<tr>
<th>Digital discrete p-crossing Dolby Digital decoding</th>
<th>Analog matrix processing Dolby Surround</th>
</tr>
</thead>
</table>

High frequency playback limit of Surround channel

20 kHz

7 kHz

Dolby Digital compatible media and playback methods

Marks indicating Dolby Digital compatibility: [II]

The following are general examples. Also refer to the player’s operating instructions.

- DVD
- Others (satellite, broadcast, CATV, etc.)

[1] Some DVD digital outputs have the function of switching the Dolby Digital signal output method between “bitstream” and “(convert to) PCM”.
- When playing in Dolby Digital surround on the AVC-A11XV, switch the DVD player’s output mode to “bitstream”. In some cases players are equipped with both “bitstream + PCM” and “PCM only” digital outputs. In this case connect the “bitstream + PCM” terminals to the AVC-A11XV.

Dolby Pro Logic II

- Dolby Pro Logic II is a new multi-channel playback format developed by Dolby Laboratories using feedback logic steering technology and offering improvements over conventional Dolby Pro Logic circuits.
- Dolby Pro Logic II can be used to decode not only sources recorded in Dolby Surround (II) but also regular stereo sources into five channels (front left, front right, center, surround left and surround right) to achieve surround sound.
- Whereas with conventional Dolby Pro Logic, the surround channel playback frequency band was limited, Dolby Pro Logic II offers a wider band range (20 Hz to 20 kHz or greater). In addition, the surround channels were monaural (the surround left and right channels were the same) with previous Dolby Pro Logic, but Dolby Pro Logic II they are played as stereo signals.
- Various parameters can be set according to the type of source and the contents, so it is possible to achieve optimum decoding (page 27).

Dolby Pro Logic IIx

- Dolby Pro Logic IIx further the matrix decoding technology of Dolby Pro Logic II to decode audio signals recorded on two channels into up to 7.1 playback channels, including the surround back channel. Dolby Pro Logic IIx also allows 5.1-channel sources to be played in up to 7.1 channels. The mode can be selected according to the source. The Music mode is best suited for playing music, the Cinema mode for playing movies, and the Game mode for playing games. The Game mode can only be used with 2-channel audio sources.

Sources recorded in Dolby Surround

- These are sources in which three or more channels of surround have been recorded as two channels of signals using Dolby Surround encoding technology.
- Dolby Surround is used for the sound tracks of movies recorded on DVDs, LDs and video cassettes, and for stereo broadcast signals of FM radio, TV satellite broadcasts and cable TV.
- Some DVD video discs employ Dolby Surround recording signals. These signals can be played on ordinary stereo equipment, in which case they provide normal stereo sounds.
- There are two types of DVD Dolby Surround recording signals:
  - 2-channel PCM stereo signals
  - 2-channel Dolby Digital signals

Sources recorded in Dolby Surround are indicated with the logo mark shown below

Manufactured under license from Dolby Laboratories. “Dolby”, “Pro Logic”, “Surround EX” and the double-D symbol are trademarks of Dolby Laboratories.
Dolby Headphone is effective not only for your own listening room. It can recreate the intricate, grand sound as in a movie theater, right in your own home theater. This technology is mainly for multichannel audio/video equipment with Dolby Digital or Dolby Pro Logic Surround decoding functions and works with a high performance digital signal processing (DSP) chip.

Dolby Headphone is effective not only for multichannel sources but also for stereo programs.

On the AV.C/11XV, it is possible to output signals encoded in the Dolby Headphone mode from the recording output terminal and record them on a separate recorder.

2) DTS Digital Surround

DTS Digital Surround (also called simply DTS) is a multichannel digital signal format developed by Digital Theater Systems, Inc. DTS offers the same “5.1” playback channels as Dolby Digital (front left, front right and center, surround left and surround right) as well as the stereo 2-channel mode. The signals for the different channels are fully independent, eliminating the risk of deterioration of sound quality due to interference between signals, crosstalk, etc.

DTS features a relatively higher bit rate as compared to Dolby Digital (1124 kbps for CDs and LDs, 1536 kbps for DVDs) so it operates with a relatively low compression rate. Because of this the amount of data is great, and when DTS playback is used in movie theaters, a separate CD-ROM synchronized with the film is played.

With LDs and DVDs, there is of course no need for an extra disc; the pictures and sound can be recorded simultaneously on the same disc, so the discs can be handled in the same way as discs with other formats. There are also music CDs recorded in DTS. These CDs include 5.1-channel surround signals (compared to two channels on current CDs). They do not include picture data, but they offer surround playback on CD players that are equipped with digital outputs (PCM type digital output required).

DTS surround track playback offers the same intricate, grand sound as in a movie theater, right in your own listening room.

DTS compatible media and playback methods

Marking indicating DTS compatibility:

- CD
- DVD

The following are general examples. Also refer to the player’s operating instructions.

1. DTS signals are recorded in the same way on CDs and LDs as PCM signals. Because of this, the un-decoded DTS signals are output as random “hissy” noise from the CD or LD player’s analog outputs. If this noise is played with the amplifier set at a very high volume, it may possibly cause damage to the speakers. To avoid this, be sure to switch the input mode to “AUTO” or “DTS”, before playing CDs or LDs recorded in DTS. Also, never switch the input mode to “ANALOG” or “PCM” during playback. This also applies true when playing CDs or LDs on a DVD player or LD/DVD compatible player.

For DVDs, the DTS signals are recorded in a special way so this problem does not occur.

2. The signals provided at the digital outputs of a CD or LD player may undergo some sort of internal signal processing (bit level adjustment, sampling frequency conversion, etc.). In this case the DTS-encoded signals may be processed erroneously, in which case they cannot be decoded by the AVC/A11XV, or may only produce noise. Before playing DTS signals for the first time, turn down the master volume to a low level, start playing the DTS disc, then check whether the DTS indicator on the AVC/A11XV (page 26) lights before turning up the master volume.

3. A DVD player with DTS-compatible digital output is required to play DTS DVDs. A DTS Digital Output logo is featured on the front panel of compatible DVD players. Recent DTV/DVD player models feature DTS-compatible digital output – consult the player’s owner’s manual for information on configuring the digital output for DTS playback of DTS-encoded DVDs.

Additional Information

- Dolby Headphone
- DTS
- DTS-ES
- DTS-ES Matrix

[Refer to page 21 for DTS-ES Matrix 6.1 information.]
Additional Information

When DTS-ES Discrete 6.1 or Matrix 6.1 encoded sources are decoded with a DTS-ES decoder, the format is automatically detected upon decoding and the optimum playing mode is selected. However, some Matrix 6.1 sou ces may be detected as having a 5.1-channel format, so the DTS-ES Matrix 6.1 mode must be set manually to play these sou ces. (For instructions on selecting the surround mode, see page 25.)

DTS Neo:6 surround mode includes another function, the DTS Neo:6 Cinema mode. This mode applies conventional 2-channel signals to the high precision digital matrix decoder used for DTS-ES Matrix 6.1, allowing the reconstruction of an immersive sound field. This mode is effective for playing sources recorded in conventional surround formats as well, because the in-phase component is assigned mainly to the surround channel (C) and the reversed phase component to the surround (SL, SR and SB channels).

DTS Neo:6 Music

This mode is suited mainly for playing music. The front channel (FL and FR) signals bypass the decoder and are played directly so there is no loss of sound quality, and the effect of the surround channels output from the center channel (C) and surround (SL, SR and SB) channels add a natural sense of expansion to the sound field.

DTS Neo:6 surround

This mode applies conventional 2-channel signals to the high precision digital matrix decoder used for DTS-ES Matrix 6.1 to achieve 6.1-channel surround playback. High precision input signal detection and matrix processing enable full band reproduction (frequency response of 20 Hz to 20 kHz or greater) for all 6.1 channels, and separation between the different channels is improved to the same level as that of a digital discrete system.$^{3}$

DTS Neo:6 surround includes two modes for selecting the optimum decoding for the signal source:

- DTS Neo:6 Cinema
  - This mode is optimum for playing movies. Decoding is performed with emphasis on separation performance to achieve the same atmosphere with 2-channel sources as with 6.1-channel sources.
  - This mode is effective for playing sources recorded in conventional surround formats as well, because the in-phase component is assigned mainly to the center channel (C) and the reversed phase component to the surround (SL, SR and SB channels).

- DTS Neo:6 Music
  - This mode is suited mainly for playing music. The front channel (FL and FR) signals bypass the decoder and are played directly so there is no loss of sound quality, and the effect of the surround channels output from the center channel (C) and surround (SL, SR and SB) channels add a natural sense of expansion to the sound field.

Additional Information

Additional Information

[1] The human ear changes our perception of a sound depending on the direction from which the sound is coming. In a movie theater, there is an array of surround speakers so that the surround information is all around you. In a home theater, only two speakers located to the side of your head are used. The Timbre Matching feature filters the information going to the surround speakers so that they more closely match the spatial characteristics of the sound coming from the front speakers. This ensures seamless pinning between the front and surround speakers.

[2] Before any home theater component can be THX Ultra2 certified, it must incorporate all the features above and also pass a rigorous series of quality and performance tests. Only then can a product feature the THX Ultra2 logo, which is your guarantee that the Home Theater products you purchase will give you superb performance for many years to come. THX Ultra2 requirements cover every aspect of the product, including power amplifier performance, pre-amplifier performance and operation, as well as hundreds of other parameters in both the digital and analog domain.

[3] In addition to improvements to the power amplifier with respect to previous THX Ultra standards, three surround modes have been added: the THX Ultra2 Cinema mode, THX Music Mode and THX Games Mode.

THX Ultra2 Cinema

THX Ultra2 Cinema plays 5.1 movies using all 8 speakers giving you the best possible movie watching experience. In this mode, THX processing blends the side surround speakers and back surround speakers providing the optimal mix of ambient and directional surround sounds.

DTS-ES (Matrix and 6.1 Discrete) and Dolby Digital Surround EX encoded soundtracks will be automatically detected in Ultra2 Cinema mode if the appropriate flag has been encoded. Some Dolby Digital Surround EX soundtracks are missing the digital flag that allows automatic switching. If you know that the movie that you are watching is encoded in Surround EX, you can manually select the THX Surround EX playback mode, otherwise THX Ultra2 Cinema mode will apply processing to provide optimum replay.
Additional Information

- THX Music Mode
  For the replay of 5.1 multichannel music the THX Music Mode should be selected. In this mode new THX processing is applied to the surround channels of all 5.1 encoded music sources such as an analog, PCM, DTS and Dolby Digital. This accurately places all game audio surround information, providing a full 360 degree playback environment. THX Games Mode is unique as it gives you a smooth transition of audio in all points of the surround field.

- THX Games Mode
  For the replay of stereo and multi-channel game audio the THX Games Mode should be selected. In this mode THX ASA processing is applied to the surround channels of all 5.1 and 2.0 encoded game sources such as analog, PCM, DTS and Dolby Digital. This accurately places all game audio surround information, providing a full 360 degree playback environment. THX Games Mode is unique as it gives you a smooth transition of audio in all points of the surround field.

- Advanced Speaker Array™ (ASA)
  ASA is a proprietary THX technology which processes the sound field to 2 side and 2 back surround speakers to provide the optimal surround sound experience. When you set up your home theater system using all eight speaker outputs Left, Center, Right, Surround Right, Surround Back Right, Surround Back Left, Surround Left and Subwoofer placing the two Surround Back speakers close together facing the front of the room as shown in the diagram will provide the largest sweet spot. If for practical reasons you have to place the Surround Back speakers apart, you will need to go THX Audio Set up screen and choose the setting that most closely corresponds to the speaker spacing, which will re-optimize the surround sound field.

- Boundary Gain Compensation
  If your chosen listening room layout (for practical or aesthetic reasons) results in the most of the listeners being close to the rear wall, the resulting bass level can be sufficiently reinforced by the boundary that the overall sound quality becomes "boomy". THX Ultra2 receivers and controllers contain the BGC (Boundary Gain Compensation) feature to provide an improved bass balance. BGC can be selected by choosing "THX Ultrade 2 Subwoofer–Yes" from the "Boundary Gain Compensation" section of the THX Audio setup menu.

- THX Surround EX
  In 1999, a new surround system was launched simultaneously with the release of the movie "Star Wars Episode I". "Dolby Digital Surround EX" is a new movie sound track that greatly enhances the sense of spatial expression and the positioning of the surround channel sound. The result is 360 degrees of movement and moving sound effects that seem to pass right over the listener’s head. This system was developed jointly by THX and Dobly Laboratories, fusing THX's idea of improving spatial expression and achieving a uniform 360 degree sound positioning with Dobly Laboratories' matrix encoding technology. Emphasis was placed on compatibility with the existing system Dolby Digital 5.1-channel, and the new "surround back (SB) channel" was added to achieve improvements over the conventional 5.1-channel system in terms of the positioning of the sound at the rear, the acoustic image of sound moving from the two sides to the back as well as sound moving from the front to the center rear with the multi surround speaker systems used in movie theaters, thereby enabling various types of surround sound.

The surround back channel signal is a matrix-encoded signal inserted into both the Dolby Digital SL (surround left) and SR (surround right) channels. Upon playback, the signals are decoded by a high precision digital matrix decoder within the Dolby Digital decoder into the SL, SR and SB channels and output as 6.1 channels of signals. With the AVCA-11XV, the signals further undergo Home THX Cinema processing to achieve a THX Surround EX system. Even without the proper environment for playing the SB channel, Dolby Digital EX Surround signals are 100% compatible with existing 5.1-channel playback systems, so they can be played as such. In this case, the SB channel signal is produced as a monaural signal from both the SL and SR channels, so none of the signal components are missing. The effects specific to THX Surround EX (the sense of spatial expression and the positioning of the sound) however, are only as good as conventional 5.1-channel surround systems.

Audyssey MultiEQ XT

There are several factors that can degrade the sound from even the best loudspeakers in a listening room. One of the most important is the interaction of sound from the loudspeakers with large surfaces such as walls, the floor, and the ceiling in the room. Even with careful loudspeaker placement and acoustical treatments, there are significant problems that are caused by room acoustics. These include reflections from nearby surfaces and standing waves that are created between large parallel surfaces in the room. In a home theater the situation is further complicated because there are several listening locations. The effects of room acoustics on the sound arriving at each person’s ears are very different and the result is a listening experience that is degraded in a different way for every person in the room. It is not uncommon to have variations in two adjacent seats that are as large as 10 dB, particularly in the frequency range below 250 Hz.

The solution to this problem is to apply room correction after precisely measuring how each loudspeaker interacts with the room. Because the room causes variations in the frequency response of the loudspeakers that are so large from seat to seat, it is important to measure each loudspeaker at several locations in the listening room. This should be done even if there is only one listener. Measurement at a single location is not representative of the acoustical problems in the room and will, in most cases, degrade overall performance.

Audyssey MultiEQ XT is the only technology that can achieve room correction for multiple listeners in a large listening area. It does so by combining the data collected at several points in the room from each loudspeaker and then applying correction that minimizes the acoustical effects of the room and is matched to the frequency resolution of human perception (known as psychoacoustics). Furthermore, MultiEQ XT correction is applied both in frequency and time domains and so there are no artifacts (such as smearing of sound or modal ringing) that are sometimes associated with traditional methods of room equalization.

In addition to correcting frequency response problems over a wide listening area, Audyssey MultiEQ XT provides a completely automated sound system set-up process. It identifies how many loudspeakers are connected to the amplifiers and whether they are full-range, satellites, or subwoofers. If there is a least one subwoofer connected, Audyssey MultiEQ XT determines the optimum crossover frequency between each satellite and the subwoofer(s). It automatically checks the polarity of each loudspeaker and alerts the user if they are not set so that all levels are equal.

The two diagrams below illustrate two examples of microphone placement for two types of seating arrangements. There are six measuring points shown in each case. Increasing the number of measuring points will provide a better sampling of the listening area and produce better results. The dotted line represents the area in which the room correction provided by Audyssey MultiEQ XT is optimal. The microphone must be placed at ear height at each location.

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HDCD® (High Definition Compatible Digital®)

HDCD is an encoding/decoding technology that greatly reduces the distortion that occurs upon digital recording while maintaining compatibility with the conventional CD format, thus expanding the dynamic range and achieving a high resolution. Conventional CDs and HDCD compatible CDs are identified automatically to select the optimum digital processing.

DENON LINK (DENON Digital Link)

High-grade LPCM 24-bit, 96-kHz, 6-channel or 24-bit, 192-kHz, 2-channel digital input is possible when the AVC-A11XV is connected via a shielded twisted pair (STP) cable to a Denon DVD player that supports Denon Digital Link. Since Denon Digital Link uses low-voltage differential signaling (LVDS), transfer capabilities of greater than 1.2 Gbps at a differential voltage of approximately 0.3Vpp are possible.

About IEEE1394

IEEE1394 is an international standard established by the Institute of Electrical and Electronics Engineers (IEEE) of the United States. The AVC-A11XV can be connected to an IEEE1394 compatible device using an IEEE1394 cable to enable digital transfer of multi-channel audio sources (DVD Audio discs, Super Audio CDs, etc.) with a single cable.

- The AVC-A11XV’s transfer format is compatible with A&M protocol.
- In addition to A&M protocol, IEEE1394 transfer formats also include MPEG-TS, DV, etc.
- The AVC-A11XV is compatible with a data transfer speed of up to 540 Mbps. The IEEE1394 maximum data transfer speeds are defined as approximately 100, 200 or 400 Mbps, expressed respectively as S100, S200 and S400. When S100 or S200 devices are connected, the actual transfer rate may be slower than 400 Mbps, depending on the device’s specifications. As far as possible, interconnect devices with the same maximum data transfer rate.

- The AVC-A11XV is compatible with the DTCP (Digital Transmission Content Protection) system.

Copyright protection system

In order to play the sound of DVD Audio discs, Super Audio CDs or DVDs (aside from freely copiable discs) connected via an IEEE1394 connection, both the player and receiver must be compatible with the DTCP (Digital Transmission Content Protection) system. DTCP is a copy protection technology that involves data encryption and authentication of the other device. Refer to your player’s operating instructions.

AL24 Plus (AL24 Processing Plus)

AL24 Processing for All Channels

DENON has further developed its proprietary AL24 Processing, an analog waveform reproduction technology, to support the 192-kHz sampling frequency of DVD-Audio. AL24 Processing Plus, thoroughly suppresses quantization noise associated with D/A conversion of LPCM signals to reproduce the low-noise signals with optimum clarity that will bring out all the delicate nuances of the music. Equipped for not only front left and right channels but also for the surround left and right, center and subwoofer channels.

HDMI

HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.
## Relationship between the video input signal and monitor output according to the VIDEO CONVERT MODE settings

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<th>Input signals</th>
<th>MONITOR OUT</th>
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</thead>
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<tr>
<td><strong>AUTO</strong></td>
<td>HDMI COMPONENT S-VIDEO VIDEO</td>
<td>HDMI COMPONENT S-VIDEO VIDEO</td>
</tr>
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<td>S-VIDEO VIDEO</td>
<td>S-VIDEO VIDEO</td>
</tr>
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<td>HDMI COMPONENT</td>
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<td></td>
<td>VIDEO</td>
<td>VIDEO</td>
</tr>
</tbody>
</table>

### Additional Information

**Additional Information**

1. **VIDEO CONVERT MODE** settings affect the relationship between the video input signal and monitor output as follows:
   - HDMI:
     - Auto: The monitor will automatically select the best output signal based on the input signal.
     - S-VIDEO:
     - VIDEO: The monitor will output the video signal directly.
   - COMPONENT:
     - The monitor will output the component video signal.
   - S-VIDEO:
     - The monitor will output the S-VIDEO signal.

2. **480p ~ 720p**:
   - The monitor supports 480p and 720p video signals.
   - The monitor will output the appropriate video signal based on the input signal.

3. **ENGLISH**:
   - The information is provided in English.

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Additional Information

1. **Additional Information**
   - Video input signals and monitor output according to the VIDEO CONVERT MODE settings.
   - HDMI, COMPONENT, S-VIDEO, VIDEO signals.
   - ENGLISH

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**ENGLISH**

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### VGA to HDMI Conversion Function

**Additional Information**

<table>
<thead>
<tr>
<th>VIDEO CONVERT Mode</th>
<th>S-VIDEO</th>
<th>MONITOR OUT</th>
<th>HDMI</th>
<th>COMPONENT</th>
<th>S-VIDEO</th>
<th>VIDEO</th>
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</thead>
<tbody>
<tr>
<td>HDMI</td>
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<tr>
<td>HDMI</td>
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<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

- **COMPONENT**: Signal input
- **No signal**: Not output
- **Signal input**: On screen display superimposed on video signal and output
- **COMPONENT**: S-Video signals are output when the analog to HDMI convert function is set to “OFF”.
- **COMPONENT**: HDMI signals are output when the analog to HDMI convert function is set to “OFF”.
- **COMPONENT**: The on screen display is displayed when the analog to HDMI convert function is set to “ON”.

**Notes**:
- The MAIN ZONE video conversion function is compatible with the following format: NTSC, PAL, SECAM, NTSC4.43, PAL-N, PAL-M and PAL-60.
- When SECAM signals of video input are up-converted, the signals are output in PAL format from the S-video connector.
- Signals up-converted to HDMI are output to the HDMI monitor with the resolution at which they are input. Note that resolutions of 1080p are not handled.
### Surround modes and parameters

<table>
<thead>
<tr>
<th>Surround Mode</th>
<th>Channel output</th>
<th>Signals and adjustability in the different modes</th>
<th>Parameter default values are shown in parentheses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FRONT L/R</td>
<td>CENTER</td>
<td>SURROUND L/R</td>
</tr>
<tr>
<td>PURE DIRECT, DIRECT</td>
<td>O</td>
<td>x</td>
<td>x</td>
</tr>
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<td>DSD DIRECT</td>
<td>O</td>
<td>x</td>
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<td>DSD MULTI DIRECT</td>
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<td>VIDEO GAME</td>
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<tr>
<td>MATRIX</td>
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</table>

- **O**: Signal / Adjustable
- **x**: No signal / Not adjustable
- **o**: Turned on or off by speaker configuration setting
- **E**: Able
- **X**: Unable

**NOTE1**: BASS +6 dB, TREBLE 0 dB
**NOTE2**: BASS +6 dB, TREBLE +4 dB
**NOTE3**: This parameter is available when the “MODE” is set to “CINEMA”.
**NOTE4**: This parameter is available when the “MODE” is set to “CINEMA” or “PL”.

---

**ENGLISH**
### Additional Information

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<tr>
<th>Surround Mode</th>
<th>DELAY TIME</th>
<th>SUBWOOFER ON/OFF</th>
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- ○: Signal / Adjustable
- X: No signal / Not adjustable
- ○ (30 msec): Adjustable
- ○ (130 msed): Not adjustable
- Turned on or off by speaker configuration setting
### Differences in Surround Mode Names Depending on the Input Signals

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<tr>
<th>Surround Mode</th>
<th>Note</th>
<th>Analog</th>
<th>Linear PDM</th>
<th>DTS ES DISCRETE (With Flag)</th>
<th>DTS ES MATRIX (W 2 Flag)</th>
<th>DTS IX</th>
<th>DTS AC3</th>
<th>DO BY D DOLBY EX (W 2 Flag)</th>
<th>DO BY D DOLBY EX (W 2 Inv Flag)</th>
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</table>

- **Notes:**
  - *1: With DSD
  - *2: With Flag
  - *3: With no Flag
  - *4: 2ch

**Additional Information:**

- **Differences in Surround Mode Names Depending on the Input Signals**

**Note:**

- Input signals:
  - 2ch
  - 3 4 5ch
  - 5.1ch
  - Multi Channel
  - DVD-Audio (multi ch)
  - DVD-Audio (2ch)
  - DVD-Audio (multi ch) 176.4/192
### Additional Information

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<th>Note</th>
<th>ANALOG</th>
<th>LINEAR / FCA</th>
<th>DTS ES DISCRE (W/ Flag)</th>
<th>DTS ES MTRK (W/ Flag)</th>
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<th>DTS NL/24</th>
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<th>DD BY D/DL DIGITAL (5.1ch)</th>
<th>DD BY D/DL DIGITAL (4.1ch)</th>
<th>DVD Audio (multi ch)</th>
<th>DVD-AUDIO (multi ch)</th>
<th>DVD-AUDIO (multi ch)</th>
<th>1/8 &amp; 1/32kHz</th>
<th>256 &amp; 512kHz</th>
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**NOTE:**
- 1: Mode selectable in initial status
- 2: Mode fixed when AFDM is ON
- 3: Selectable mode
- 4: Non-selectable mode

* This mode is not available when the Surround Back speaker setup is set to "None".
*2: This mode is not available when the Surround Back speaker setup is set to "1spkr" or "None".
*3: If the Surround Back speaker setup is set to "None", then "SCH STEREO" is displayed.
* 4: For input signals other than 2-channel signals, this mode cannot be selected when surround back speaker is set to "1 spkr" or "None".
Specifications

Audio section

• Power amplifier

  Rated output:
  - Front: 140 W + 140 W (8 Ω, 20 Hz – 20 kHz with 0.05 % T.H.D.)
  - 195 W + 195 W (6 Ω, 1 kHz with 0.7 % T.H.D.)
  - Center: 140 W (8 Ω, 20 Hz – 20 kHz with 0.05 % T.H.D.)
  - 195 W (6 Ω, 1 kHz with 0.7 % T.H.D.)
  - Surround (A, B): 140 W + 140 W (8 Ω, 20 Hz – 20 kHz with 0.05 % T.H.D.)
  - 195 W + 195 W (6 Ω, 1 kHz with 0.7 % T.H.D.)
  - Surround Back: 140 W + 140 W (8 Ω, 20 Hz – 20 kHz with 0.05 % T.H.D.)
  - 195 W + 195 W (6 Ω, 1 kHz with 0.7 % T.H.D.)

  Dynamic power:
  - 180 W x 2 ch (8 Ω)
  - 280 W x 2 ch (4 Ω)

  Output terminals:
  - Front, Center, Surround Back 6 ~ 16 Ω
  - Surround: A or B 6 ~ 16 Ω
  - A + B 8 ~ 16 Ω

• Analog

  Input sensitivity / input impedance:
  - 200 mV / 47 kΩ

  Frequency response:
  - 10 Hz – 100 kHz: +0, –3 dB (DIRECT mode)

  Distortion:
  - 0.005% (20 Hz – 20 kHz) (DIRECT mode)

  Rated output:
  - 1.2 V

• Digital

  D/A output:
  - Rated output: 2 V (at 0 dB playback)
  - Total harmonic distortion: 0.005 % (1 kHz, at 0 dB)
  - Dynamic range: 108 dB

  Digital input:
  - Format: Digital audio interface

• Phono equalizer (PHONO input — REC OUT)

  Input sensitivity:
  - 2.5 mV

  RIAA deviation:
  - ±1 dB (20 Hz to 20 kHz)

  S/N:
  - 74 dB (A weighting, with 5 mV input)

  Rated output / Maximum output:
  - 150 mV / 8 V

  Distortion factor:
  - 0.03% (1 kHz, 3 V)

Video section

• Standard video terminals

  Input / output level and impedance:
  - 1 Vp-p, 75 Ω

  Frequency response:
  - 5 Hz – 10 kHz — 20 Hz to 20 kHz

• S-video terminals

  Input / output level and impedance:
  - Y (brightness) signal — 1 Vp-p, 75 Ω
  - C (color) signal — 0.286 Vp-p, 75 Ω

  Frequency response:
  - 5 Hz – 10 MHz — 20 Hz to 20 kHz

• Color component video terminal

  Input / output level and impedance:
  - Y (brightness) signal — 1 Vp-p, 75 Ω
  - Pb/Cb signal — 0.7 Vp-p, 75 Ω
  - Pr/Cr signal — 0.7 Vp-p, 75 Ω

  Frequency response:
  - 5 Hz – 100 MHz — 20 Hz to 20 kHz

Remote control unit (RC-995)

• Batteries:
  - R03/AAA Type (four batteries)

• External dimensions:
  - 72 (W) x 238 (H) x 25.5 (D) mm (2-53/64” x 9-3/8” x 1-0”)

• Mass:
  - 225 g (Approx. 8 oz) (including batteries)

* For purposes of improvement, specifications and design are subject to change without notice.

General

• Power supply:
  - AC 230 V, 50 Hz

• Power consumption:
  - 610 W

• Maximum external dimensions:
  - 434 (W) x 178 (H) x 500 (D) mm (17-3/32” x 7-0” x 19-11/16”)

• Mass:
  - 23.6 kg (52 lbs)

Remote control unit (RC-995)

• Batteries:
  - R03/AAA Type (four batteries)

• External dimensions:
  - 72 (W) x 238 (H) x 25.5 (D) mm (2-53/64” x 9-3/8” x 1-0”)

• Mass:
  - 225 g (Approx. 8 oz) (including batteries)

* For purposes of improvement, specifications and design are subject to change without notice.