

# Instruction Manual

Multichannel Amplifier

# AVP1

 Nakamichi®

## IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heaters, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not override the safety features of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong, are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles and at the point that they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket or table specified by the manufacturer or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as when a power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
  - Refer to the manufacturer's operating instructions for power requirements. Be advised that different operating voltages may require the use of different line cords and/or attachment plugs.
  - Do not install the unit in an unventilated rack, or directly above heat-producing equipment such as power amplifiers. Observe the maximum ambient operating temperature listed in the product specifications.
  - Never attach audio power amplifier outputs directly to any of the unit's connectors.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and radiates radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio or television reception. This can be determined by turning the equipment off and on. The user is encouraged to try to correct the interference by one or more of the following measures:

- Re-orient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment to an outlet on a circuit different to the one that the receiver is connected to.
- Consult the dealer or an experienced radio/television technician for help.

**WARNING :**

*To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. Do not place objects containing liquid, such as vases, on this apparatus.*



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## About the AVP1

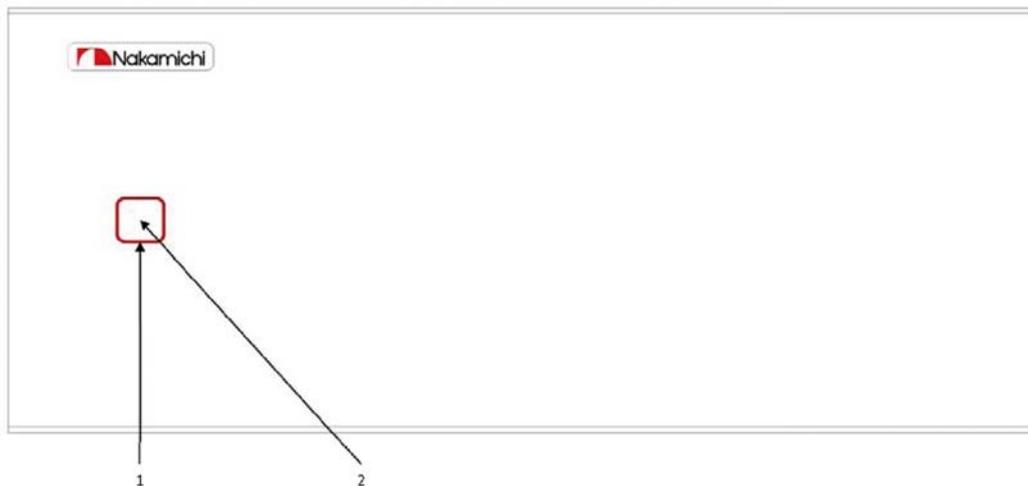
The Nakamichi AVP1 is a high-quality, high-power, multichannel amplifier that offers 7 channels of Class AB amplification with enough power headroom to fill your most demanding home theater installation. With 150Wrms power per channel (8 ohm load)† he AVP1 is the perfect partner to the AV1 Audio Video Processor.

## Highlights

1. Supports balanced and unbalanced input connection to the processor / pre-amplifier unit.
2. Supports trigger input for remote controlled power up and power down,
3. Supports specific, synchronized, dimmer level control when connected to AV1 Audio Video Processor,
4. Delivers 150Wrms with 8 ohm load and up to 250Wrms with 4 ohm load per channel,

## Product Description

### Front Panel



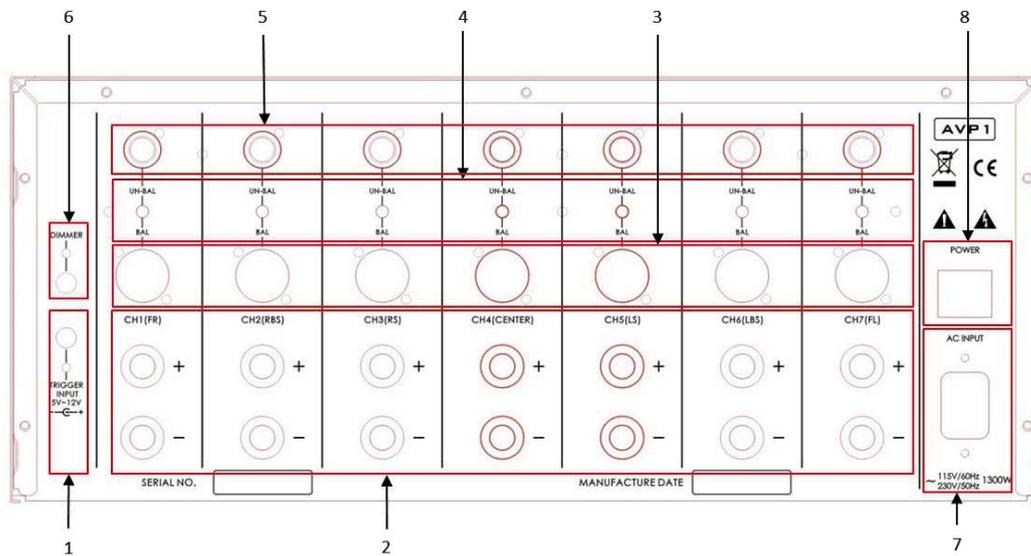
#### 1. STANDBY INDICATOR LIGHT

When the machine is in standby mode, the light will glow RED. When the machine is in operating mode it will glow WHITE. When the machine has detected a problem (for example: protection due to short on output) the light will BLINK.

#### 2. STANDBY BUTTON

This button is for powering up or putting AV1 into standby state.

## Back Panel



### 1. TRIGGER INPUT PORT

This input gets a 12V signal from a connected device such as AV1 to power ON AVP1.

### 2. 7 CH OUT (multichannel) SPEAKER OUTPUT

Front L/R, centre C, surround L/R, back surround L/R. All these multi-channel, audio output ports must connect to the system speakers. The correct polarity should be followed (+) and (-) as indicated on the unit. In principle, the speakers will show (+) with a RED indicator and (-) with a BLACK indicator.

### 3. 7.1CH IN (multichannel) BALANCED INPUT

Front L/R, centre C, surround L/R, back surround L/R. All these multi-channel, balanced, audio input ports can connect to the analogue, balanced, audio output ports of the multi-channel Audio Video Processor AV1.

### 4. AUDIO INPUT MODE SELECTION SWITCH

Depending on the type of connection selected to connect AVP1 to the Audio Video Processor AV1, these switches should be positioned accordingly. Position the switch to UN-BAL for UNBALANCED connection or to BAL for BALANCED connection.

### 5. 7.1CH IN (multi-channel) UNBALANCED INPUT

Front L/R, centre C, surround LS/RS, back surround LNS/RBS. All these multi-channel, audio input ports can connect to the analogue, audio output ports of the multichannel Audio Video Processor AV1.

#### 6. DIMMER PORT

Use this port to connect a jack cable between AV1 and AVP1 ports (or Nakamichi dimmer equipped products) so as to synchronize the lighting of each unit. AV1 is the master. The cable is included with AV1.

#### 7. AC INPUT

Use to connect to AC power.

#### 8. POWER SWITCH AND FUSE INSTALLATION

Control main power switch and replace the fuse if damaged.

## Installation

### Speaker Connections

#### 1) Connect to multi-channel processor

The AVP1 provides 2 methods for connecting to AV1 or to an other Audio Video Processor.

Choose one of the following:

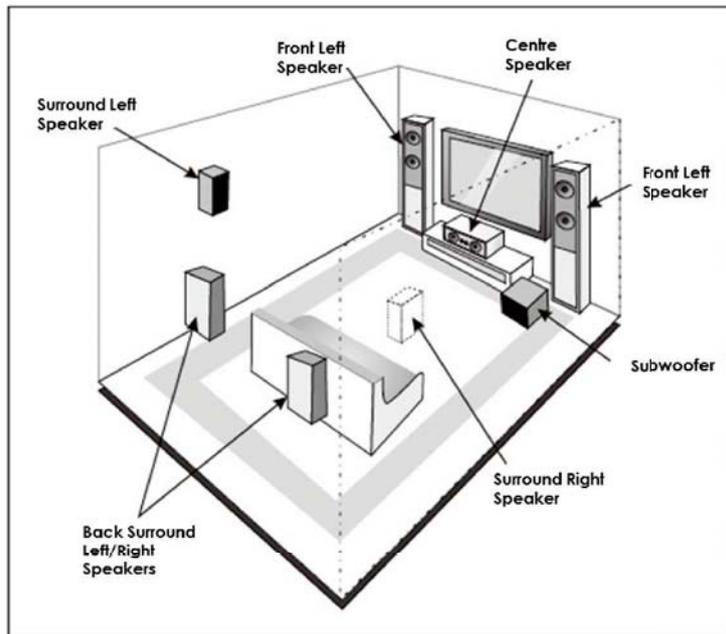
- a) Unbalanced connecting (refer to zone 5 of back panel picture)
- b) Balanced connecting (refer to zone 3 of back panel picture)

#### 2) Connect the speakers to the amplifier

- a) Unplug the power cable before connecting.
- b) Follow instructions attached to the speaker.
- c) Ensure that the negative pole and positive pole are correctly connected.
- d) Do not connect a speaker to multiple connectors.
- e) A lengthy power cable or a very narrow speaker cable may affect performance and should be avoided.
- f) Incorrectly connected speakers may cause a short-circuit, which in turn may damage the amplifier.
- g) If a metal core wire of the cable touches the rear panel it may damage the amplifier.
- h) Connecting more than one cable to each speaker connector may damage the amplifier.

### Speaker Room-setting Reference

The following picture shows where a 7.1 speaker configuration (7 speakers and one subwoofer) should be placed. User can adjust the position according to the number of speakers owned. If the user only has one speaker to be put in the rear, put it between the two speakers as shown in the picture.



1. Front Left/ Right Speaker.

FL/FR speakers are placed for sound effects. The role these speakers play in home theater is to offer a single position point in the sound field. The speakers should be placed facing the listener, at ear height. The FL and FR should be placed the same distance away from the TV. The direction of the speakers should be toward the inner side so as to form a triangle with the listener in the vertex.

2. Centre Speaker

Centre speaker adds to the sound effect of FL/FR, which provides a complete sound field. In a film, the centre speaker is used to play the dialogue. When installing, it should be placed near the display, facing the listener, at ear height or at the same height as FL/FR.

3. Subwoofer Speaker

Subwoofer speaker processes the bass of the sound field. The output bass volume and tone quality of the subwoofer speaker is related to the shape of the room and position used.

4. Surround Left/ Right Speaker

These speakers are used for precise sound positioning and to add realistic ambience. Position them at the sides of the listener or slightly above with a minimal deviation of about 60cm to 100cm from the top of the ear. The ideal scenario is to place them equidistant from the listeners' ear.

5. Back Surround Left/ Right Speaker

These speakers will emit sound when needed, either when decoding Dolby HD, DTS HD or when activating the DPLIIx Processing Mode. They expand the surround sound, providing listeners with

a more realistic scene. They should generally be placed behind the listener at 40 ~ 100cm above the ears. They are shared with front high Left/ Right speakers when this mode is selected on AV1.

### **Amplifier Control: Trigger Input**

The AVP1 is provided with a trigger input made of a 3.5mm connector jack (zone 1 on the back panel). This input should be connected (via the dedicated cable included in the AV1 box ) to the partnered AV1 multi-channel audio video processor or to another unit trigger output.

Max signal allowed is 12V/120mA.

### **Dimmer Link**

The AVP1 offers an advanced dimmer / brightness control for the front panel button backlighting and logo badge. In order to ensure synchronization of Nakamichi products (AV1 and AVP1 in this case), the AVP1 dimmer link input should be connected to the AV1 dimmer output. This input is a 3.5mm jack connector (zone 6 on the back panel).

## **Basic Operation**

Once all connections have been made, turn the main switch to the ON position. The power button will light up RED.

If the trigger input has been connected to AV1, the power up of the AVP1 will make the AVP1 a slave to AV1. There is nothing more to do on AVP1.

If the trigger input is not used, you must power ON the AVP1 manually by pressing the power button. After internal check procedures the LED will turn WHITE to indicate the correct ON mode function.

If the dimmer link input has been connected to AV1, the AVP1 light will synchronize automatically.

## Specifications

### Audio

Power Gain:	29 dB
Input Sensitivity:	1.1Vrms, 47kohm
Power:	250W with 4 ohm load, 2 channels driven, 170W with 4 ohm load, all channels driven, 150W with 8 ohm load, 2 channels driven, 110W with 8 ohm load, all channels driven,
SNR:	
Unbalanced Output:	≥107dB (Rated condition: A weighting, rated output power)
Balanced Output:	≥110dB (Rated condition: A weighting, rated output power)
THD+N:	≤0.06% (Rated condition: A weighting)
Frequency Response:	10-60KHz(+1/-3dB)

### Other

Power:	AC110 to 230V, 50/60HZ
Max Power Consumption:	< 1900W (8 ohm loads)
Standby Power:	< 0,5W
Packing size:	570mm× 616 mm×330 mm
N.W.:	32 kg
G.W.:	34.6 kg

Due to continuous product development, specifications may be subject to change without prior notification.

## Troubleshooting

**Problem:** No power; indicator light on the front panel of the AVP1 is not lit.

- Verify that your power source is operating correctly.
- Verify that the power switch on the rear panel of the machine is turned ON.

**Problem:** No audio.

- Ensure that the AV1 is not muted or that the volume is not turned all the way down.
- Check your interconnections, power amplifier and speakers.
- Check that the input mode selection switch is in the correct position.



## Dear Customer

Should you experience any technical difficulty in setting up or using your new product, please feel free to contact our dedicated customer service help desk.

**Tech Support Number:** 0860 009 596  
**Tech Support E-mail Address:** [help@nakamichi-uk.com](mailto:help@nakamichi-uk.com)

Wishing you many years of pure audio visual pleasure with your new Nakamichi equipment.