

AV-1700 DIGITAL AMPLIFIER

OWNERS MANUAL






www.visionaudiovisual.com/techaudio/av-1700

DECLARATION OF CONFORMITY


Where applicable Vision products are certified and comply with all known local regulations to a 'CB Certification' standard. Vision commits to ensure all products are fully compliant with all applicable certification standards for sale in the EU and other participating countries.

The product described in this owner manual is in compliance with RoHS (EU directive 2002/95/EC), and WEEE (EU directive 2002/96/EC) standards. This product should be returned to the place of purchase at the end of its useful life for recycling.


WARNINGS



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle, is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

All products are designed and imported into the EU by 'Vision' who is wholly owned by 'Azlan Logistics Ltd.', Registered in England Nr. 04625566 at Lion House, 4 Pioneer Business Park, Clifton Moor, York, YO30 4GH. WEEE Registration: GD0046SY



DECLARATION OF ORIGIN

All Vision products are made in the People's Republic of China (PRC).

USE ONLY DOMESTIC AC OUTLETS

Connecting the unit to an outlet supplying a higher voltage may create a fire hazard.

HANDLE THE POWER CORD WITH CARE

Do not disconnect the plug from the AC outlet by pulling the cord; always pull the plug itself. Pulling the cord may damage it. If you do not intend to use your unit for any considerable length of time, unplug the unit. Do not place furniture or other heavy objects on the cord, and try to avoid dropping heavy objects on it. Do not tie a knot in the power cord. Not only could the cord be damaged, but a short circuit could also be caused with a consequent fire hazard.

PLACE OF INSTALLATION

Avoid installing this product under the following conditions:

- Moist or humid places
- Places exposed to direct sunlight or close to heating equipment
- Extremely cold locations
- Places subject to excessive vibration or dust
- Poorly ventilated places

Do not expose this product to dripping or splashing. **DO NOT PLACE OBJECTS FILLED WITH LIQUIDS ON OR NEAR THIS PRODUCT!**

MOVING THE UNIT

Before moving the unit, be sure to pull out the power cord from the AC outlet and disconnect the interconnection cords with other units.

WARNING SIGNS

If you detect an abnormal smell or smoke, turn this product off immediately and unplug the power cord. Contact your reseller or Vision.

PACKAGING

Save all packing material. It is essential for shipping in the event the unit ever needs repair.

IF ORIGINAL PACKAGING IS NOT USED TO RETURN THE UNIT TO THE SERVICE CENTRE, DAMAGE IN TRANSIT WILL NOT BE COVERED BY WARRANTY.

WATTS

The most consistent standards for measuring watts are "Program Power" and "RMS" because these measure average sustained levels.

Amplifier power output changes depending on how many loudspeakers are connected. Professional manufacturers typically quote output based on 8 ohms. Less reputable manufacturers quote at 4 ohms to make their product seem more powerful.

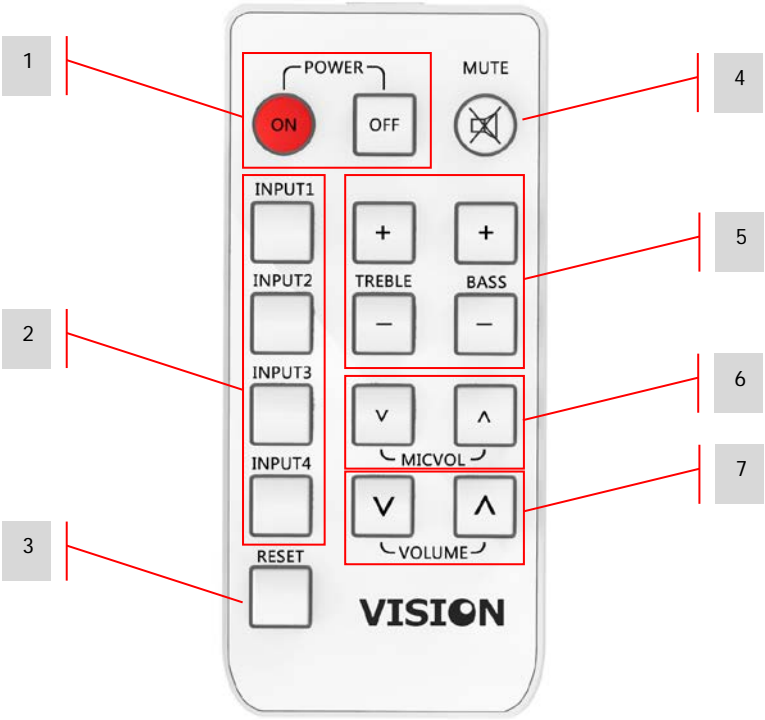
This amplifier has an output of:

2 x 30w (sometimes referred to as 60w) @ 8 ohms (two loudspeakers connected)

2 x 60w (sometimes referred to as 120w) @ 4 ohms (four loudspeakers connected)



REMOTE CONTROL



- 1. Power On and Off
- 2. Input Selection
- 3. Tone Reset
- 4. Mute
- 5. Tone Control
- 6. Microphone Input Gain
- 7. Line-level Input Volume

INSTALLATION

1. **CONNECT INPUTS AND OUTPUTS** Up to two pairs of loudspeakers can be connected. If speaker cable provided is not long enough use unshielded speaker cable with gauge of 0.75mm or higher.

NOTE 1: The warranty will be void if you use shielded cable

NOTE 2: This is a low-impedance digital amplifier. Do not connect '100v line' speakers (normally any speakers with "t" in their part code)

2. **CONNECT POWER** The amplifier will turn on when power is plugged in the first time.
3. **TURN POWER ON** Then select input and adjust volume as required.

Should it become overloaded it will shut down to protect itself. Return operating conditions to safe levels and restart amplifier.

MICROPHONE INPUT

1. The microphone input provides "Phantom Power" (24v) for condenser microphones such as lectern or boundary (PZM) microphones.

NOTE: Ensure the microphone volume is turned down when connecting microphones.

2. The microphone volume can be adjusted independently of the line-level inputs.
3. Keep microphone away from loudspeakers to avoid feedback.

RS-232 CODES

Table 1: Control Codes

| HEX Codes | On Remote | Function |
|-----------|-----------|--|
| A5 11 11 | ON | Bring out of standby |
| A5 15 15 | OFF | Put into standby |
| A5 05 05 | MUTE | Mute on/off (Standby activates after 30 minutes of mute) |
| A5 01 01 | INPUT1 | Input select 1 |
| A5 09 09 | INPUT2 | Input select 2 |
| A5 10 10 | INPUT3 | Input select 3 |
| A5 02 02 | INPUT4 | Input select 4 |
| A5 08 08 | TREBLE+ | Increase treble gain by +1dB |
| A5 0D 0D | TREBLE- | Decrease treble gain by -1dB |
| A5 0C 0C | BASS+ | Increase bass gain by +1dB |
| A5 12 12 | BASS- | Decrease bass gain by -1Db |
| A5 00 00 | RESET | Reset tone |
| A5 07 07 | MIC+ | Mic volume + (also cancels mute if active) |
| A5 0B 0B | MIC- | Mic volume - (also cancels mute if active) |
| A5 06 06 | VOL+ | Volume + (also cancels mute if active) |
| A5 04 04 | VOL- | Volume - (also cancels mute if active) |

Table 2: Direct Master Volume Codes

| HEX Codes | Function | Remark |
|-----------|------------------|------------|
| A5 30 30 | Set volume to 28 | VOLUME MAX |
| A5 31 31 | Set volume to 27 | |
| A5 32 32 | Set volume to 26 | |
| A5 33 33 | Set volume to 25 | |
| A5 34 34 | Set volume to 24 | |
| A5 35 35 | Set volume to 23 | |
| A5 36 36 | Set volume to 22 | |
| A5 37 37 | Set volume to 21 | |
| A5 38 38 | Set volume to 20 | |
| A5 39 39 | Set volume to 19 | |
| A5 3A 3A | Set volume to 18 | |
| A5 3B 3B | Set volume to 17 | |
| A5 3C 3C | Set volume to 16 | |
| A5 3D 3D | Set volume to 15 | |
| A5 3E 3E | Set volume to 14 | |
| A5 3F 3F | Set volume to 13 | |
| A5 40 40 | Set volume to 12 | |
| A5 41 41 | Set volume to 11 | |
| A5 42 42 | Set volume to 10 | |
| A5 43 43 | Set volume to 9 | |
| A5 44 44 | Set volume to 8 | |

| | | |
|----------|-----------------|------------|
| A5 45 45 | Set volume to 7 | |
| A5 46 46 | Set volume to 6 | |
| A5 47 47 | Set volume to 5 | |
| A5 48 48 | Set volume to 4 | |
| A5 49 49 | Set volume to 3 | |
| A5 4A 4A | Set volume to 2 | |
| A5 4B 4B | Set volume to 1 | |
| A5 4C 4C | Set volume to 0 | VOLUME MIN |

Table 3: Direct Master Volume Codes

| HEX Codes | Function | Remark |
|-----------|------------------|------------|
| A5 50 50 | Set volume To 0 | VOLUME MIN |
| A5 51 51 | Set volume to 1 | |
| A5 52 52 | Set volume to 2 | |
| A5 53 53 | Set volume To 3 | |
| A5 54 54 | Set volume To 4 | |
| A5 55 55 | Set volume To 5 | |
| A5 56 56 | Set volume To 6 | |
| A5 57 57 | Set volume To 7 | |
| A5 58 58 | Set volume To 8 | |
| A5 59 59 | Set volume To 9 | |
| A5 5A 5A | Set volume To 10 | |

| | | |
|----------|------------------|------------|
| A5 5B 5B | Set volume To 11 | |
| A5 5C 5C | Set volume To 12 | |
| A5 5D 5D | Set volume To 13 | |
| A5 5E 5E | Set volume To 14 | |
| A5 5F 5F | Set volume To 15 | |
| A5 60 60 | Set volume To 16 | |
| A5 61 61 | Set volume To 17 | |
| A5 62 62 | Set volume To 18 | |
| A5 63 63 | Set volume To 19 | |
| A5 64 64 | Set volume To 20 | |
| A5 65 65 | Set volume To 21 | |
| A5 66 66 | Set volume To 22 | |
| A5 67 67 | Set volume To 23 | |
| A5 68 68 | Set volume To 24 | |
| A5 69 69 | Set volume To 25 | |
| A5 6A 6A | Set volume To 26 | |
| A5 6B 6B | Set volume To 27 | |
| A5 6C 6C | Set volume To 28 | VOLUME MAX |

Table 4: Return Codes

| Hex Codes | Function | Range | | Remark | | |
|---------------------|-------------------|-------|--------|---|-----|---------|
| | | | | working | off | standby |
| MUTE | Mute status | 0 | 1 | 0 | 1 | 1 |
| BD3490FV_SELECT | Input select | 0 | 3 | 0= input 1, 1=input2, 2=input3, 3= input4 | | |
| BD3490FV_GAIN_GET | Get master volume | 1 | 28(1C) | 1~28, volume has 28 steps | | |
| BD3490FV_B_GAIN_GET | Get bass gain | 1 | 15(0F) | Bass gain has 15 steps | | |
| BD3490FV_T_GAIN_GET | Get treble gain | 1 | 15(0F) | Treble gain has 15 steps | | |
| PT2259_GAIN_GET | Get mic gain | 1 | 28(1C) | Mic gain has 28 steps | | |

Baud rate: 2400K

Stop Bit: 1

Delivery interval >80ms

No check digit

Send 0xA5 (hex code) as verification code

When a command is sent twice the amplifier returns the value of table 2

NOTE: Auto-Standby activates after 30 minutes of mute or no operation. Any adjustment turns standby off.

TROUBLESHOOTING

If your system is not operating properly, please refer to the following information. If the problem persists, disconnect from power and contact your AV reseller immediately.

| Problem | Correction |
|--------------------------------|---|
| No Sound | <ul style="list-style-type: none">• Turn off and check connections.• Check output level from sources. For example, laptop volume. |
| Microphone quiet | <ul style="list-style-type: none">• Some microphones have a gain switch. Consult the manual. |
| No Power light | <ul style="list-style-type: none">• Check power connections• Abnormal load. Turn power off, disconnect some speakers and test again |
| Distortion | <ul style="list-style-type: none">• Input gain too high• Volume too high• Loudspeakers may be worn or damaged |
| Feedback | <ul style="list-style-type: none">• Turn microphone down, or move away from speakers |
| Sound only coming out one side | <ul style="list-style-type: none">• Turn off and switch output connections. If the side changes the amplifier is okay – the fault is with the speakers.• Switch input connections and check input cabling. |

SPECIFICATIONS

AMPLIFIER DIMENSIONS: 220 x 154 x 44mm (wide x deep x tall) not including dials and connectors

AMPLIFIER WEIGHT: 1.2kg

COLOUR: White

INPUTS

4 x Stereo inputs (via 3 x phono connectors / 1 x 3.5mm minijack)

1 x Microphone inputs via balanced XLR

OUTPUTS

1 x Stereo Line-level output via phono connectors

TECHNICAL DETAILS

2 x 30w @ 8 ohms

Total Harmonic Distortion <2%

Frequency response (line in): 50Hz~18kHz

Signal to noise ratio (line in): 75dB

Rating input level/Impedance:

line in 440~500mV/47kohms

Power consumption (rating condition): <=125W

POWER SUPPLY: 100~240V Internal Power Supply

COMPLIANCES: RoHS, WEEE & CE compliant

ACCESSORIES INCLUDED

1 x 2-phono to 2-phono cable 2m long

1 x 3.5mm to 3.5mm minijack cable 2m long

2 x Unshielded Speaker Cable 5m long

1 x UK C7 figure-8 power cable 1.8 m long

1 x EU C7 figure-8 power cable 1.8 m long

1 x AU C7 figure-8 power cable 1.8 m long

1 x US C7 figure-8 power cable 1.8 m long

1 x Remote Control (Battery included: CR2025 3V Li-Mn)

WARRANTY

This product comes with a 2-year return to base warranty, effective from the date of purchase. This warranty applies only to the original purchaser and is not transferable. For the avoidance of doubt, this will be taken from the information held by the appointed national distributor at the point of sale. If the product is DOA (dead on arrival), you have 21 days from purchase date to notify the national distributor via your AV reseller. The liability of the manufacturer and its appointed service company is limited to the cost of repair and/or replacement of the faulty unit under warranty, except for death or injury (EU85/374/EEC). This warranty protects you against the following:

- Failure of any components, including the power supply.
- Damage when the product is first removed from its packaging if reported within 24 hours of purchase.

If you find you do have a problem with this product, you should contact the AV reseller you purchased this product from. The original purchaser is responsible for shipment of the product to the manufacturer's appointed service centre for repair.

We will endeavour to return repaired units within 5 working days, however this may not always be possible, in which case it will be returned as soon as practicably possible. In line with our WEEE commitments, the manufacturer endeavours to replace the faulty parts of the product rather than replacing the whole unit. This warranty does not protect this product against faults caused by abuse, misuse, incorrect installation, unstable or faulty power input, which might be caused by ignoring the guidelines set out in this manual.

LEGAL DISCLAIMER: Because we are committed to improving our products, the details above may change without prior warning. This User Manual is published without warranty and any improvements or changes to the User Manual necessitated by typographical errors, inaccuracies of current information, or improvements to programs and/or equipment, may be made at any time and without notice. Such changes will be incorporated into new editions of the User Manual.