

# ***CPRO-AVR1***

## Audio Video Receiver

### ***Operation Manual***



***CPRO-AVR1***

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## • **Safety Precautions**

Please read all instructions before attempting to unpack or install or operate this equipment, and before connecting the power supply. Please keep the following in mind as you unpack and install this equipment:

- Always follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Never spill liquid of any kind on or into this product.
- Never push an object of any kind into this product through module openings or empty slots, as you may damage parts.
- Do not attach the power supply cabling to building surfaces.
- Do not allow anything to rest on the power cabling or allow it to be abused by persons walking on it.
- To protect the equipment from overheating, do not block the slots and openings in the module housing that provide ventilation.

## • **Revision History**

<b>Version No</b>	<b>Date</b>	<b>Summary of Change</b>
<b>VR0</b>	<b>20110401</b>	<b>Preliminary Release</b>
<b>VR1</b>	<b>20120229</b>	<b>Power Adaptor</b>
<b>VR2</b>	<b>20131015</b>	<b>Applicaton Typo</b>

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## **1. Introduction**

The traditionally bulk and large amplifier is transforming into a new era with the newly formed light and full functions design. Also, the installation & operation steps are becoming much user friendly with the OSD and remote control. The Multichannel AV amplifier is made with high efficiency design and supports 3D display, these allows users to enjoy high quality true sound with no delay and real 3D display with true colors.

## **2. Applications**

- Home Theater
- Movie Theater
- Concert Room
- Dancing Room
- Opera House

## **3. Package Contents**

- Multi Channel AV Amplifier x 1
- Remote Control x 1
- Alkaline AAA battery x 2
- Operation Manual x 1
- 24V / 6.25A Power adaptor x 1
- Power Cord x 1

## **4. System Requirements**

Input source equipments such as DVD/Blue-Ray player, Set-Top-Box, VCR, or PS3 with connection cables and output display HD TV/monitor with all side of speakers up to 7.1 Channels.

## 5. Features

- Elegant compact design and streamline shape, excellent performance and decoration
- Hi Efficient 7x50W class D amplify >80% efficient
- Friendly OSD overlay with Video Display
- Easy to use big size graphic LCM display
- High performance Low THD & High quality audio
- Fast switching on all HDMI input ports in less than 1 second
- Support HDMI CEC bypass and HDCP repeater
- HDMI supports deep color 36/30/24-bit, HDCP repeater
- HDMI resolution 480i~1080p @24/50/60Hz, VGA~WUXGA
- HDMI output with xvYCC to RGB color space design
- Support IR remote control makes operation friendly using
- Support 3D signal and display
- Audio supports:
  - ✓ Audio Type: PCM 2.0, 5.1 & 7.1CH
  - ✓ Audio Sampling Rate up to 192KHz
  - ✓ Different audio sound mode (Jazz/music/Speech/Concert/Movie)
  - ✓ Tone Control (Bass/Treble +/- 10dB,
  - ✓ Speaker setting (Speaker size/Speaker Level/Speaker Distance)
  - ✓ Lip sync (0~100ms)
  - ✓ 7x Passive speaker 4ohm~8ohm
  - ✓ Supports Subwoofer output

## 6. Audio Input Specifications

1. Analog Input
  - (1). Max. Input Level: 2Vrms
  - (2). Input Impedance: 47k ohm
2. Coaxial Digital Input
  - (1). Max. Input Level: 0dBFS
  - (2) Input Impedance: 75ohm
3. HDMI Digital Input
  - (1). Max. Input Level: 0dBFS
  - (2). HDMI Differential Impedance: 100+/-10%ohm(TMDS)

## 7. Analog Audio Output Specification

1. Sub Woofer Output
  - (1). Max Output Level: 1.7Vrms
  - (2). Output Impedance: 620ohms
  - (3). SNR>85dB@0dbFs
  - (4). Sub Woofer -3dB, Frequency: 100Hz

## 8. Amplifier Performance

- (1). Analog Input sensitivity: 200mVrms
- (2). Digital Input sensitivity: -20dBFS
- (3). Frequency Response  $\pm 1$ dB@20Hz~20KHz
- (4). THD+N < 0.05% @ 1W 20Hz~20KHz
- (5). SNR > 120dB a-weighted
- (6). class D amplify efficient > 80%
- (7). Amplifier OUTPUT

Front:

50W+50W @4Ω < 1% THD+N @ 1KHz  
 25W+25W @8Ω < 1% THD+N @ 1KHz

Center

50W+50W @4Ω < 1% THD+N @ 1KHz  
 25W+25W @8Ω < 1% THD+N @ 1KHz

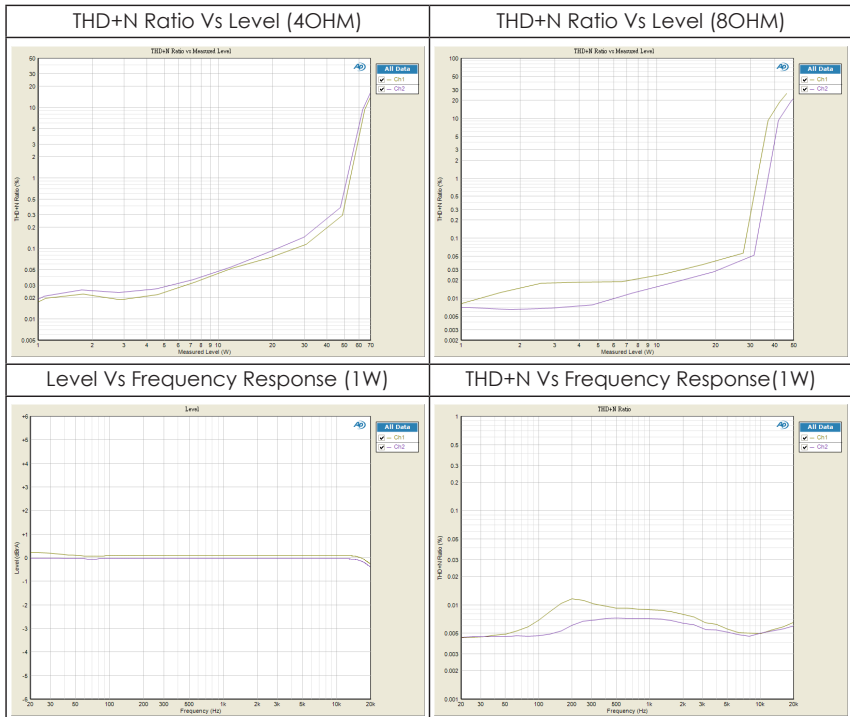
Surround

50W+50W @4Ω < 1% THD+N @ 1KHz  
 25W+25W @8Ω < 1% THD+N @ 1KHz

Surround Back

50W+50W @4Ω < 1% THD+N @ 1KHz  
 25W+25W @8Ω < 1% THD+N @ 1KHz

## Amplifier Performance



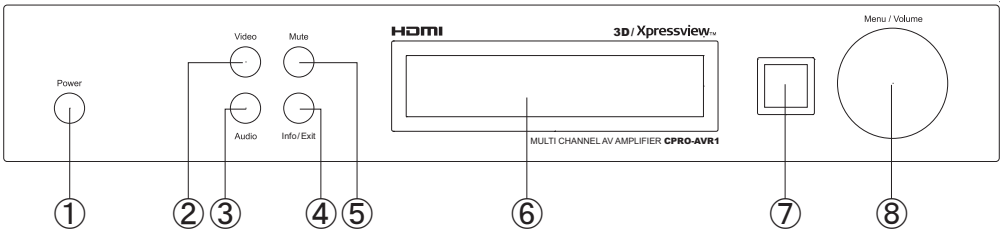
## 9. Specifications

Input ports	4 x HDMI, 1 x Coaxial, 1 x Analog 7.1 or 4x Analog Stereo
Output ports	1 x HDMI, 1 x Subwoofer, 1 x Service Jack, 7 x Speaker Jack
VIDEO Support Resolution	480i~1080p 50/60/24, VGA ~WUXGA
HDMI Cable IN/OUT	15M/15M
Audio Analog IN/OUT Impedance	47kohm/620 ohm
Audio Analog INPUT Max.	2Vrms
Audio Sensitivity	200mV
Audio TYPE	LPCM2.0, 5.1 & 7.1
Audio Sampling	32k~192kHz
Power Supply	24V/6.25A DC (US/EU standards, CE/FCC/UL certified)
Dimensions (mm)	280 (W) x 162(D) x 49 (H)
Chassis Material	Metal
Silkscreen Color	Silver
Operating Temperature	0°C ~ 40°C / 32°F ~ 104°F
Storage Temperature	-20°C ~ 60°C / -4°F ~ 140°F
Power Consumption	150W
Relative Humidity	20~90% RH(non-condensing)

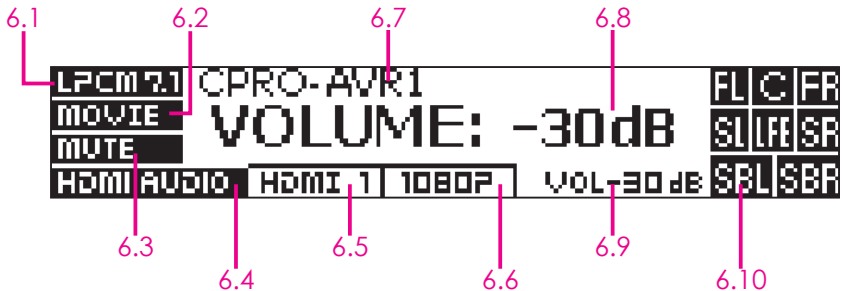


# 10. Operation Controls and Functions

## 10.1 Front Panel



- ① Power: Press this button to turn on or set the device to standby mode.
- ② Video: Press this button to select HDMI input from 1~4
- ③ Audio: Press this button to select audio input from analog RCA or digital coaxial input.
- ④ Info/Exit: Press this button to bring up the information screen and press it again to exit it.
- ⑤ Mute: Press this button to mute the audio sound.
- ⑥ LED monitor: This monitor will display the setting status.

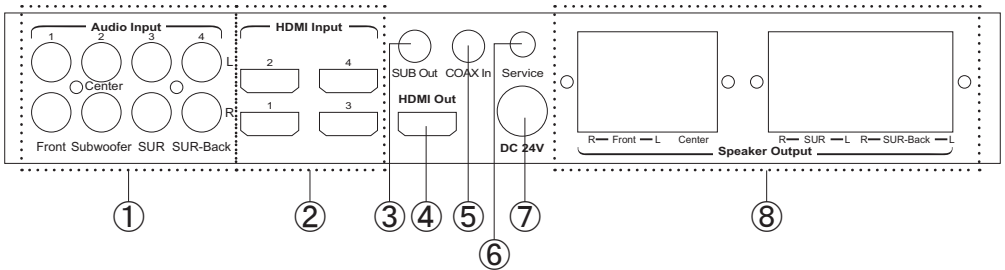


- 6.1 Audio Type: This LED will show output audio format setting from LPCM 2.0/ 5.1./7.1.
- 6.2 Sound Mode: This LED will show output sound format setting from Default/Concert/Speech/Movie/Music or Jazz.
- 6.3 MUTE: This LED shows the output audio is being muted, when the LED is off the output audio will output sound again.
- 6.4 Audio Input: This LED shows the audio input format setting from Digital HDMI 1~4/Digital Coaxial/analog 7.1CH or Analog Stereo.
- 6.5 Video Input: This LED shows the video input format setting from HDM 1~4.
- 6.6 Video Resolution This LED shows the output video resolution according to the display monitor or TV or the built-in EDID.
- 6.7 OSD Upper Layer: This LED shows the device's mode or the upper

level of the OSD selection.

- 6.8 OSD Lower Layer: This LED shows from the upper level to the lower level of the OSD selection but the default will always goes back to the main volume setting.
- 6.9 Volume: This LED shows the present volume setting.
- 6.10 Speaker: These LEDs shows the output speaker connection.
- ⑦ IR window: This is the IR receiver window which receive IR signal from the remote control included in the device package.
- ⑧ Menu/Volume wheel: Turn this wheel to turn up or down the volme or when selecting the OSD turn it to right or left to bring in and out the OSD sele

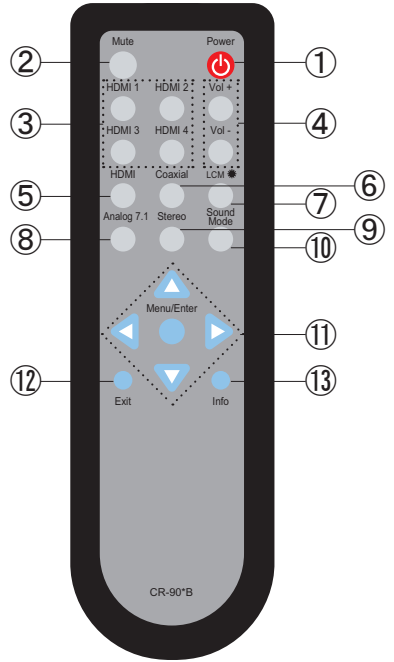
## 10.2 Rear Panel



- ① Analog Audio Input: These slots are for connecting the analog audio signal from input source equipment such as Set-top-Box or VCR with RCA cables.
- ② HDMI Input 1~4: These slots are for connecting the input source equipments such as DVD or Blue-Ray player for both video and audio signal input with HDMI cables.
- ③ SUB Out: This slot is to connect to the subwoofer speaker for subwoofer sound display.
- ④ HDMI Out: This slot is to connect with display equipment such as amplifier or HD TV/monitor for output signal display with HDMI cable.
- ⑤ COAX In: This slot is to connect with input source equipment such as DVD or Set-Top-Box for audio signal input with coaxial cable.
- ⑥ Service: This slot is reserved for manufacturing service only.
- ⑦ DC 24V: This slot is to connect with power adaptor and power cord included in the package and connect it to the AC wall outlet for power supply.
- ⑧ Speaker Output: These slots are for connecting the output speakers up to 7.1CH for audio output signal display with speaker's bare wire cable.

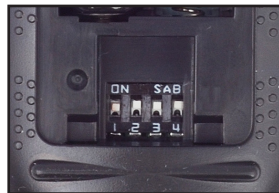
# 11. Remote Control

- ① Power: Press this key to turn on or set the device to standby mode.
- ② Mute: Press this key to mute the audio output sound, press it again to turn back the audio sound.
- ③ HDMI 1~4: Press these keys to select HDMI input source equipments from 1~4.
- ④ Vol +/-: Press these Keys to set the audio output volume up or down.
- ⑤ HDMI: Press this key to set the audio output volume from HDMI Input signal.
- ⑥ Coaxial: Press this key to set the audio output volume from COAX In signal.
- ⑦ LCM \*: Press this key to light up/down the LCM screen.
- ⑧ Analog 7.1: Press this key to set the audio output volume from analog Audio Input signal.
- ⑨ Stereo: Press this key to set the audio output to be 2Ch only from analog Audio Input signal.
- ⑩ Sound Mode: Press this key to select the sound mode from Jazz/Music/ Speech/Concert or Movie.
- ⑪ ▲▼◀▶ & Menu/Enter: Press the Menu key to bring up the OSD menu and press the up/down/right/left keys to select the OSD selection and once confirm the selection press Enter key.
- ⑫ Exit: Press this key to exit the OSD selection.
- ⑬ Info: Press this key to bring up the present setting.



## 11.1 Dip Switch

NO.	DATA
Channel 1	↓↓↓↓
Channel 2	↓↓↑↓
Channel 3	↓↑↓↓
Channel 4	↓↑↑↓



To return back to the factory default setting, press buttons Mute→HDMI 1 →HDMI 2→HDMI 3→HDMI 4 sequentially and switch the dip switch to Channel 1.

## 12. OSD Chart

CYP-CPRO-AVR1	1 <sup>st</sup> Tier	2 <sup>nd</sup> Tier	3 <sup>rd</sup> Tier	
VIDEO INPUT	HDMI1			
	HDMI2			
	HDMI3			
	HDMI4			
	RETURN			
AUDIO INPUT	DIGITAL HDMI			
	DIGITAL COAXIAL			
	ANALOG 7.1CH			
	ANALOG STEREO	STEREO 1		
		STEREO 2		
		STEREO 3		
		STEREO 4		
		RETURN		
	NOISE GREN.	FRONT L		
		FRONT R		
		CENTER		
		SUBWOOFER		
		SURROUND L		
		SURROUND R		
		SUR BACK L		
		SUR BACK R		
	RETURN			
SOUND MODE	DEFAULT MODE			
	CONCERT MODE			
	SPEECH MODE			
	MOVIE MODE			
	MUSIC MODE			
	JAZZ MODE			
	RETURN			
TONE CONTROL	BASS: 0dB	+/- 10dB		
	TREBLE: 0dB	+/- 10dB		
	RETURN			

SPK SETTING	SPK SIZE	FRONT L/R	(LARGE)
			SMALL
			RETURN
		CENTER	(SMALL)
			LARGE
			OFF
			RETURN
		SUBWOOKFER	(ON)
			OFF
			RETURN
		SURROUND L	(SMALL)
			LARGE
			OFF
			RETURN
		SURROUND R	(SMALL)
			LARGE
	OFF		
	RETURN		
	RETURN		
	SPK LEVEL	FRONT L	-10dB ~ (0) ~+10dB
		FRONT R	-10dB ~ (0) ~+10dB
		CENTER	-10dB ~ (0) ~+10dB
		SUBWOOFER	-10dB ~ (0) ~+10dB
		SURROUND L	-10dB ~ (0) ~+10dB
		SURROUND R	-10dB ~ (0) ~+10dB
		SUR BACK L	-10dB ~ (0) ~+10dB
		SUR BACK R	-10dB ~ (0) ~+10dB
		RETURN	
	SPK DISTANCE	FRONT L	0~(3)~10M
		FRONT R	0~(2)~10M
		CENTER	0~(3)~10M
		SUBWOOFER	0~(3)~10M
		SURROUND L	0~(2)~10M
SURROUND R		0~(3)~10M	
SUR BACK L		0~(2)~10M	
SUR BACK R		0~(2)~10M	
RETURN			
RETURN			

SYS. CONFIG	OSD TIMEOUT	5 SEC	
		10 SEC	
		20 SEC	
		RETURN	
	EDID SETTING	INT	
		TV	
		RETURN	
	LCM SETTING	BRIGHTNESS	0-10
		CONTRAST	0-10
		RETURN	
	LIP SYNC	(50ms)	0ms ~ 100ms
	IR CHANNEL	IR CHANNEL 1	
		IR CHANNEL 2	
		IR CHANNEL 3	
IR CHANNEL 4			
RETURN			
RETURN			
INFORMATION	HDMI INPUT		
	Resolution		
	AUDIO INPUT		
	AUDIO TYPE		
	SOUND MODE		
	SKP SETTING		
	OSD TIMEOUT		
	F/W Version		

**Note:** The value is the default setting

#### System Config

**EDID Setting:** The device has built-in EDID allowing source to output signal for display or users may set the EDID to TV to allow the source to read display's EDID and send the output signal accordingly.

**Lip Sync:** This function allows all output speakers with the same delay.

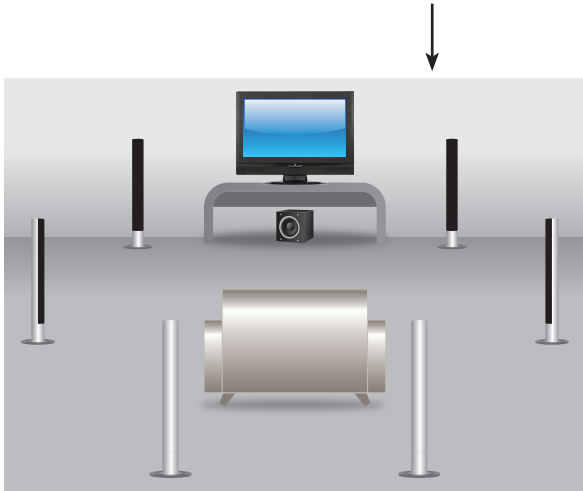
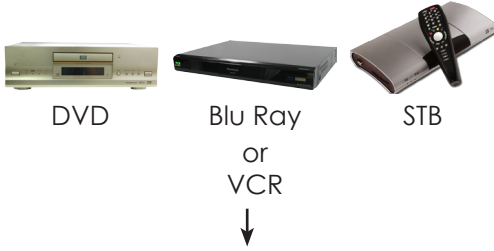
## Speaker Setting

**Speaker Size:** This function allows users to set each and every speaker's output sound from OFF/ON/Small to Large base on the main volume setting. This setting favor user when in setting the speaker position and the desire favor sound part.

**Speaker Level:** This function allows users with add or less each and every speaker's output level base on main volume sound.

**Speaker Distance:** This function allows users to set each and every speaker's distance starting from the audience's position and each meter is about 3ms delay.

### 13. Connection and Installation







# Acronyms

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<b>Acronym</b>	<b>Complete Term</b>
CEC	Consumer Electronics Control
COAX	Coaxial
EDID	Extended Display Identification Data
HDCP	High-bandwidth Digital content protection
HDMI	High-Definition Multimedia Interface
LCM	Liquid Crystal Monitor
OSD	On-Screen Display
SUB	Subwoofer







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