



# cMAV-120 mixer-amplifier

# **USER MANUAL**







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### Introduction



#### Thank you for choosing an AVuno Product

We are sure that it will give you many years of trouble free enjoyment. However to ensure the finest possible performance it is recommended that you read this manual before use and keep it in a safe place for future reference.

The **cMAV-120** is a high quality 120 Watt Mixer Amplifier designed primarily for use in commercial applications.

There are 4 Microphone inputs with input gain controls on the rear, and front panel volume controls.

The Line section provides for 5 separate inputs - 4 on the rear panel via RCA phono connectors, and an additional input on the front panel via 3.5mm jack plug, designed to facilitate music players.

Outputs are via multipin euroconnector on the back panel. Connections are provided for 4 Ohm, and 50/70/100V line loads.

Connections are also provided for recording, plug in of processing equipment between Pre-amp and Power amp sections, and output to slave amplifier.

# Safety Information



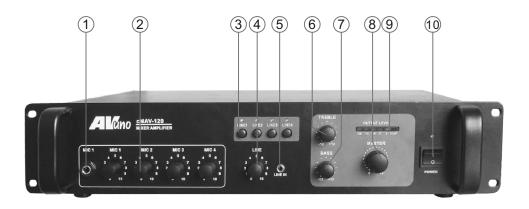
#### **SAFETY INFORMATION**

- Read the manual before use and retain for future reference
- Heed any warnings on the appliance and in the instruction manual.
- Following the safety instructions and operating guidelines as laid out in the manual.
- Do not use this apparatus near water and keep liquids and beverages out of reach in case of spillage.
- Unplug from the wall before cleaning and clean only with a soft dry cloth.
- Keep well ventilated and <u>do not cover or block ventilation</u> <u>openings.</u>
- Do not place near heat sources or other equipment that may produce heat.
- Protect the power cord from accidental damage. Make sure it cannot be pinched, knotted or walked upon.
- Unplug during lightning storms or when unused for extended periods of time.
- Refer all servicing to qualified personnel. There are no user serviceable parts. Should a problem occur unplug and call an engineer for service assistance.
- If you transfer the amplifier from a cold to a warm place, allow it to reach room temperature before switching on as there may be a risk of condensation.



#### **FRONT PANEL**

- Front Panel Microphone Input.
   6.35mm Jack Socket for Microphone Input. This input is on Mic 1, and is in parallel with the Mic 1 Euro connector on the back panel.
- 2. Microphone Volume Controls
  Adjusts volume levels for Microphones 1- 4. If Microphones are not connected the relevant volume controls should be set to Zero, in order to prevent noise.
- 3. Line Input Selector
  Allows selection of the Line input to be amplified.
- 4. Line Input Volume Control Sets volume level of the Line input selected at (3) above.





#### FRONT PANEL contd.

#### 5. Line Input Socket

This socket is provided to facilitate personal music devices (iPod, Mp3 Players etc). It uses a stereo 3.5mm Jack Plug. When connected this input takes priority over all other Line inputs.

#### 6. Treble Control

Adjust to set Treble as required.

#### 7. Bass Control

Adjust to set Bass as required.

#### 8. Master Volume

Overall Output volume is controlled by this knob. Avoid driving amplifier into distortion.

#### 9. Signal Level Display

This indicates the output signal level of the amplifier, which should be kept below the 0db level (Yellow indicator) for normal operation. Do not allow the amplifier to operate at Clip level (Red indicator) operation.

#### 10. Power Switch

Press switch to turn power on/off. The Blue indicator illuminates when power is switched on.



#### **BACK PANEL**

#### 1. Mains Power Socket and Fuseholder

Connect to mains power using standard IEC power lead. Fuseholder can be opened using a small screwdriver. Replace with a 2.5 Amp time delay fuse (2.5AT).

#### 2. 24V DC Supply

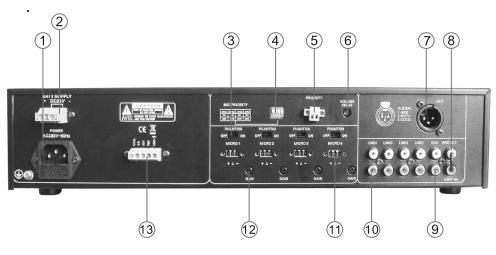
This connector is used to power the amplifier from a 24V battery or DC power supply. Please follow polarity as indicated.

#### 3. Microphone Phantom Power Switches

Provides Phantom power to Microphone inputs if required.

#### 4. Microphone Priority Dip Switches

All Microphones have access to the priority facility. Moving a dip switch to the 'on' position gives the selected microphone priority over line inputs.



#### **BACK PANEL contd.**

- Microphone Priority Connector
   Connecting these contacts activates the Chime.
- 6. Chime Volume Control
  When the priority contacts are closed a chime is activated, and the chime volume is set by this control. Turn control to Zero if no chime required.
- 7. Pre-Amp Output XLR Connector
  Provides Pre-amp output signal (controlled by Master Output section) to drive additional power amplifiers if required.
- 8. Pre-Amp Out / Power Amp In Connectors
  Remove the link to facilitate the addition of processing equipment between pre-amp and power amplifier.
- Record Output
   Provides output signal for recording devices.
- 10. Line 1- 4 Input RCA / Phono Connectors Standard RCA / Phone Sockets to connect line level inputs to Lines 1- 4.
- Microphone Input Connectors3 Pin Euro connector for connecting Microphones. Ensure polarity is followed as shown on panel.
- **Microphone Input Level Controls**Used to adjust the input signal levels for each Microphone.
- 13. Speaker Output Multipin Connector
  Connect Speakers here, ensuring that the correct pins are used, depending on the load type (4 Ohm, 50/70/100V).

# **Troubleshooting**



#### **NO POWER**

Check the fuse in the power socket on the rear of the amplifier. Also check the fuse in the plug of the power cord.

#### **NO AUDIO**

Make sure that the unit is powered on, and speakers are attached. Check that the RCA bridges between the PRE OUT and AMP IN sockets are inserted (if processors are not attached).

#### NO MICROPHONE SIGNAL

Ensure that the microphone lead is properly connected, following the pin configuration as shown below the microphone connector. If the microphone requires phantom power check that the appropriate switch is in the 'on' position

#### HISS OR HUM ON OUTPUT

Check the microphone volume controls on the front pane. If there is no microphone connected and the control is in the full on position this may cause some noise. Turn the unused microphone control to the zero position. This may also occur with the Line volume control if there are no line inputs connected.

# **Specifications**



#### Microphone Inputs

Frequency response: 100 Hz ~ 10kHz ±1.5 dB

25V (1kHz) <1.2% Distortion (THD): 2mV

Sensitivity

-52dB ~ -30dB Gain range: Input impedance: 600 Ohm Type: Balanced Noise (S/N Ratio): >98dB

#### **Line Inputs**

Frequency response: 100 Hz ~ 10kHz ±1 dB Distortion (THD) 25V (1kHz) <1% Sensitivity: 200mV -52dB~ -30dB Gain range: 1k Ohm Input impedance: >105dB Noise (S/N Ratio):

#### **Outputs:**

Output power @ 4 Ohm 120 Watts Output power @ 50/70/100V 120 Watts

#### General:

S/N amplifier: better than 95dB Distortion: <0,5% @ -6dB, 1kHz

Equalisation - Bass: ±12 dB **Equalisation - Treble** ±12 dB

Record Output: +5dB Microphone Phantom Power: 15V DC

230V/50Hz or 24V DC Power requirements:

Power consumption: 220W Fuse rating: T2.5A

#### **Dimensions and Weight:**

Dimensions (mm): 535 x 375 x 155 mm

9.5Kg Weight (kg):



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