

AP[®]

APMN-600

600W

APMN-1300

1000W

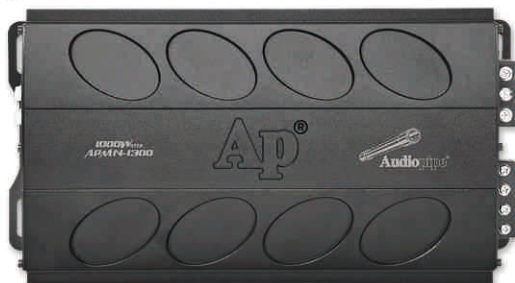
APMN-1500

1500W

APMN-2000

2000W

Mini Design Class D Mosfet Amplifier



With Remote Bass Knob

Owner's Manual



INTRODUCTION

Congratulations!

Thank you for purchasing this Audiopipe amplifier for your car audio system. Now you own an amplifier of uncompromising design and engineering incorporating the latest advanced circuit technology. You will discover soon that our amplifiers display optimum sound with high quality and provide reliable performance.

Audiopipe amplifiers are adopted by advanced craftsmanship which use the highest quality components and strict quality control system. In order to provide you the best performance. We recommend you to contact an authorized Audiopipe Dealer to do the installation.

Please read this manual thoroughly to ensure that you can get the maximum benefit from this new amplifier. When you install it properly, this unit will provide you years of trouble-free performance.

- 1 Ohm load stable.
- Double side FR-4 PCB, high quality SMD components.
- Full MOSFET circuit design.
- Adjustable subsonic filter.
- Adjustable low pass filter .
- Adjustable bass boost frequency and level.
- Overload, short circuit, thermal, low voltage protection.
- Easy bridging operation.
- Remote bass level control (with remote bass knob).

WARRANTY

Audiopipe warrants this amplifier for one year from date of purchase against all manufacturing defects only.

Warranty does not include physical damage or electrical abuse from being over-driven or short circuit from speaker failure.

Amplifier must be installed by an authorized Audiopipe dealer or there is no warranty.

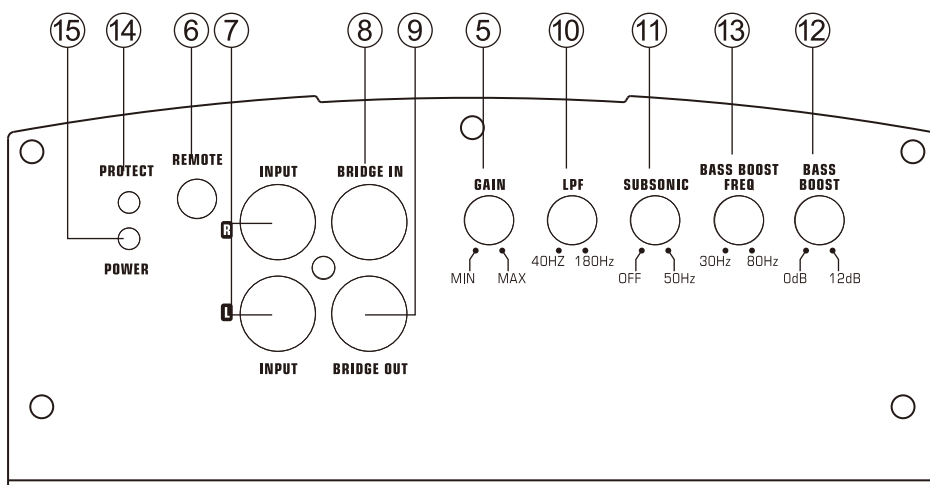
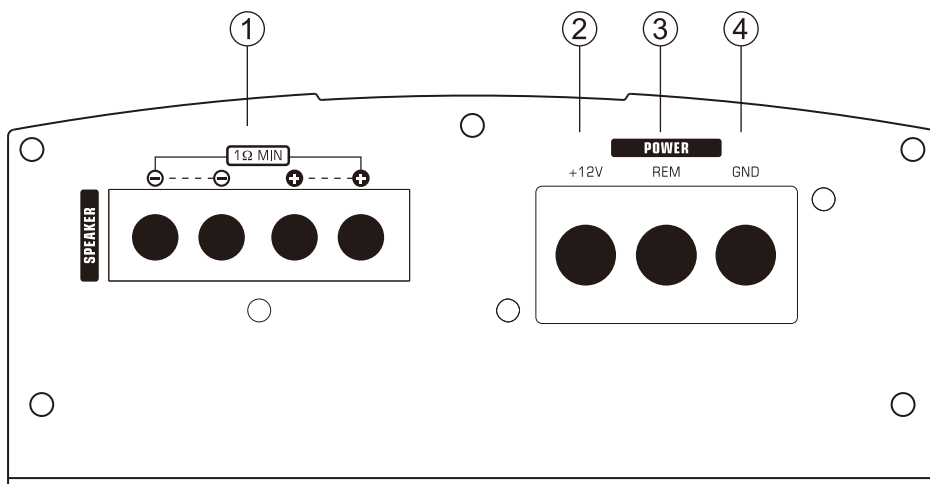
Amplifier must be returned to Audiopipe freight pre-paid, Audiopipe will pay return freight to authorized dealer.

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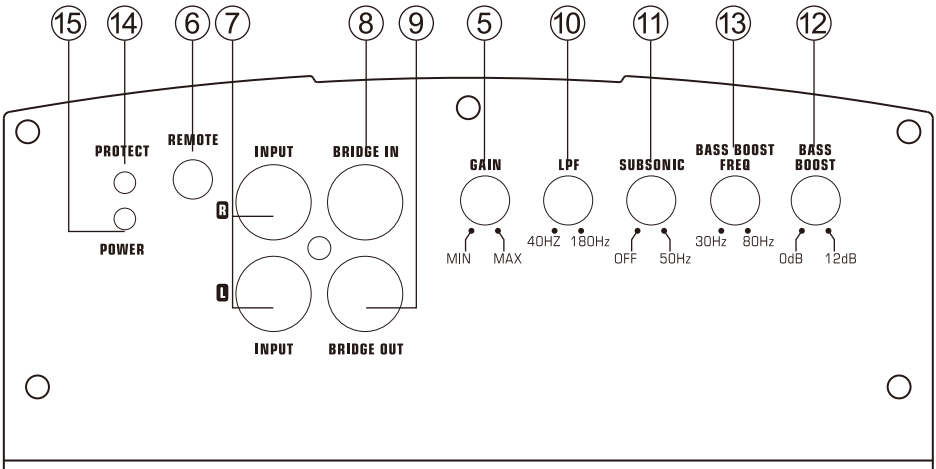
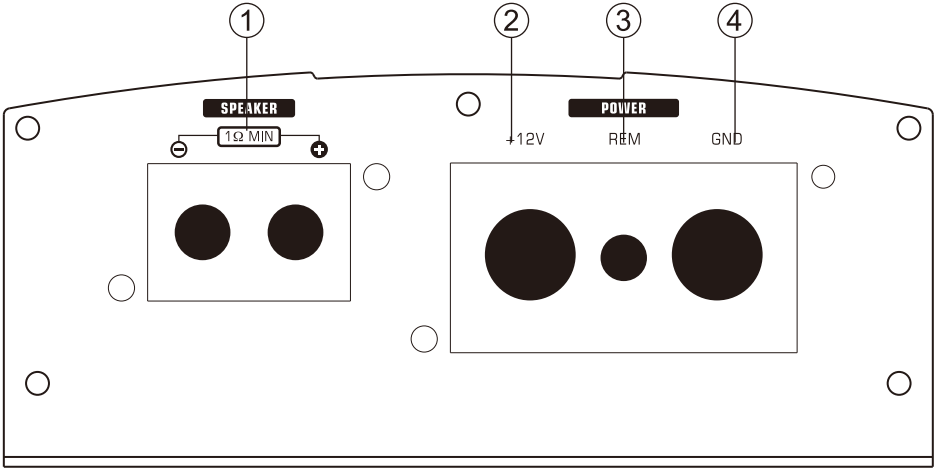
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AMPLIFIER FUNCTIONS

APMN-600/APMN-1300/APMN-1500



APMN-2000



- ① **Speaker connection**

Never connect the speaker cables with the chassis ground. This may destroy your amplifier. Check that your speakers are connected correctly which means plus to plus and minus to minus.
We recommend speaker cable from 2.25 mm to up. The connection ways are shown in the attachment.
- ② **BATT+**

Battery + terminal. The +12 Volt power cable must be connected with a fuse in line near the battery + terminal. Please see the table of cable and fuse selection.
- ③ **REM**

Remote terminal. The remote cable must be connected with the radio remote terminal so that the amplifier will switch on and off automatically with the radio.
If there are two or more amplifiers installed together, it might be necessary to add an additional relay. Please consult your dealer.
- ④ **GND**

Chassis ground terminal. The chassis ground cable must be connected very tight on a nearby massive and electric conductive place.
- ⑤ **Gain**

Gain control regulates the sensitivity of the amplifier to match the signal output voltage of your source unit. The gain control is not a volume adjustment. Use high quality CD music and increase the volume of your source unit to 75% of its minimum volume, set the gain at the minimum and then increase gain slowly (clockwise). Stop at the first sign of distortion, then lower the gain a little (counter clockwise) to achieve clear undistorted music at the maximum level.
- ⑥ **Remote Bass Level Control**

When using the remote bass level control you can adjust volume in the driver seat.
- ⑦ **RCA audio input**

These RCA audio inputs connect with your radio RCA outputs. Please use high quality RCA cables. Keep these cables as short as possible. To avoid electrical disturbances from your car electronics, route RCA cables away from other current carrying cables in the car. If your radio has only speaker output, you must use a HIGH LOW LEVEL adaptor.
- ⑧ **Bridge in**

This RCA jack receives signal from the master amplifier when this amplifier is bridged as slave. DO NOT use input jacks when the amplifier is working as slave. All the functions will be adjusted by the master amplifier.
- ⑨ **Bridge out**

This RCA output sends out bridged signal to another same Class D amplifier in bridging configuration.

⑩ **Low Pass Filter**

Filter out high frequency that the woofer cannot play. Adjust this knob to match the woofer's frequency response.

⑪ **SUBSONIC**

Filter out unwanted too low frequency. This function will increase the power handing of your woofer's. It can adjust the frequency filter from, 10Hz (OFF) to 50Hz.

⑫ **Bass boost Level**

Adjust the boosted frequency from 0 ~ 12dB, APMN-600/APMN-1300/APMN-1500's boosted frequency is adjustable.

⑬ **Bass boost Frequency**

Adjust the boosted center frequency. The frequency can be adjusted from 30Hz to 80Hz, use combine with bass boost level adjusting.

⑭ **Protect**

Protection circuit indicator LED.

⑮ **Power**

Power indicator LED.

INSTALLATION

We recommend you have the installation done by an Authorized Audiopipe Dealer. Required power, ground wire and proper external fuse as below:

Model	Fuse	Wire
APMN-600	50 AMP	4 Gauge
APMN-1300	80 AMP	4 Gauge
APMN-1500	100 AMP	2 to 4 Gauge
APMN-2000	150 AMP	0 to 2 Gauge

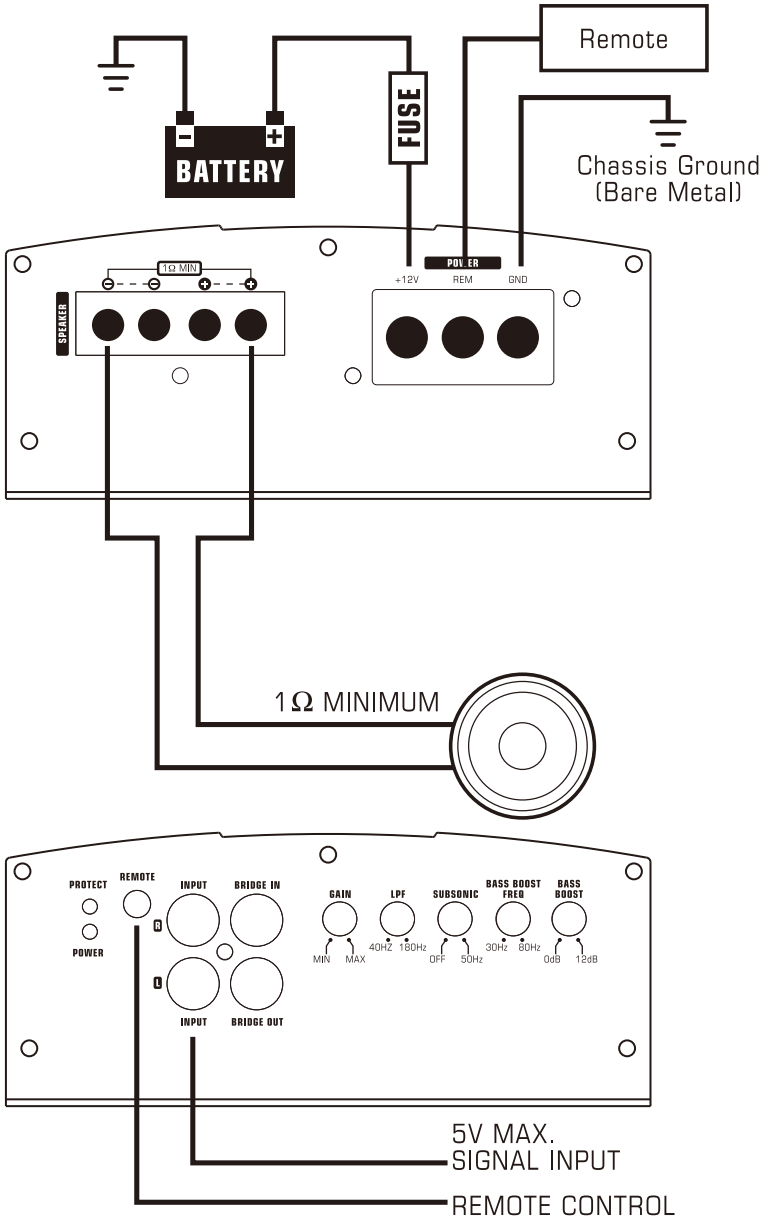
We recommend the fuse should be installed no more than 12 inches from the battery. The ground wire should be connected directly with the chassis of your vehicle which should be metal to metal ground point connection. The amplifier must be mounted securely at a solid, dry and low vibration surface in the trunk or passenger area. Mount the amplifier in an open air area to insure proper heat dissipation. Mount the amplifier in a place where can access easily to set the input controllers. Install all amplifier cables as far as possible from car electrical cables such as the car ignition cable..

IMPORTANT:

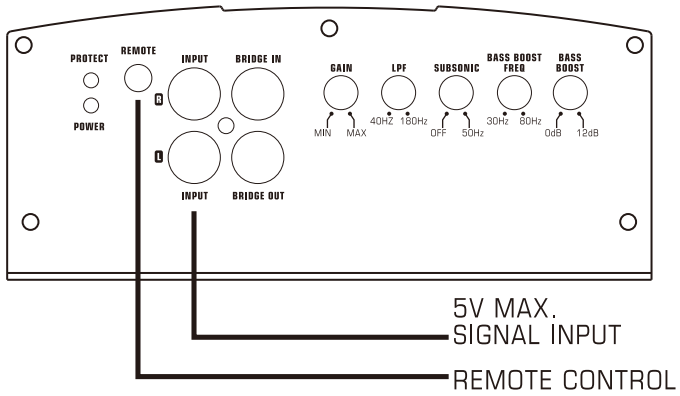
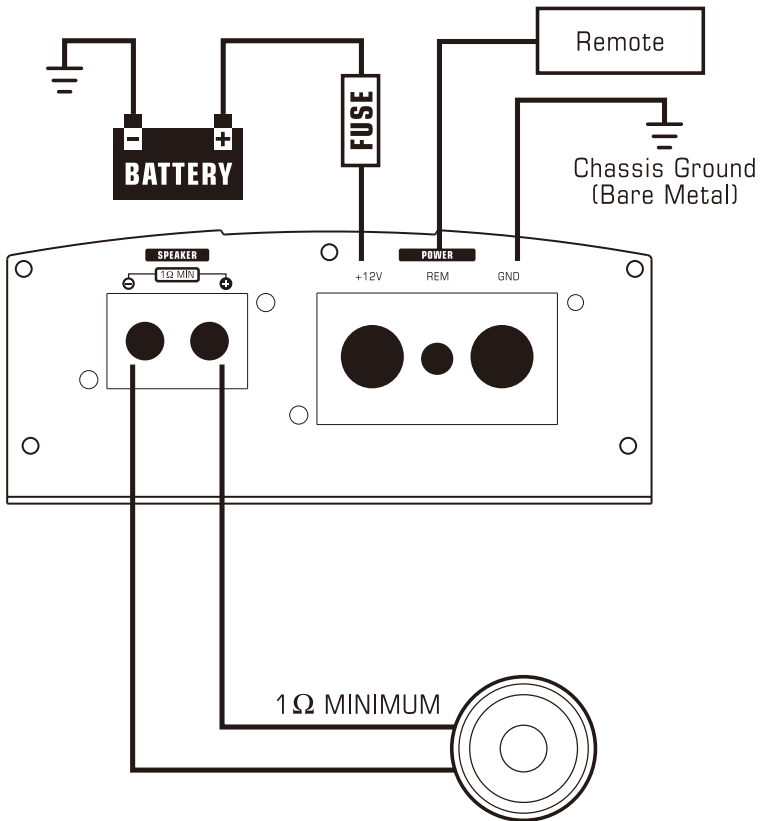
- When bridging two amplifiers please refer the bridging wiring chart.
- When bridging two amplifiers you should use same model amplifiers.
- Please make sure the negative speaker terminal of two amplifiers are connected by the same gauge cables as the positive terminal being used.
- DO NOT connect any signal cables with the input RCA jacks when bridged as slave unit.
- The LPF, Input level and remote functions will be disabled on slave amplifier when bridged.
- All the functions of the slave amplifier will be adjusted by the master amplifier.

WIRING AND APPLICATIONS

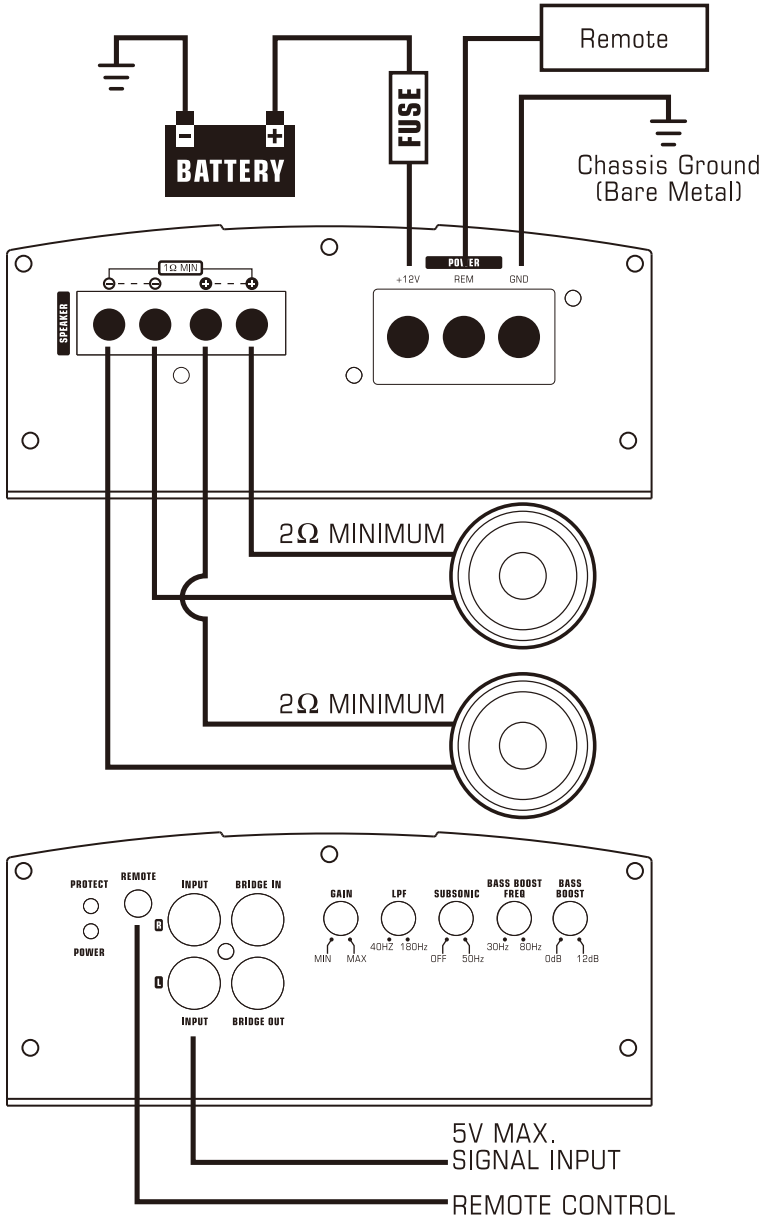
**ONE SPEAKER MONO
APMN-600/APMN-1300/APMN-1500**



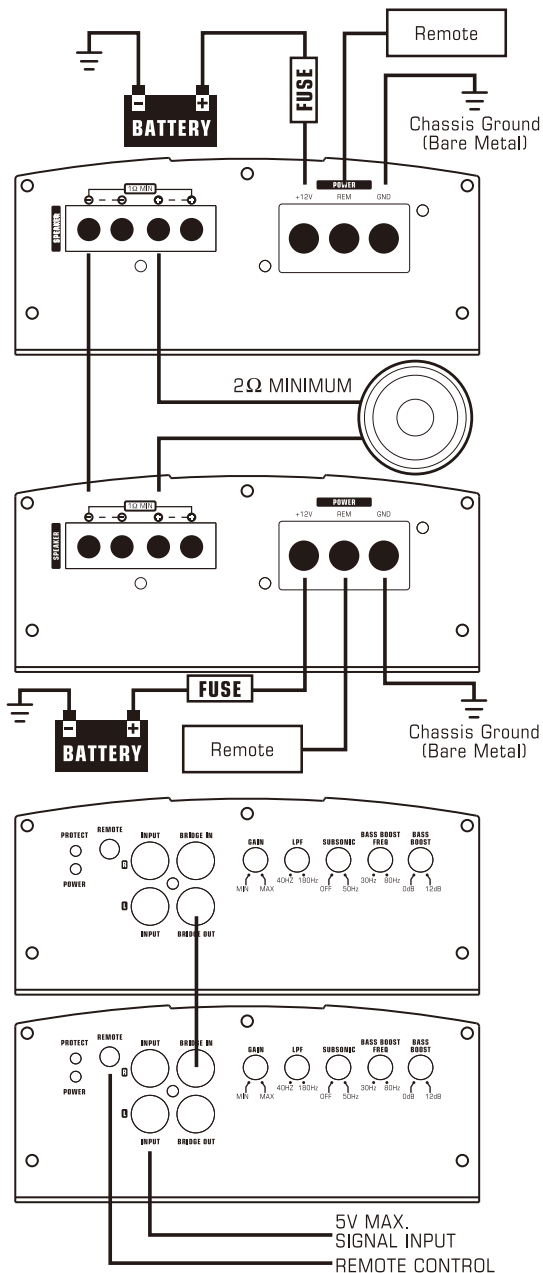
ONE SPEAKER MONO APMN-2000



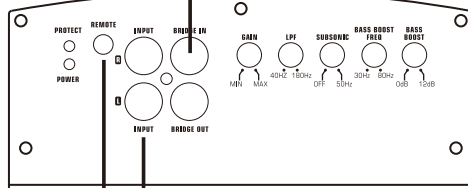
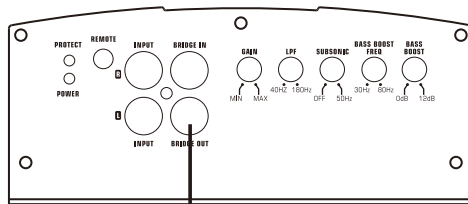
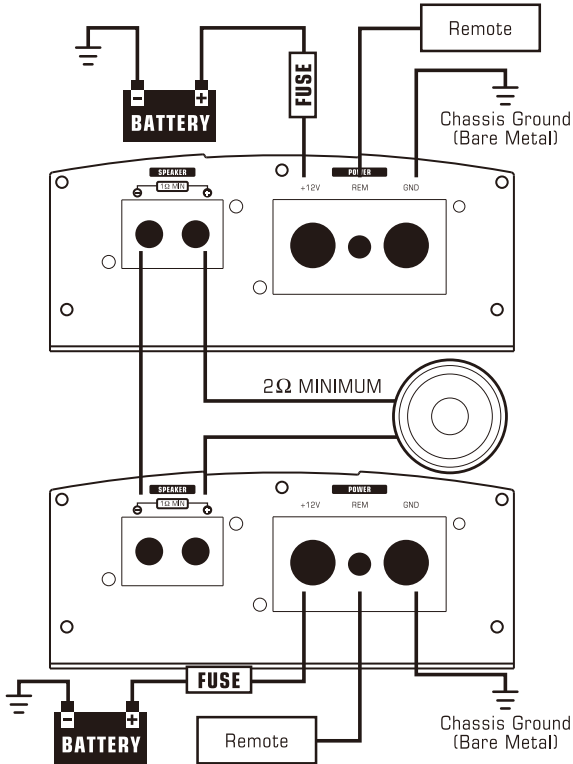
TWO SPEAKER MONO APMN-600/APMN-1300/APMN-1500



TWO AMPLIFIERS LINKED TO ONE CHANNEL APMN-600/APMN-1300/APMN-1500



TWO AMPLIFIERS LINKED TO ONE CHANNEL APMN-2000



5V MAX.
SIGNAL INPUT
REMOTE CONTROL

TROUBLESHOOTING

Problem

Run indicator doesn't light up.

Solution

- *Check all fuses on the amplifier.*
- *Check main fuse near the battery.*
- *Check plus and minus battery cables.*
- *Check remote voltage.*

Problem

Run indicator is on but no sound.

Solution

- *Check volume control on the radio.*
- *Check GAIN regulator on the amplifier.*
- *Check RCA cables and connections.*
- *Check speaker cables and connections.*

Problem

Bass response is low.

Solution

- *One speaker cable could be disconnected the bass.*

Problem

The amplifier switches on and off.

Solution

- *Check chassis ground connection with amplifier cable and check battery terminal connections and check remote turn-on voltage.*

For additional questions please contact your authorized Audiopipe dealer.

PRODUCT SPECIFICATIONS**APMN-600**

RMS @ 4 Ohm (<1% DISTORTION)	268W
RMS @ 2 Ohm (<1% DISTORTION)	380W
RMS @ 1 Ohm (<1% DISTORTION)	540W
Input Level	0.2 ~ 5V
Frequency Response	30 ~ 180Hz
LPF	40 ~ 180Hz
SUBSONIC Filter	5 ~ 50Hz
Bass Boost Frequency	30 ~ 80Hz
Bass Boost Level	0 ~ 12dB
THD at 4 Ohm load 30% Rated Power	<0.15%
Signal Noise Ratio	>70dB
Best Efficiency	>85%
Minimum Load	1 Ohm
Optional Remote	YES
Bridgeable with Same Amplifier	YES
Overload Protect System	YES
Short Circuit Test (max. power)	PASS
Overheat Protect Temperature	80°C/176°F
Components & PCB	Double Side Board
Transparent Isolation Connector	YES
Dimension (W x H x D)	225.5 x 55 x 160mm

APMN-1300

RMS @ 4 Ohm (<1% DISTORTION)	376W
RMS @ 2 Ohm (<1% DISTORTION)	648W
RMS @ 1 Ohm (<1% DISTORTION)	1024W
Input Level	0.2 ~ 5V
Frequency Response	30 ~ 180Hz
LPF	40 ~ 180Hz
SUBSONIC Filter	5 ~ 50Hz
Bass Boost Frequency	30 ~ 80Hz
Bass Boost Level	0 ~ 12dB
THD at 4 Ohm load 30% Rated Power	<0.15%
Signal Noise Ratio	>70dB
Best Efficiency	>85%
Minimum Load	1 Ohm
Optional Remote	YES
Bridgeable with Same Amplifier	YES
Overload Protect System	YES
Short Circuit Test (max. power)	PASS
Overheat Protect Temperature	80°C/176°F
Components & PCB	Double Side Board
Transparent Isolation Connector	YES
Dimension (W x H x D)	266.5 x 55 x 160mm

APMN-1500

RMS @ 4 Ohm (<1% DISTORTION)	540W
RMS @ 2 Ohm (<1% DISTORTION)	964W
RMS @ 1 Ohm (<1% DISTORTION)	1414W
Input Level	0.2 ~ 5V
Frequency Response	30 ~ 180Hz
LPF	40 ~ 180Hz
SUBSONIC Filter	5 ~ 50Hz
Bass Boost Frequency	30 ~ 80Hz
Bass Boost Level	0 ~ 12dB
THD at 4 Ohm load 30% Rated Power	<0.2%
Signal Noise Ratio	>70dB
Best Efficiency	>85%
Minimum Load	1 Ohm
Optional Remote	YES
Bridgeable with Same Amplifier	YES
Overload Protect System	YES
Short Circuit Test (max. power)	PASS
Overheat Protect Temperature	80°C/176°F
Components & PCB	Double Side Board
Transparent Isolation Connector	YES
Dimension (W x H x D)	341.5 x 55 x 160mm

APMN-2000

RMS @ 4 Ohm (<1% DISTORTION)	770W
RMS @ 2 Ohm (<1% DISTORTION)	1300W
RMS @ 1 Ohm (<1% DISTORTION)	1944W
Input Level	0.2 ~ 5V
Frequency Response	30 ~ 180Hz
LPF	40 ~ 180Hz
SUBSONIC Filter	5 ~ 50Hz
Bass Boost Frequency	30 ~ 80Hz
Bass Boost Level	0 ~ 12dB
THD at 4 Ohm load 30% Rated Power	<0.2%
Signal Noise Ratio	>70dB
Best Efficiency	>85%
Minimum Load	1 Ohm
Optional Remote	YES
Bridgeable with Same Amplifier	YES
Overload Protect System	YES
Short Circuit Test (max. power)	PASS
Overheat Protect Temperature	80°C/176°F
Components & PCB	Double Side Board
Transparent Isolation Connector	YES
Dimension (W x H x D)	416.5 x 55 x 160mm