

**DAD-100.4AB**  
**DAD-200.4**  
**DAD-180.6**  
**DAD-2000.5**  
**DAD-1000.1**  
**DAD-1500.1**

# **OWNERS MANUAL**

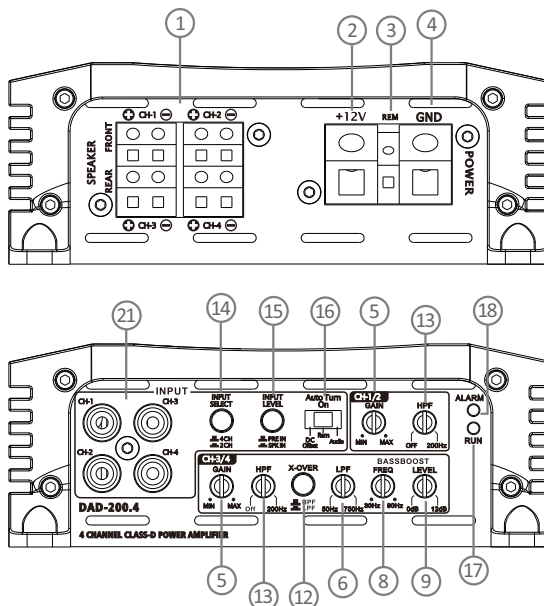


## FEATURES

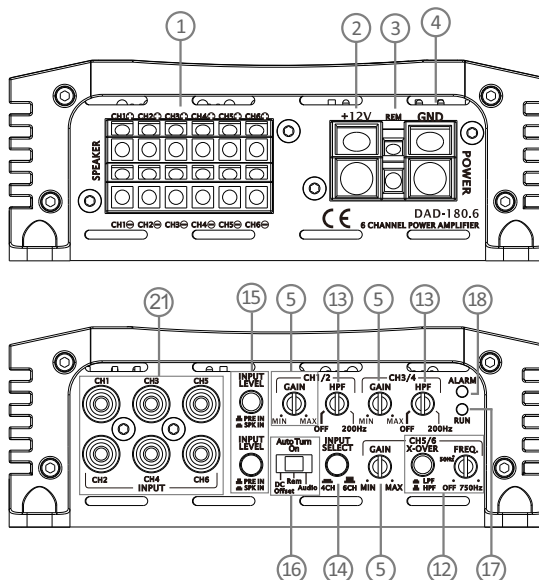
- ✓ Hi Fi High Power class AB automotive amplifier (DAD-100.4AB only)
- ✓ High efficiency, Energy-saving digital automotive amplifier
- ✓ High Power, Compact Size
- ✓ MCU Power Management
- ✓ High / Low Level Input Switch
- ✓ Auto Turn - on / off Functions
- ✓ High Reliability Full Mosfet Design
- ✓ High Pass / Low Pass Filter And Subsonic Adjustable
- ✓ Bassboost frequency and level adjustable
- ✓ Clip limit function and Q factor adjustable
- ✓ Overload, shortcircuit, thermal, low voltage protection
- ✓ RoHS Compliant

## PANEL LAYOUT

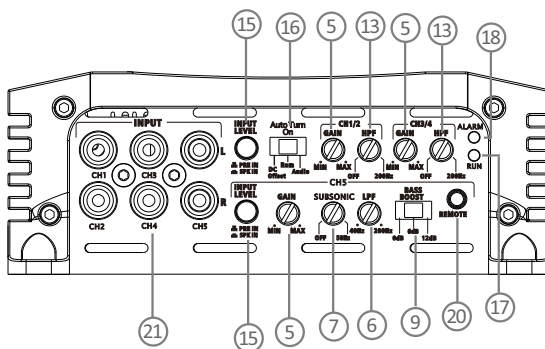
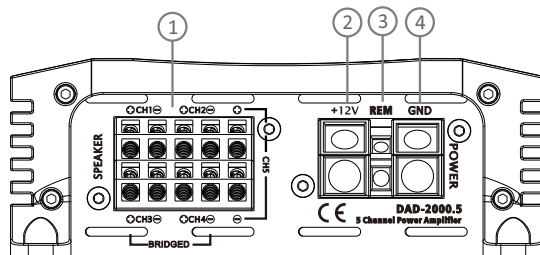
### DAD-100.4AB/DAD-200.4



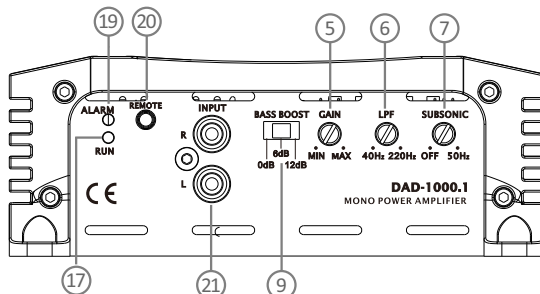
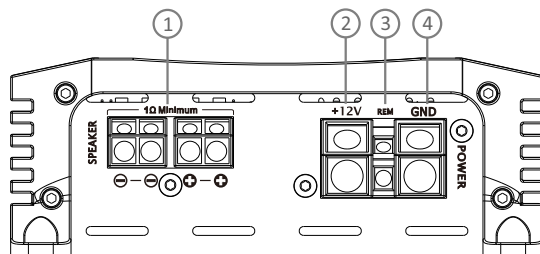
### DAD-180.6



## DAD-2000.5

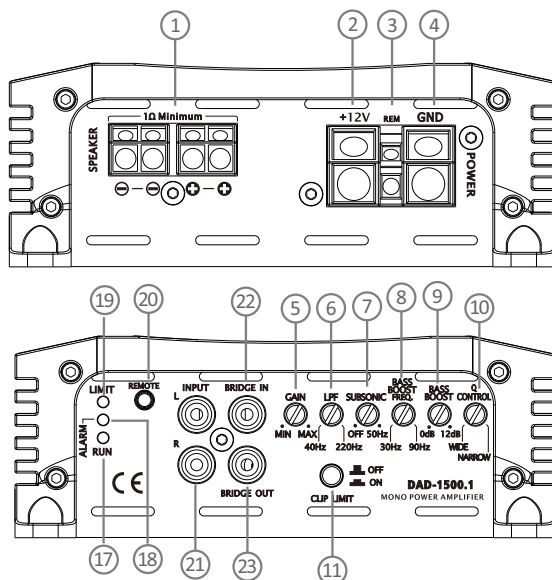


## DAD-1000.1



## PANEL LAYOUT

### DAD-1500.1



#### 1. SPEAKERS

Connect speakers/subwoofers to these terminals. Be sure to check wire for proper polarity. Never connect the speaker cables to chassis ground.

#### 2. +12 Volt Power

Connect this terminal through a FUSE or CIRCUIT BREAKER to the positive terminal of the vehicle battery or the positive terminal of an isolated audio system battery.

Warning: Always protect this power cable by installing a fuse or circuit breaker of the appropriate size within 18 inches (45cm) of the battery terminal connection.

#### 3. Remote Turn On

This terminal turns on the amplifier when (+)12 volt is applied to it. Connect it to the remote turn on lead of the head unit or signal source.

#### 4. GND

Connect this cable directly to the frame of the vehicle. Make sure the metal frame has been stripped of all paint down to the bare metal. Use the shortest distance possible. It is always a good idea to replace the factory ground at this time with a larger cable equal to the new amplifier power cable or larger. CAUTION: Do not connect this terminal directly to the vehicle battery ground terminal or any other factory ground points.

#### 5. GAIN

The level control will match the amplifiers sensitivity to the source units signal voltage. The operating range is 200mV minimum to 5V maximum (PRE IN) or 400mV minimum to 10V maximum (SPK IN)

NOTE: DAD-1000.1 and DAD-1500.1 has only PRE IN mode.

#### 6. LPF

This control is used to select the desired low pass x-over frequency. The frequency can be adjusted from 40Hz to 220Hz for all bass mono models.

## 7. Subsonic Filter Control

This control can filter out unwanted low frequency from 10Hz (OFF) to 50Hz. This function will increase the power handling of your woofers.

## 8. Bass Boost Frequency

By adjusting these two knobs, you can boost a wanted frequency to a wanted level. The center boost frequency is adjustable from 30Hz to 90Hz,

## 9. BASSBOOST

This knob adjust the boost level of the bassboost center frequency. It can be adjusted from 0 to 12dB. Combining with bassboost frequency, you can accurately match the amplifier performance to woofer response.

## 10. Q-Control

This knob adjust the curve shape of bassboost. Turn it to narrow side will make the boosted frequency narrow and sharp, turn it to wide will extend the boosted frequency range. Combining with bassboost frequency and bassboost level adjusting, you can get a perfect bass response matching your system.

## 11. CLIP LIMIT Switch

This switch control the output clip limit on/off. When switched on, the amplifier will control the output level at clip point and reduce the distortion. This will keep your amplifier at a low distortion at clipped signal.

## 12. X-over mode and frequency Control ( DAD-100.4AB / DAD-200.4)

These controls allow control over the frequencies played for DAD-100.4AB/DAD-200.4. There is an option for Low Pass and High Pass. In LP mode, the frequency range is from 50Hz to 750Hz; In HP mode the frequency is from 15Hz to 200Hz.

## 13. HPF

This control is used to set the HPF crossover frequency. The frequency is adjustable between OFF and 200Hz.

## 14. INPUT SELECT

This control is used to select how many inputs the amplifier uses, two or four inputs (DAD-100.4AB, DAD-200.4 only), four or six inputs (DAD-180.6 only). For DAD-100.4AB/DAD-200.4, when set to 4CH, the CH1&2 and CH3&4 need to input stereo signals separately. When set to 2CH, the amplifier only needs to input 1 group of stereo sound into CH1&2. For DAD-180.6, when set to 6CH, the CH1&2, CH3&4, and CH5&6 need to input stereo signals separately. When set to 4CH, the power amplifier only needs two group of stereo signal to input CH1&2 and CH3&4.

## 15. INPUT LEVEL (DAD-100.4AB / DAD-200.4 / DAD-180.6 / DAD-2000.5)

This button is to set the amplifier input sensitivity range.

When set to PRE IN, the signal can be delivered to the amplifier using the low level RCA outputs on the source unit.

When set to SPK IN, the high level signal can be run from the source unit's speaker outputs to the RCA input of amplifier by using the accessory of adaptor.

## 16. Auto Turn On(DAD-100.4AB / DAD-200.4 / DAD-180.6 / DAD-2000.5)

For auto turn on/off mode, it offers three options: DC Offset/Rem/Audio.

REM: When auto turn on to REM, please connect the unit REM terminal to the source unit remote terminal with an 18AWG cable. This is the preferred mode.

DC Offset: If the OEM source unit has no REM signal output, you can choose DC Offset (Meanwhile, Input select switch to SPK IN mode), DC Offset can turn on/off amplifier by detecting the 6V DC Offset from the OEM source unit terminal.

AUDIO: Audio mode can turn ON/OFF the amplifier by detecting the audio signal from source unit. Note: If the volume is too Low, The amp may fail to turn on. So please check if the source unit volume is properly set.

**17. RUN**

This LED will light up when amplifier works properly.

**18. ALARM**

The red LED will light up and will be flashing if there is a fault presented to the amplifier. Please disconnect the amplifier and resolve the fault before reconnecting the amplifier.

**19. Limit Indicator**

This LED will light up when output clipped or amplifier get over heat. When limit indicator light up, the amplifier will hold or reduce output power to protect subwoofer and amplifier. Please turn down volume or cool down the amplifier when this indicator light up continually.

**20. REMOTE**

Connect the remote controller to control the Subwoofer amplifier volume from the driver seat location, for ease of adjustment during playing.

**21. RCA input jacks**

These RCA input jacks are for use with source units that have RCA outputs. A source unit with a minimum level of 200mV is required for proper operation. The use of high quality twisted pair cables is recommended to decrease the possibility of radiated noise entering the system.

**22. 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.

**23. Bridge Out**

This RCA output send out bridge signal to another same model amplifier in bridging configuration. All the functions will be adjusted by the master amplifier.

**CONNECTING THE AMPLIFIER**

- Select cable and fuse according to the following table.

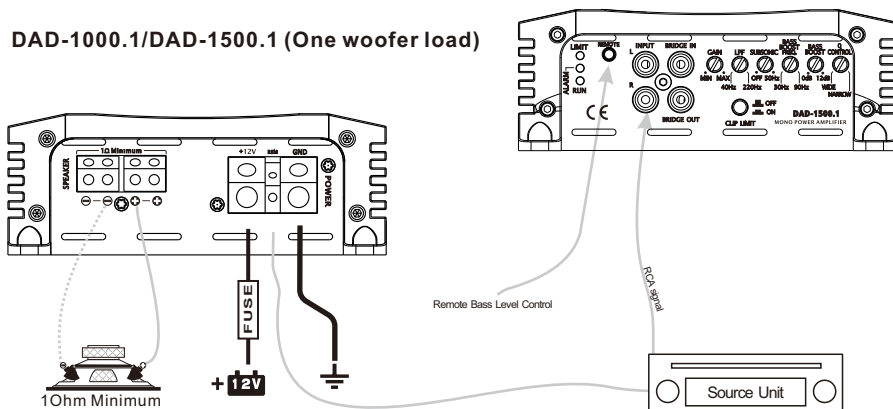
MODEL	DAD-100.4AB	DAD-200.4	DAD-2000.5	DAD-180.6	DAD-1000.1	DAD-1500.1
CABLE	4-8 #	2-4#	2-4 #	2-4 #	4 #	4 #
FUSE	60 A	120A	100 A	100 A	80 A	120 A

- Connect the amplifiers ground cable to a close, bare metal part of the frame or chassis. Use a nut and bolt, Not a screw! The ground cable must be at least the same size as the +12Volt cable.
- Connect the remote terminal to remote output of the head unit using 16 gauge (or heavier) wire.
- Connect the fuse holder within 18"(45cm) of the car battery, and run the selected cable from this fuse to the amplifier.
- Connect all the inputs with high-quality cables. Connect Remote Control if necessary.
- Insert fuse(s) into the battery fuse holder(s).
- If using a subwoofer for 2-CH and 4-CH, bridge the channels by using the Left "+" and the Right "-" terminals.

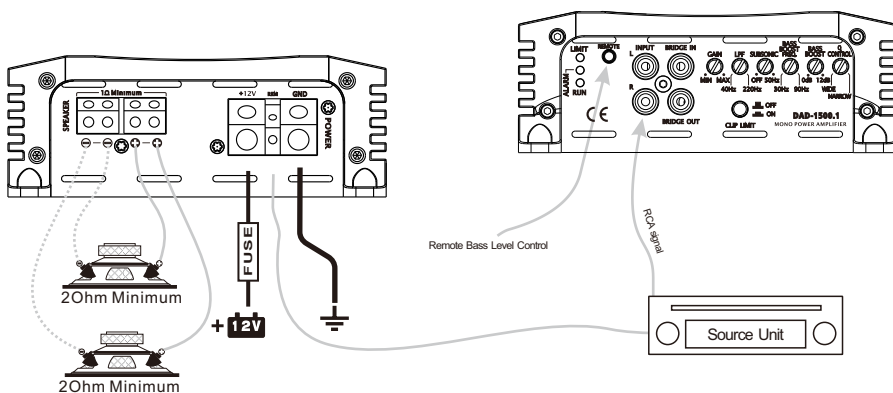


## WIRING DIAGRAM

### DAD-1000.1/DAD-1500.1 (One woofer load)



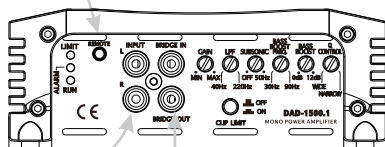
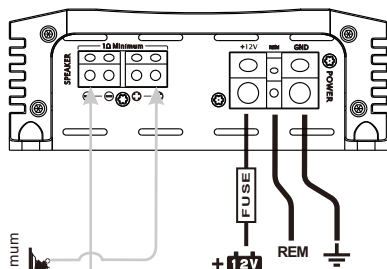
### DAD-1000.1/DAD-1500.1 (Two woofer load)



## DAD-1500.1 (Bridged mode)

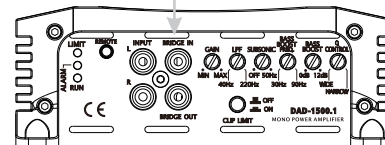
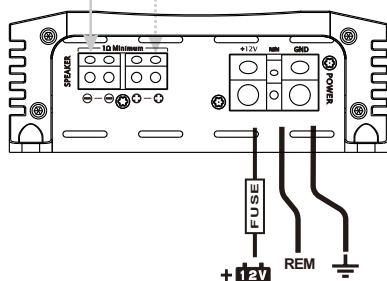
Amp # 1  
MASTER

Amp # 1  
MASTER



Amp # 2  
SLAVE

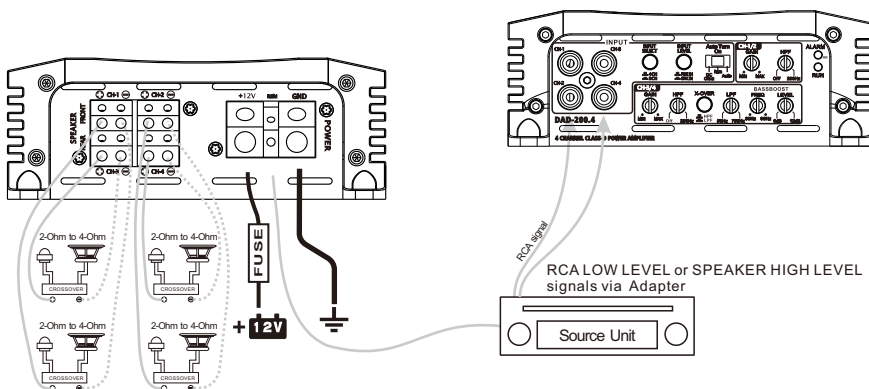
Amp # 2  
SLAVE



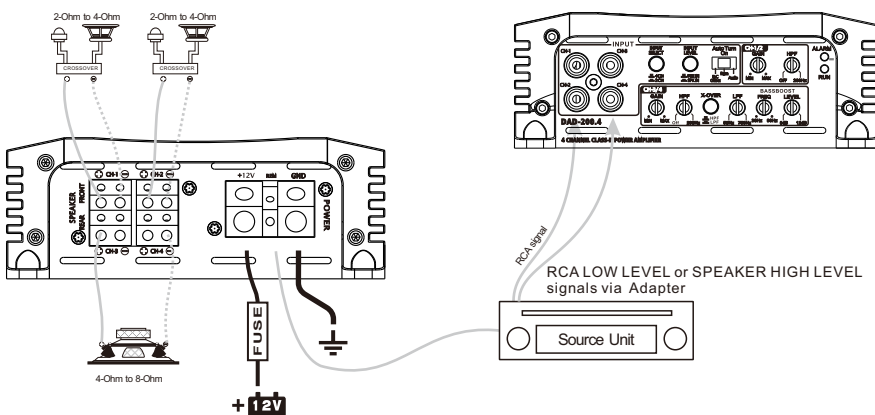
## IMPORTANT

- 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 to the input RCA jacks when bridged as slave unit.
- All the functions will be disabled on slave amplifier when bridged. It will be adjusted by the master amplifier.

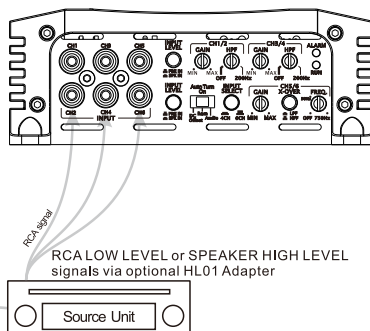
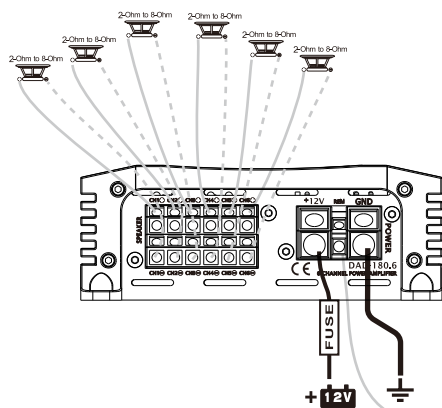
## DAD100.4AB/DAD-200.4 (Four-channel mode)



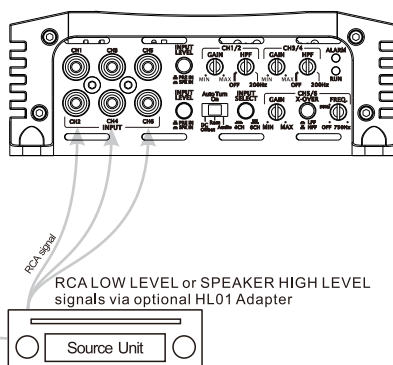
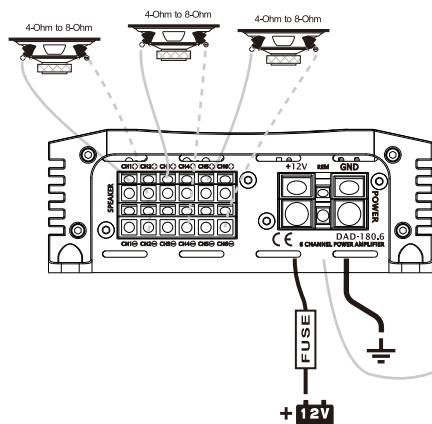
## DAD100.4AB/DAD-200.4 (Three-channel mode)



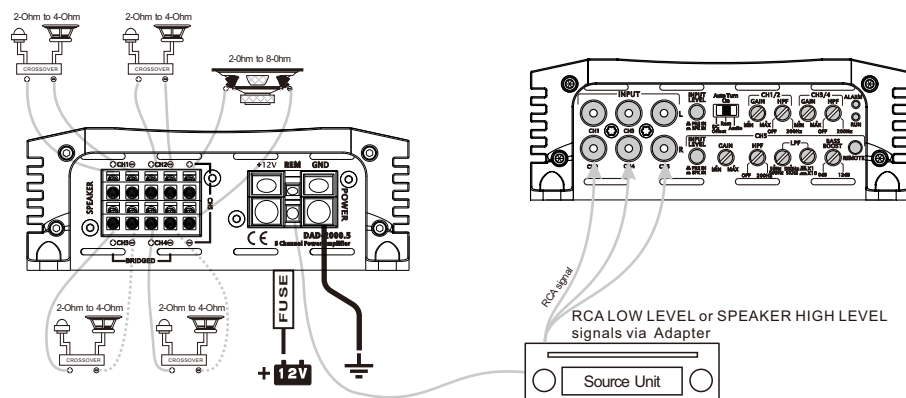
## DAD-180.6 wiring Six-channel mode



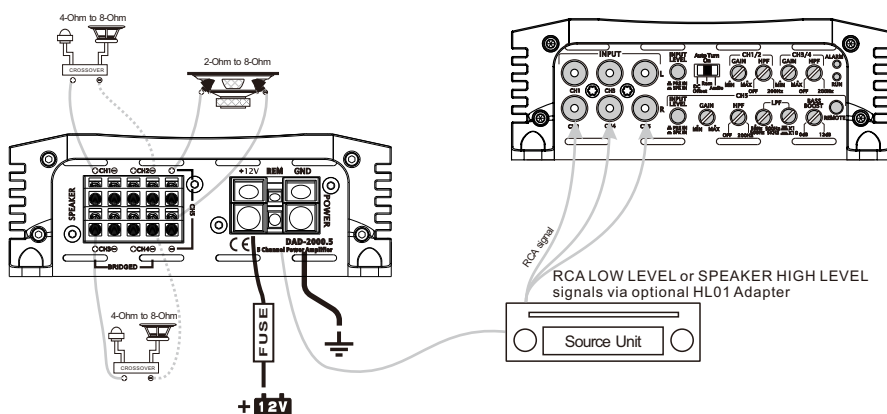
## DAD-180.6 wiring Three-channel mode



## DAD-2000.5 (Five-channel mode)



## DAD-2000.5 (Three-channel mode)



## TROUBLE SHOOTING

Symptom	Possible Remedy
<b>Amplifier will not power up</b>	<p>Check to make sure you have a good ground connection.</p> <p>Check that there is battery power on the (+) terminal .</p> <p>Check all fuses, replace if necessary .</p> <p>Make sure that the Protection LED is not illuminated.</p>
<b>Protection LED Comes on</b>	<p>Check for short circuits on speaker leads.</p> <p>Check the speaker load not beyond the minimum load.</p> <p>Remove speaker lead, and reset the amplifier. If the protection LED still Comes on, then the amplifier is faulty and needs servicing .</p>
<b>No output</b>	<p>Check that the RCA audio cables are plugged into the proper inputs.</p> <p>Check all speakers wiring.</p> <p>Check the headunit output and the amplifier level setting.</p>
<b>Low output</b>	<p>Reset the level Control.</p> <p>Check the Crossover Control settings.</p>
<b>High hiss in The speakers</b>	<p>Check the RCA cable is not shorted to power ground at amplifier side.</p> <p>Check the amplifier grounding.</p>
<b>Distorted sound</b>	<p>Check that the Input level control is set to match the signal level of the head unit.</p> <p>Always try to set the Input level as low as possible.</p> <p>Check that all crossover frequencies are properly set.</p> <p>Check for short circuits on the speaker leads.</p>
<b>Amplifier gets Very hot</b>	<p>Check that the minimum load impedance for the amplifier model is correct.</p> <p>Check that there is good air circulation around the amplifier. In some applications, It may be necessary to add an external cooling fan.</p>

If your amplifier is still malfunction after checking through the troubleshooting section, please contact our authorized dealer.

## SPECIFICATIONS

Model	DAD-100.4AB	DAD-200.4	DAD-180.6	DAD-2000.5	DAD-1000.1	DAD-1500.1
RMS Power at 14.4V ( THD < 1% )						
10hm Load	N/A	N/A	N/A	N/A	1000W x 1	1500W x 1
20hm Load	140W x 4	320W x 4	220W x 6	160W x 4 + 530W	500W x 1	800W x 1
40hm Load	100W x 4	200W x 4	180W x 6	105W x 4 + 350W	300W x 1	400W x 1
Bridged 40hm Load	280W x 2	650W x 2	450W x 3	330W x 2+ 350W	N/A	N/A
Bridged 20hm Load	N/A	N/A	N/A	N/A	N/A	N/A
Features						
Input Level	PRE IN:0.2~5V / SPK IN:0.4~10V			0.2~5V	0.2~5V	
Frequency Response	10Hz~30KHz	10Hz~30KHz	10Hz~20KHz	10Hz~20KHz	15Hz~220Hz	15Hz~220Hz
X-over Type	HPF/LPF	HPF/LPF	HPF/LPF/Subsonic	HPF/LPF/Subsonic	LPF/Subsonic	LPF/Subsonic
LPF	50~750Hz	50~750Hz	40~200Hz	40~200Hz	40Hz~220Hz	40Hz~220Hz
Subsonic/HPF	10~200Hz	10~200Hz	OFF~50Hz/10~200Hz	OFF~50Hz/10~200Hz	OFF~50Hz	OFF~50Hz
Bass Boost Frequency	30Hz~90Hz	30Hz~90Hz	NA	NA	50Hz	30Hz~90Hz
Bass Boost Level	0dB~12dB				0dB~6dB~12dB	0dB~12dB
Intelligent Power supply Management System	Overload, ShortCircuit, Overheat, Under voltage, Over voltage Protection				ShortCircuit, Overheat, Under voltage Protection	
S/N Ratio	>95dB	>93dB	>94dB	>97dB	>95dB	>95dB
Minimum Load	2 Ohm				1 Ohm	1 Ohm
Voltage Range				8.2V ~16V		
Bass Remote	NA	NA	NA	YES	YES	YES
Components & PCB	SMT Parts / Double-Sided FR-4 PCB					
DIMENSION						
Height ( mm )	56					
Width ( mm )	150					
Length ( mm )	355	355	385	385	246	355

