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DAH-4
DAH-2

User's Manual

INTRODUCTION

Amplifiers provide high-performance sound reinforcement for your mobile audio equipment.
Its versatility enables compatibility with optional equalizers, Frequency Dividing Crossover networks, and other audio processor in a customized system. The Multi-Mode bridging capabilities allow flexibility in hosting several different speaker configurations.
To achieve optimum performance, it is highly recommended that you read this owners Manual before beginning installation.

WARNING

High powered audio systems in a vehicle are capable of generating "Live Concert" high levels of sound pressure. Continued exposure to excessively high volume sound levels may cause hearing loss or damage.
Also, operation of a motor vehicle while listening to audio equipment at high volume levels may impair your ability to hear external sounds such as; horns, warning signals, or emergency vehicles, thus contributing to a potential traffic hazard.
In the interest of safety, recommends listening at lower volume levels while driving

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PLANNING YOUR SYSTEM

Before beginning the installation,consider the Following :

1. Do you plan to add additional mobile electronics equipment in the future?
   If you plan to expend your system by adding other components sometime in the future, ensure adequate space is left and cooling requirements are met.

2. Should you use high or low level inputs?
   Your Amplifier has been designed to accept Low-level(Pre-Amp outputs from your radio) source signal.
   If you radio/source is equipped with Pre-Amp outputs , it is possible to utilize them to drive the Amplifier and the 2 front speakers. Then ,use the built-in power of your radio to drive the 2 rear speakers.

3. Are your components matched?
   The RMS power rating of your speaker(s) must be equal or greater than the RMS power rating of your amplifier.Your speaker(s) also must be 2-8 Ohm impedance for stable amplifier operation.Impedance information is normally printed on the speaker basket or magnet.

4. Where will the amplifier be installed?
   Consider both the length of your leads,and routing when determining the mounting location. It is best to run power and RCA wiring on opposite sides of the vehicle to prevent induced noise. Pre-amp input jacks require a length of high quality shielded male to male RCA patch cord .

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CONNECTING THE POWER

CAUTION :

AS A PRECAUTION,DISCONNECT THE POWER WIRE FROM THE BATTERY WHILE MAKING THE POWER AND GROUND CONNECTIONS TO THE AMPLIFIER.

4/8 GAUGE

the power and ground Wires 12 Gauge, for the remote turn-on wire 16 Gauge. both types are available at most Mobile Audio Dealers or Installation Shop.

(1) Ground : To Vehicle Chassis
To avoid unwanted ignition noise caused by ground loop,it is essential that the amplifier be grounded to a clean ,bare,metal surface of the vehicle's Chassis

NOTE:

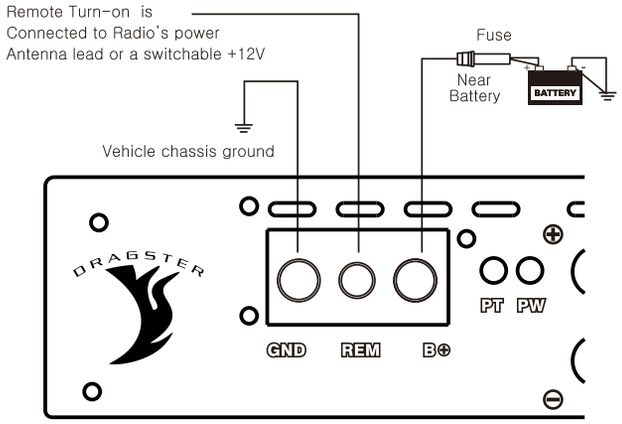
GROUND WIRE SHOULD NOT BE EXTENDED MORE THAN 3FT.(1METER)

(2) +12Volt(Fused) Constant Power : To Battery(+)
Due to the power requirements of the Amplifier , this connections should be made directly to the positive(+) terminal of battery . For safety measures,install an in-line fuse Holder (not included) as close to the battery positive(+) terminal as possible with an ampere rating ; not to exceed total value of fuses in Amp.

(3) Remote Turn-On Input : To remote turn-on output of Car Stereo
This Amplifier is turned "ON" remotely when the vehicle's stereo is turned " ON".

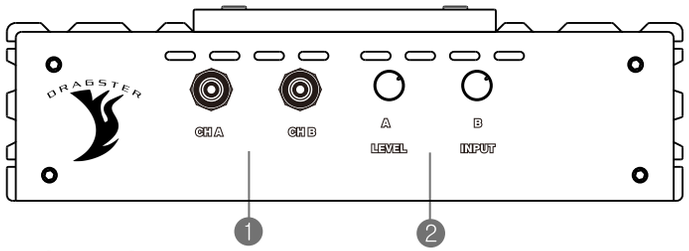
NOTE:

IF YOUR RADIO DOES NOT HAVE A+ 12VOLT OUTPUT LEAD WHEN THE RADIO IN TURNED ON,THE"REMOTE" TERMINAL ON THE AMPLIFIER CAN BE CONNECTED TO VEHICLE'S ACCESSORY CIRCUIT THAT IS LIVE WHEN THE KEY IS " ON".

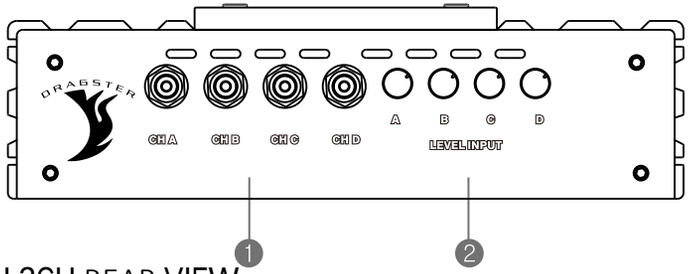


PANEL LAYOUT

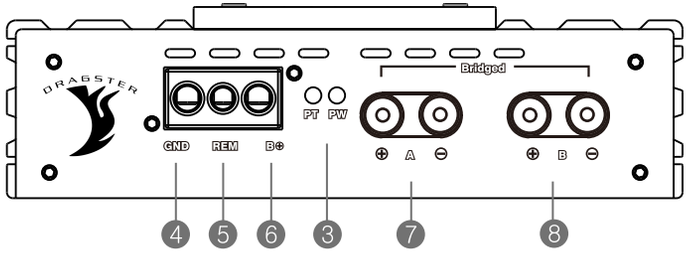
DAH 2CH FRONT VIEW



DAH 4CH FRONT VIEW



DAH 2CH REAR VIEW



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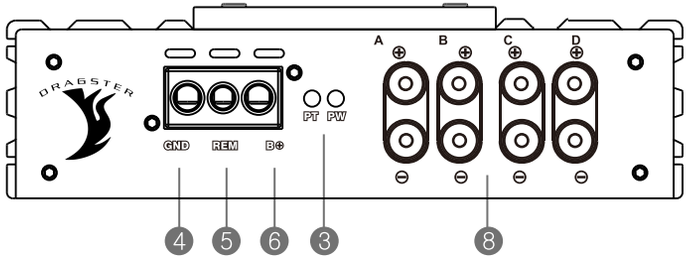

PANEL LAYOUT

1. RCA input jacks

source units that have RCA or Line level outputs.
A source unit with a minimum level of 400mV 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.

2. GAIN Control

The level control with match the amplifiers sensitivity to the source units signal voltage. The Operating range is 400mV minimum to 2V maximum.

CAUTION : Do not run the amplifier in high volume for long time, otherwise the loudspeakers will be damaged.

3. LED

Will illuminate BLUE to indicate the amplifier is on and operating normally, and will be illuminated RED if the amplifier shuts down due to short circuit,DC offset, or over-heating detected by on board protection circuitry.

4. GND

Connect this terminal directly to the sheet metal chassis of the vehicle,using the shortest wire necessary to make this connection. Always use wire of the same gauge or larger than the (+)12 volt power wire . The chassis connection point should be scraped free of paint and dirt. Use only quality crimped and /or soldered connectors at both ends of this wire .

Warning : Do not connect this terminal directly to the vehicle battery ground terminal or any other factory ground points.

5. 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.

6. (+)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 wire by installing a fuse or circuit breaker of the appropriate size within 12 inches of the battery terminal connection.

7. SPEAKERS

Connect speakers to these terminals.

CAUTION : Minimum speakers impedance is 2ohm & 4ohm Bridged Load.

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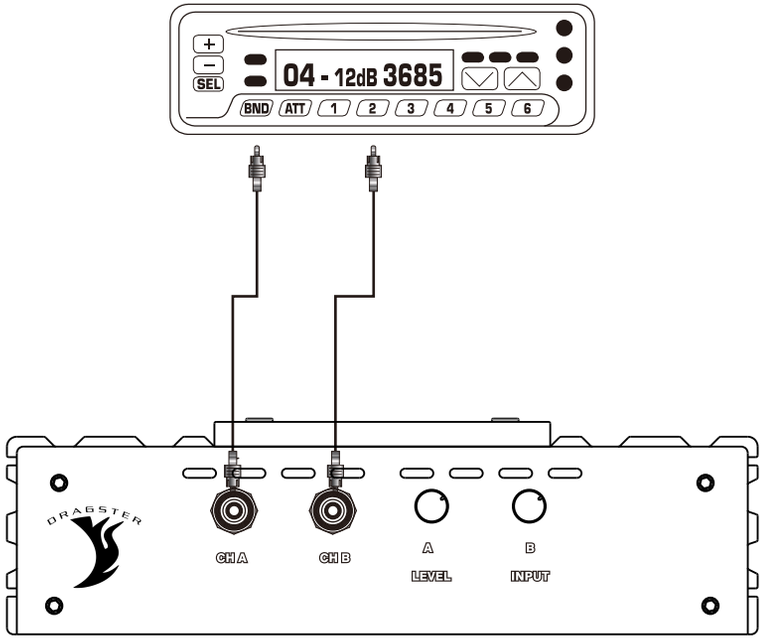
SYSTEM DIAGRAMS

DAH 2CH SYSTEM



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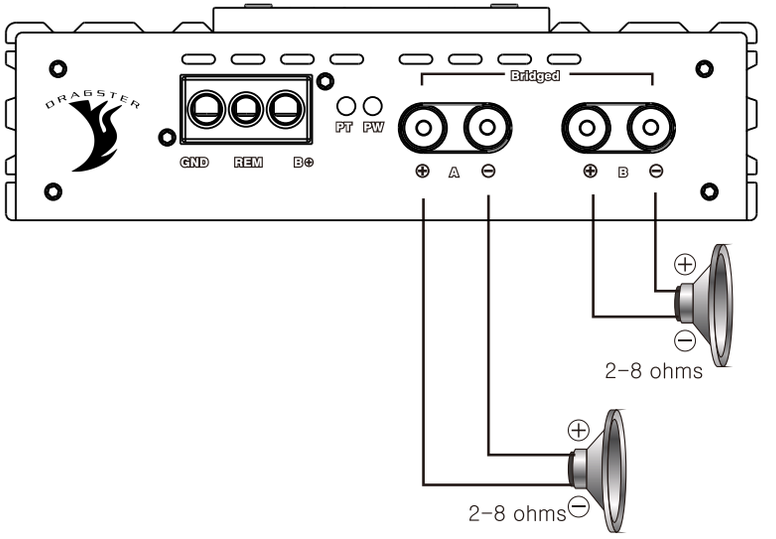
SYSTEM DIAGRAMS

DAH 2CH SYSTEM

Design#1



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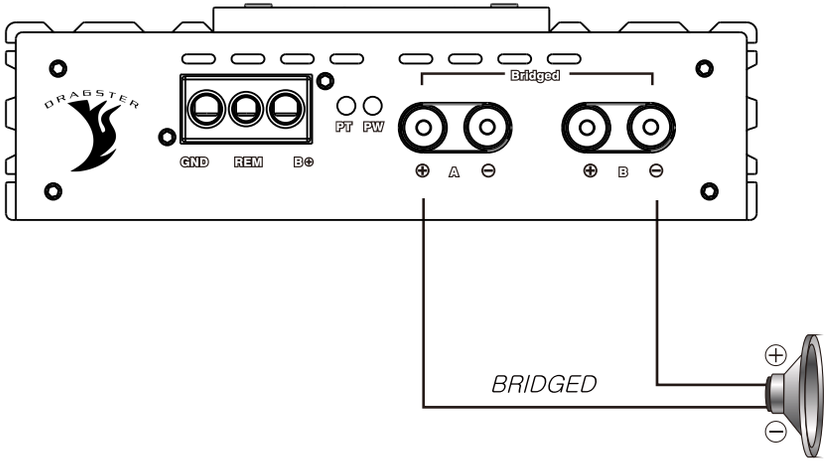
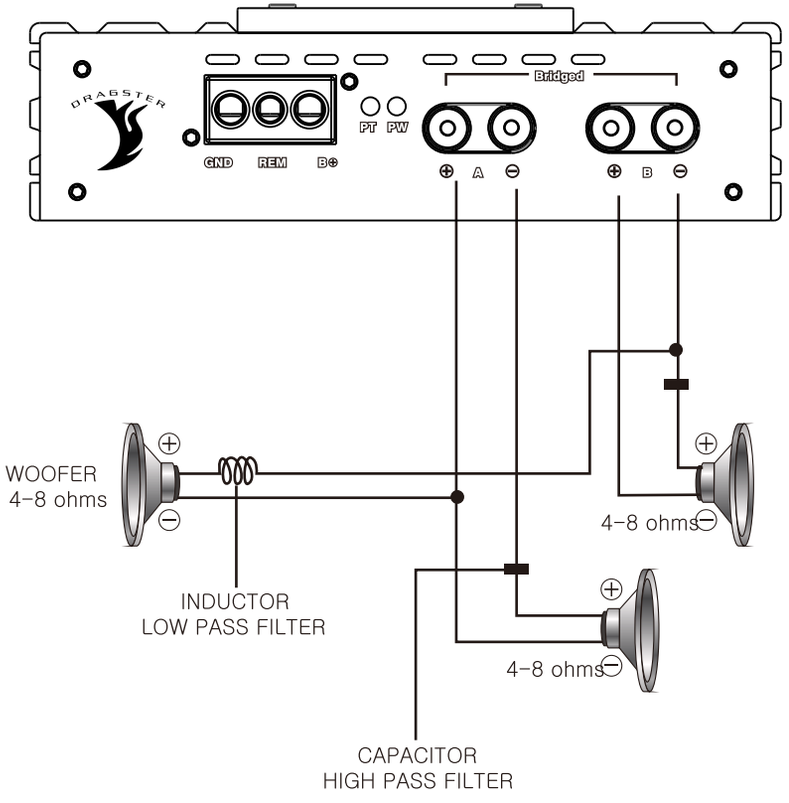


4-8 ohms

SYSTEM DIAGRAMS

DAH 2CH SYSTEM

Design#3



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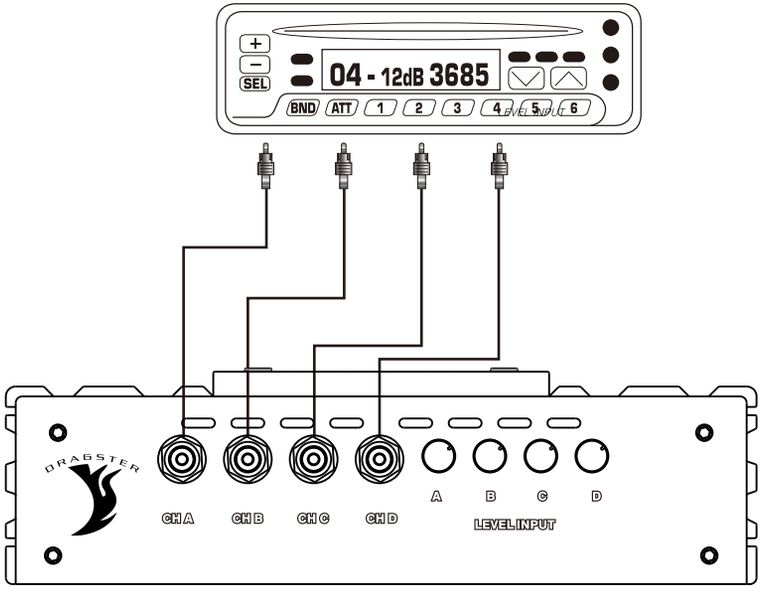

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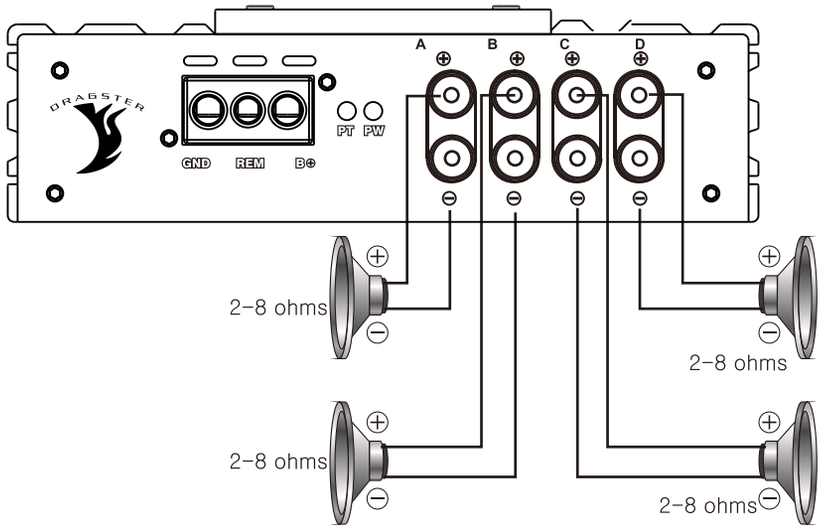

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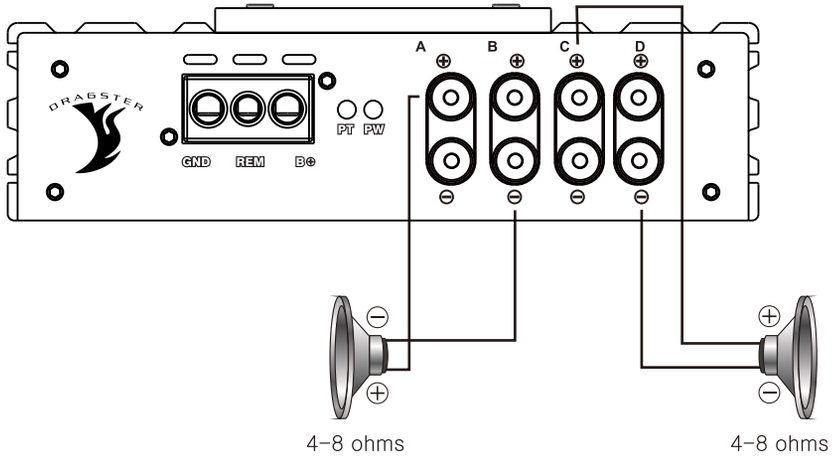

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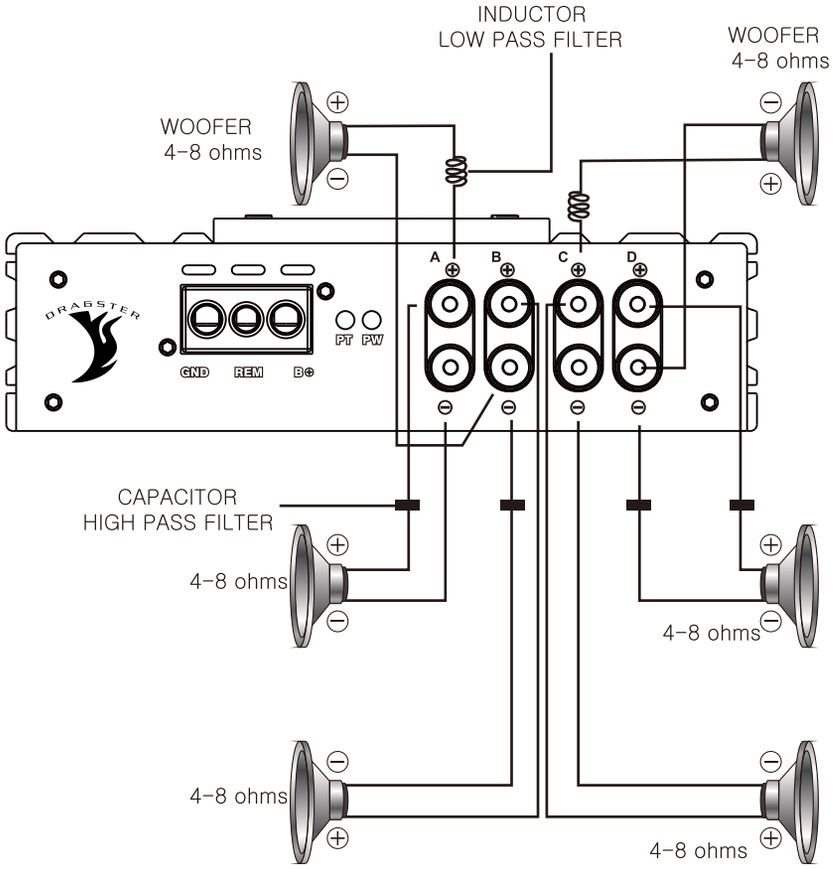

TROUBLESHOOTING GUIDE

SYMPTOMS	CHECK POINTS	CURE
NO SOUND	Is the power LED illuminated?	Check extenal fuse. Be sure Turn-on lead is connected.
AMP NOT SWITCHING ON	No power to power wire.	Repair power wire or connections.
	No power to remote wire with receiver on.	Check connections to radio.
	Fuse broken.	Check external fuse.
NO SOUND IN ONE CHANNEL	Check speaker leads.	Inspect for short circuit or an open connection.
	Check audio input leads.	Reverse Left and Right RCA inputs to determine if it is occurring before the amp. Check Tuner/Deck volume level.

TECHNICAL SPECIFICATION

MODEL	**DAH-2CH**	DAH-**4CH**
Output Power Rating	300W X 2CH	125W X 4CH
4 Ohm at 14.4V(1% THD+N)	300W X 2CH	125W X 4CH
2 Ohm at 14.4V(1% THD+N)	500W X 2CH	200W X 4CH
Mono Bridge at 4 Ohms(1% THD+N)	1000W X 1CH	400W X 2CH
Operating Voltage(RMS MAX OUTPUT)	9-16V	9-16V
Power Supply	PWM	PWM
Output Power Circuit Configuration	MOSFET CLASS-AB	MOSFET CLASS-AB
Main PCB Material	FR-4 D / 1 Oz	FR-4 D / 1 Oz

Miscellaneous Specification		
Soft Start Sound	Yes	Yes
Frequency Response @-1dB (4ohm 10watt)	20Hz - 20kHz	20Hz - 20kHz
Damping Factor (4ohm/1%)	>200	>200
S/N Ratio(A-Weight / RMS Power)	>92dB	>92dB
THD(A-Weight) 10watt	0.050%	0.050%
Channel Separation	>60dB	>60dB
Variable Input Gain Control(1% THD+N)	0.4V~2.0V	0.4V~2.0V
Input Impedance	20kΩ	20kΩ
LED(s)	Power/ Protect	Power/ Protect
Protection(Short, Thermal, Dc Offset)	Yes	Yes
Residual Noise(A-Weight)	0.5mV below	0.5mV below

Dimensions Length(mm) WxHxL	228 x 62 x 554	228 x 62 x 554
Weight	8.0kg	8.1kg

MEMO

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⚠ WARNINGS

Investigate the layout of your automobile thoroughly before drilling or cutting any holes.
Take care when to work near the gas tanks, lines, or hydraulic lines, and electrical wiring.
Don't use power amplifier unmounted.
Attach this system securely to the automobile to prevent damage, particularly in the event of an accident.
Don't mount this system so that the wire connections are unprotected or are subject to pinching or damage from nearby objects.
The +12V DC Power wire must be fused at the battery positive terminal connection.
Before making or breaking power connections at this system power terminal, disconnect the +12V wire at the battery end.
Confirm your radio/cassette player and/or other equip is turned off while connecting the input jacks and speaker terminals.
If you need to replace the power fuse, replace it only with a fuse identical to that supplied with the system.
Using a fuse of different type or rating may result in damage to this system which isn't covered by the warranty.

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