

OWNER'S MANUAL



DRAGO

D5K
D6K
D10K

WWW.MASSIVEAUDIO.COM

WARRANTY

- Massive Audio, Inc, warrants all manufactured amplifier products to be free from defect in material and workmanship for a period not to exceed ONE YEAR* from the date of original purchase when installed by an authorized “Massive Audio” dealer. Units that are not installed by an authorized “Massive Audio” dealer maintain a warranty not to exceed 90 days from the original purchase date by the original purchaser.
- Products that display abuse such as power deficiency, over driving the amplifier or clipping the input requires purchase of a new PCB for replacement.
- “Massive Audio” obligations under this warranty are limited to repairing or replacing, at its own sole option, any such defective products. This warranty does not apply to equipment that has been damaged by accident, negligence, or misapplication or has been altered or modified in anyway. This warranty applies only to the original purchaser who must have properly registered the product within 30 days of purchase.

*Except as provided herein, Massive Audio, Inc. makes no warranties or representations, express or implied, including any warranty implied by law, whether for merchantability or fitness for a particular purpose and shall be effective only for the period that this express warranty is effective. **SEE THE WARRANTY REGISTRATION CARD TO ADDITIONAL INFORMATION.***

* DUE TO CONSTANT IMPROVEMENT PRICES AND SPECS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTIFICATION.

INTRODUCTION :

Congratulations!

And thank you for purchasing a “Massive Audio” Drago amplifier for your car audio system. You now own an amplifier of uncompromising design and engineering incorporating the latest advances in technology. This handcrafted amplifier is designed to deliver the demands of serious sound competitors. You will soon discover that “Drago” amplifiers display a fine balance between high quality, performance and reliability; all proven qualities of “Massive Audio” products.

“Massive Audio” amplifiers are the result of American Craftsmanship using only the highest quality components and quality control standards. In order to provide you with many years of listening pleasure, we recommend you to have your new amplifier installed by an Authorized “Massive Audio Dealer.” This will ensure the proper installation of your product, and will also increase the length of your warranty to **ONE YEAR**.

(Please see the warranty section of for more details.)

Please take a moment to thoroughly read this manual to ensure that you get the maximum benefit from this new addition to your car audio system. When installed properly, this unit will provide years of trouble-free performance.

Should your amplifier ever need service or replacement due to theft, please record the following information, which will help protect your investment

Model#: _____

Dealer's Name: _____

Date of Purchase : _____

Installation Shop and Date : _____

Installation

In case you install the DRAGO amplifiers by yourself, please go through the user manual carefully and follow the outlined instructions.

Mounting Preparation

Disconnect the negative (-) battery cable before mounting or making any connections. Check the battery and alternator ground (-) connections. Make sure they are properly connected and free of corrosion. Before selecting a mounting location for the DRAGO amplifier, please take cooling and safety into consideration.

Avoid installing DRAGO amplifier on speaker boxes with excessive vibration !

The DRAGO amplifiers have been designed with a good heat dissipating heatsink. To avoid excessive heating, it is recommended that DRAGO amplifier is installed in a well ventilated space

+12V(B+), GND, REM CONNECTION

+12V / B+ (POWER CONNECTION)

Before mounting the DRAGO amplifier, disconnect the negative (-) wire from the battery to protect any accidental damage to the DRAGO amplifier or the audio systems. The amplifiers are equipped with 0 AWG or 4 AWG power and ground terminals. Connect the power cables to power terminal labeled as + 12V. As the DRAGO amplifier is not equipped with fuses, external fuses are required. Connect one end of the fuse holder to the power cable and the other end of the fuse holder to the positive battery terminal within 20 cm of the same cable. This fuse location will protect the system and the vehicle against the possibility of a short circuit in the power cable.

Make sure that the fuses and the fuse holder are appropriate and sufficient for the desired application.

GND (GROUND CONNECTION)

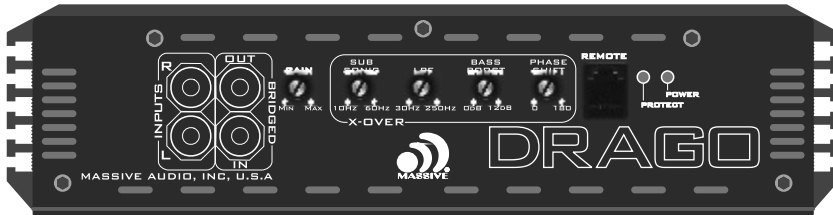
Locate a secure grounding connection as close as possible to the DRAGO amplifier. Make sure the location is clean with direct electrical connection to the chassis of the vehicle. Connect one end of an equal sized cable as the positive cable to the location of ground. It is important that the ground cable is as short as possible, but no longer than 75 cm. Run one end of the cable to the grounding point. Run the other end of the cable to the mounting location. Connect the ground cable to the terminal labeled as GND.

REM (REMOTE CONNECTION)

Run a remote turn on cable from the switched + 12V source. This can be a toggle switch, a relay, the source unit's remote output cable or power antenna trigger cable. Connect the remote turn on cable to the power terminal labeled as REM.

Panel Layout

(D5K / D6K / D10K)



1) INPUT

Connect preamp signal cables from head unit to RCA input of amplifier.
Minimum level input of 0.2V is essential for correct operation.

2) OUTPUT

Output RCA for signal routing to another amplifier.

3) GAIN

Matches the output voltage of the head unit's RCA line-outs to the input section.

4) SUBSONIC FILTER

Controls the high pass point for the speaker outputs to eliminate extreme low frequencies.

5) LOW PASS FILTER (30Hz ~ 250Hz @ 24dB OCTAVE SLOPE)

Controls the low pass point for the speaker outputs.

6) BASS BOOST

Variable bass boost with 0-12 dB @ 45Hz.

7) PHASE CONTROL

Variable phase adjustment from 0~180 degrees

8) REMOTE LEVEL CONTROL PORT

Used for connecting to external wired remote controller.

9) REMOTE CONTROL INCLUDED

Turn knob clockwise to increase level and likewise, turn knob counter clockwise to decrease level.

10) MASTER OUTPUT / SLAVE INPUT

For linkable connection of 2 same amplifiers. Minimum impedance is 2 Ω .

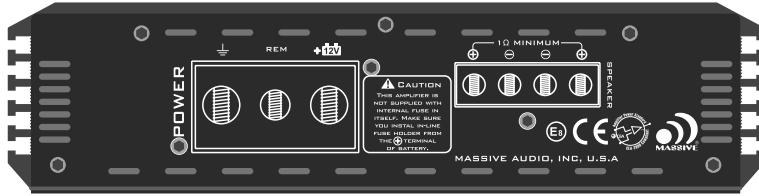
In this mode, the master amplifier will control gain settings on the subsequent slaved amplifier.

11) POWER & PROTECTION INDICATOR

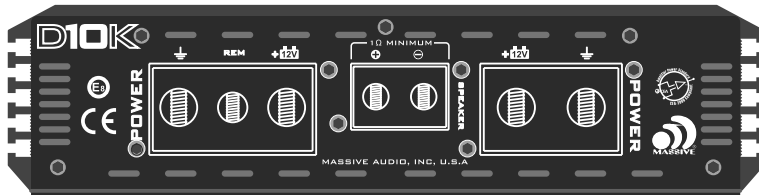
Power LED lights up green and protect LED lights up red.

+12V (B+), GND, REM

(D5K / D6K)



(D10K)



GND (GROUND CONNECTION)

For connection to chassis ground. For optimum performance, 0 gauge cable is recommended.

REM (REMOTE)

Connect to switched +12V from the head unit.

+12V / B+ (POWER CONNECTION)

For connection to positive terminal of battery (+12).

For optimum performance, 0 gauge cable is recommended.

SPEAKER OUTPUTS

Amplifier connection to the loudspeakers. Minimum speaker cable is 12 gauge.

Minimum impedance for single unit is 1 Ω.

Minimum impedance in linked connections is 2 Ω.

⚠ CAUTION

Before attempting to make any connections to power supply, input and output connectors, make sure the amplifier is in OFF state. Check polarity of cables carefully as using reversed polarity will cause damage to amplifier. And to prevent power loss and overheating of wiring, always use the recommended wire gauges.

⚠ CAUTION

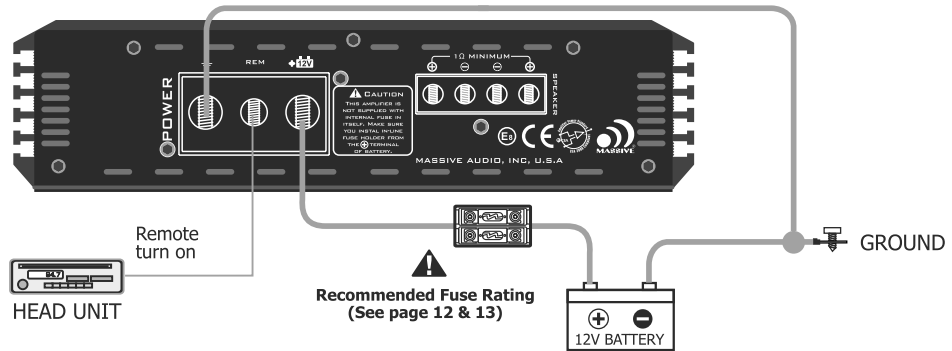
Installation of the amplifier should be done in the following steps:

1. Ensure that the ground is appropriate, then connect it to the amplifier.
2. Next step is to connect the +12V wire. Ensure all power terminals are used.
This cable has to be fused at the battery for safety precautions.
3. The final step is connecting the switched remote.

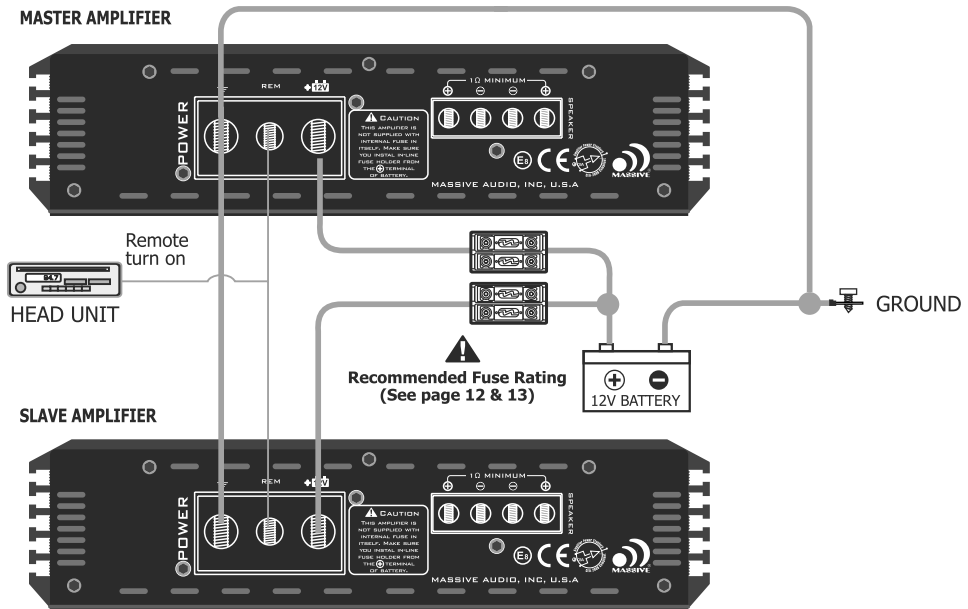
+12V(B+), GND, REM Connection

(D5K / D6K)

SINGLE CONNECTION



DAISY CHAIN (LINKED) CONNECTION



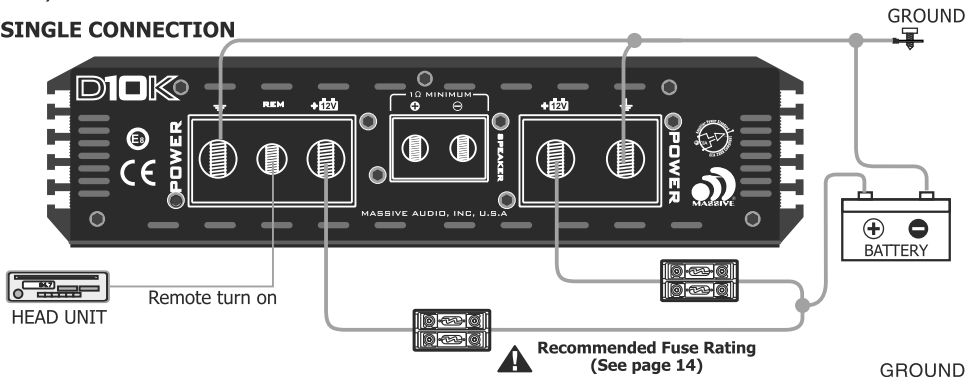
Keep GROUND of equal length. This drawing is for illustration purpose only.

We recommend using 12 AWG speaker cables to obtain intended performance. Run 12 AWG speaker cables from your speakers to the amplifier's mounting location. Keep the speaker cables separate from the power cables and the amplifier's input cables. Use grommets where the cables have to penetrate the vehicle chassis. Connect the speaker wires according to the terminals on each speaker. Strip 1cm, 3/8" of insulation of the end of each cable and twist the cable strands together tightly. Make sure there are no stray strands that might touch other cable or terminals and cause short circuit. Connect the cable ends to the amplifier as shown in the speaker wiring diagram.

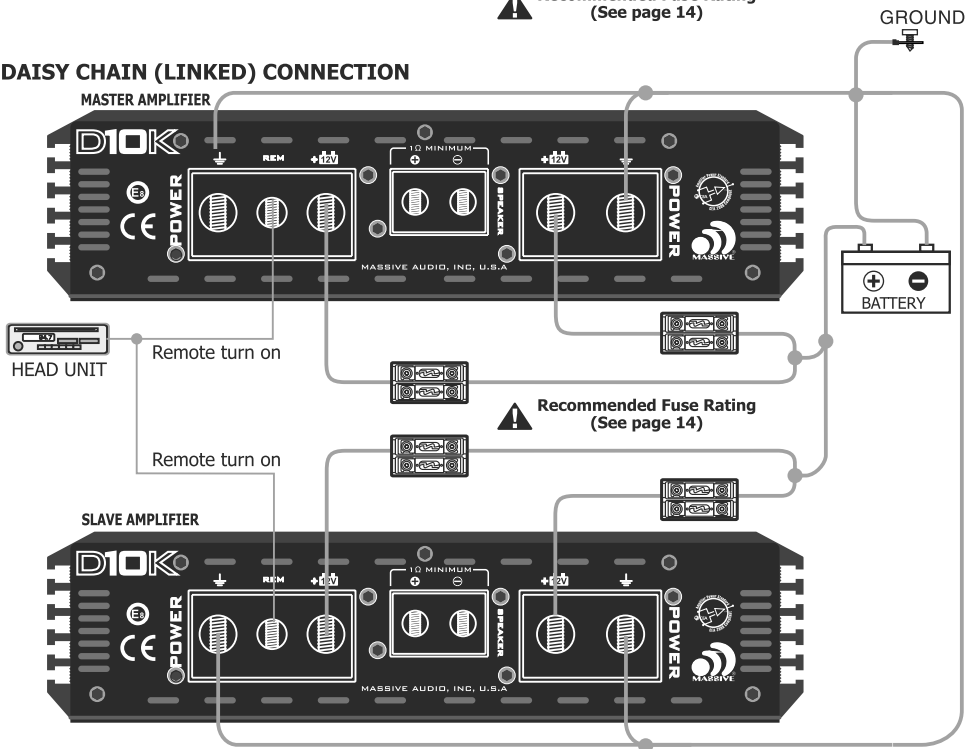
+12V(B+), GND, REM Connection

(D10K)

SINGLE CONNECTION



DAISY CHAIN (LINKED) CONNECTION



Keep GROUND of equal length. This drawing is for illustration purpose only.

We recommend using 12 AWG speaker cables to obtain intended performance.

Run 12 AWG speaker cables from your speakers to the amplifier's mounting location

Keep the speaker cables separate from the power cables and the amplifier's input cables.

Use grommets where the cables have to penetrate the vehicle chassis.

Connect the speaker wires according to the terminals on each speaker.

Strip 1cm, 3/8" of insulation of the end of each cable and twist the cable strands together tightly.

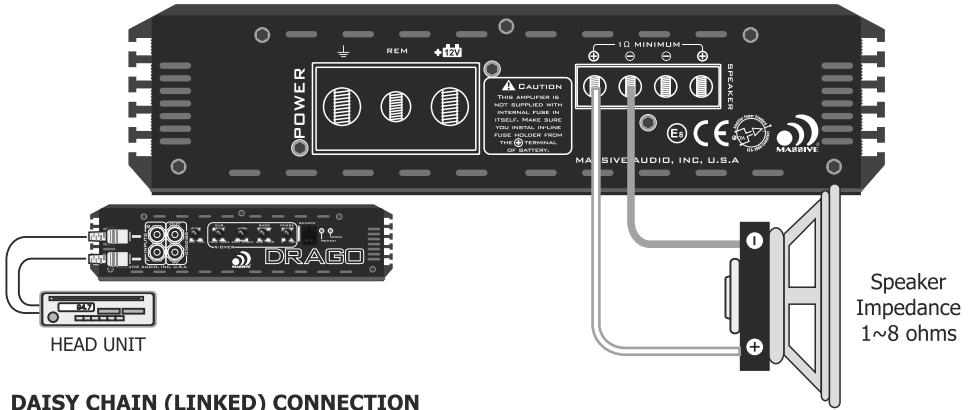
Make sure there are no stray strands that might touch other cable or terminals and cause short circuit.

Connect the cable ends to the amplifier as shown in the speaker wiring diagram.

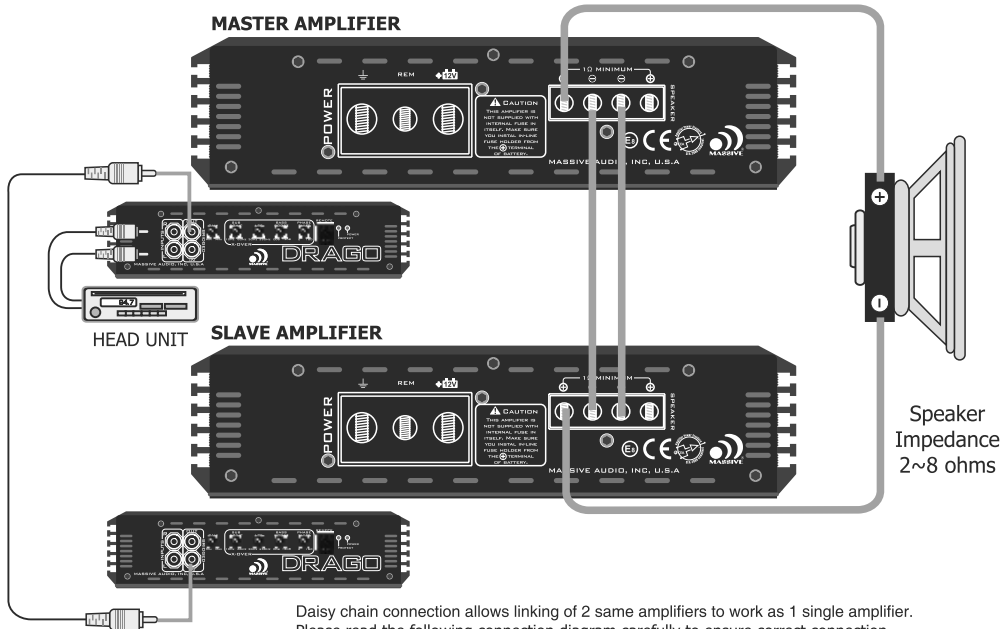
Speaker Connection

(D5K / D6K)

SINGLE CONNECTION



DAISY CHAIN (LINKED) CONNECTION



- Daisy chain connection allows linking of 2 same amplifiers to work as 1 single amplifier. Please read the following connection diagram carefully to ensure correct connection.
- Step 1. Connect the master amplifier to the head unit
 - Step 2. Connect the master and slave amplifier in daisy chain RCA jack as shown in the diagram.
 - Step 3. Connect speaker cable (+) on master amplifier to subwoofer (+)
 - Step 4. Connect speaker cable (+) on slave amplifier to subwoofer (-)
 - Step 5. Connect speaker cable (-) on master amplifier to speaker cable (-) on slave amplifier using 8 AWG wire cable.

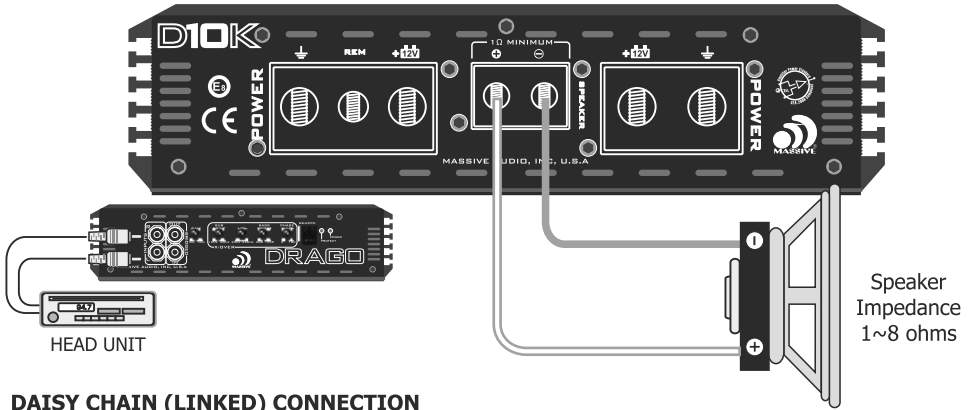


The minimum impedance as 1 unit is 1Ω .
In a daisy chain configuration the minimum impedance is 2Ω .

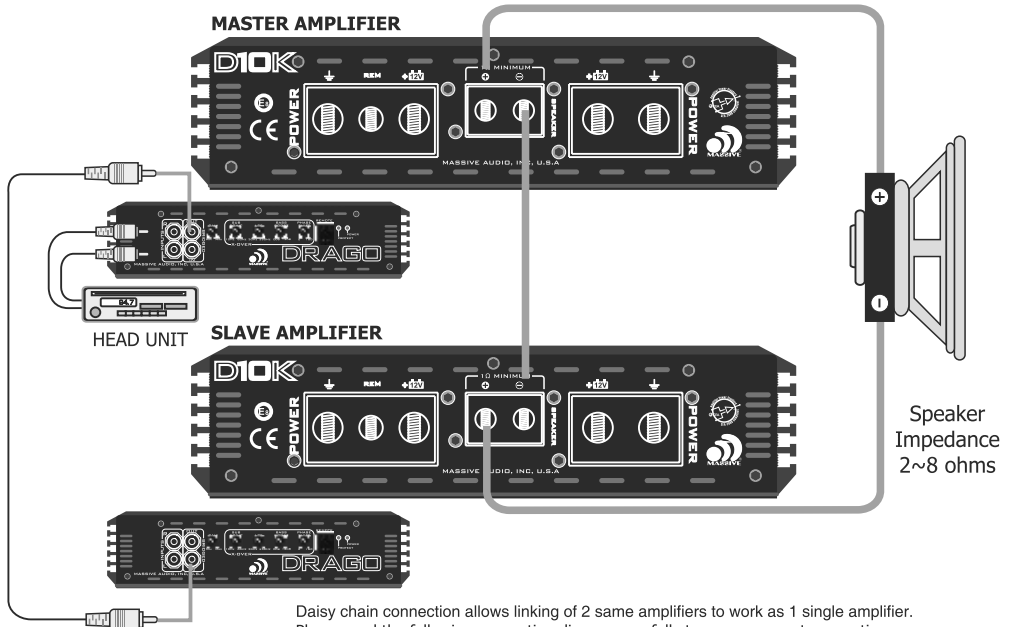
Speaker Connection

(D10K)

SINGLE CONNECTION



DAISY CHAIN (LINKED) CONNECTION



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 - Step 4. Connect speaker cable (+) on slave amplifier to subwoofer (-)
 - Step 5. Connect speaker cable (-) on master amplifier to speaker cable (-) on slave amplifier using 8 AWG wire cable.



The minimum impedance as 1 unit is 1Ω .
In a daisy chain configuration the minimum impedance is 2Ω .

Troubleshooting

This DRAGO amplifier has protection features to prevent damage from misuse or faulty conditions. If the unit senses excessive heat, short circuited speakers or overload, protection LED will light up and system will be turned off. Prior to checking the wiring for any fault, you should turn all level controls down and turn off power. If the amplifier shuts down due to excessive heat, protection LED will not light up. In this case, simply allow the amplifier to cool down. Before removing your amplifier, refer to the list below and follow the troubleshooting instructions. Always test the speakers and their wires first.

AMPLIFIER DOES NOT POWER UP

- Check if at least +12V DC is available on the battery power terminal.
- Check if at least +13.8V DC is available on the remote terminal.
- Check if a good ground connection is present. Check all fuses.
- Check if protection LED is not lit.

PROTECTION LED LIGHTS UP WHEN AMPLIFIER IS POWERED ON

- Check if speaker wires are short-circuited.
- Remove speaker wires and reset the amplifier. If protection LED still lights up, then the amplifier is faulty.

FUSE BLOW

- Check the value of minimum speaker impedance.
- Check for short-circuits on power cable and vehicle chassis.

OVERHEATING

- Check the value of minimum speaker impedance.
- Check speakers for short-circuits.
- Check if there is good airflow around the amplifier.

SOUND TOO LOW-DISTORTED SOUND

- Check if the input level control has been set to match the output level of the unit.
- Check the volume of head unit.
- Check speakers for short-circuits.
- Check if crossover frequencies have been properly set.

HIGH HISS-ENGINE NOISE IN SPEAKERS

- Check if a good ground connection is present and check speakers for short-circuits.
- Disconnect all RCA inputs from the amplifier. If hissing / engine noise disappears, replace the RCA connectors and re-check. Then check the component driving the amplifier.

Specifications

MODEL CODE

D5K

Continuous Power Output @14.4V Input

-RMS power, 4 ohms mono ----- : **730W x 1CH**

-RMS power, 2 ohms mono ----- : **1440W x 1CH**

-RMS power, 1 ohm mono ----- : **2600W x 1CH**

-RMS power, 2 ohms linkable/dual mono ----- : **5000W x 1CH**

Signal To Noise Ratio ----- : **>90dB**

Low Pass Frequency Crossover ----- : **30Hz~250Hz**

Subsonic Filter ----- : **10Hz~60Hz**

Bass Boost @ 45Hz ----- : **0~12dB**

Phase Shift Control ----- : **0~180 degree**

Frequency Response ----- : **10Hz~350Hz (+/- 1dB)**

T.H.D Continuous @ 4 ohm, 100Hz ----- : **<0.1%**

Efficiency @ 4 ohm, 100Hz ----- : **86%**

Input Sensitivity ----- : **Variable 200mV~8V (+/- 5%)**

Dimensions (inch) ----- : **9.44"(W) x 2.32"(H) x 17.71"(L)**

Operating Voltage ----- : **DC 8.5V~16V**

Recommended Fuse Rating ----- : **250A (External Fuse)/linked(500A)**

The above specifications are subject to modifications without prior notice.

Specifications

| MODEL CODE | D6K |
|---|--|
| Continuous Power Output @14.4V Input | |
| -RMS power, 4 ohms mono ----- | : 1000W x 1CH |
| -RMS power, 2 ohms mono ----- | : 2000W x 1CH |
| -RMS power, 1 ohm mono ----- | : 3000W x 1CH |
| -RMS power, 2 ohms linkable/dual mono ----- | : 6000W x 1CH |
| Signal To Noise Ratio ----- | : >90dB |
| Low Pass Frequency Crossover ----- | : 30Hz~250Hz |
| Subsonic Filter ----- | : 10Hz~60Hz |
| Bass Boost @ 45Hz ----- | : 0~12dB |
| Phase Shift Control ----- | : 0~180 degree |
| Frequency Response ----- | : 10Hz~350Hz (+/- 1dB) |
| T.H.D Continuous @ 4 ohm, 100Hz ----- | : <0.1% |
| Efficiency @ 4 ohm, 100Hz ----- | : 86% |
| Input Sensitivity ----- | : Variable 200mV~8V (+/- 5%) |
| Dimensions (inch) ----- | : 9.44"(W) x 2.32"(H) x 22.04"(L) |
| Operating Voltage ----- | : DC 8.5V~16V |
| Recommended Fuse Rating ----- | : 300A (External Fuse)/linked(600A) |

The above specifications are subject to modifications without prior notice.

Specifications

| | |
|---|--|
| MODEL CODE | D10K |
| Continuous Power Output @14.4V Input | |
| -RMS power, 4 ohms mono ----- | : 1400W x 1CH |
| -RMS power, 2 ohms mono ----- | : 2700W x 1CH |
| -RMS power, 1 ohm mono ----- | : 5000W x 1CH |
| -RMS power, 2 ohms linkable/dual mono ----- | : 10000W x 1CH |
| Signal To Noise Ratio ----- | : >90dB |
| Low Pass Frequency Crossover ----- | : 30Hz~250Hz |
| Subsonic Filter ----- | : 10Hz~60Hz |
| Bass Boost @ 45Hz ----- | : 0~12dB |
| Phase Shift Control ----- | : 0~180 degree |
| Frequency Response ----- | : 10Hz~350Hz (+/- 1dB) |
| T.H.D Continuous @ 4 ohm, 100Hz ----- | : <0.1% |
| Efficiency @ 4 ohm, 100Hz ----- | : 86% |
| Input Sensitivity ----- | : Variable 200mV~8V (+/- 5%) |
| Dimensions (inch) ----- | : 9.44"(W) x 2.32"(H) x 23.22"(L) |
| Operating Voltage ----- | : DC 8.5V~16V |
| Recommended Fuse Rating ----- | : 400A (External Fuse)/linked(800A) |

The above specifications are subject to modifications without prior notice.



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MADE IN CHINA



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