DS18 HOOLIGAN-KO Full Range Class D 4 Channel Car Audio Amplifier Owner's Manual

Contents

DS18 HOOLIGAN-KO Full Range Class D 4 Channel Car Audio Amplifier

Product Information

Specifications

- Product: DS18 HOOLIGAN KO Competition Class D Amplifier
- Features: Platinum finish connections, fully variable crossovers, protection circuitry
- Crossovers: 12dB per octave slopes
- Protection Features: Overload, Short Circuit, Thermal, Reverse Polarity

Product Usage Instructions

Introduction

The DS18 HOOLIGAN KO Car amplifiers offer high-quality audio reproduction suitable for both audiophiles and everyday listeners. The fully variable crossovers with 12dB per octave slopes allow customization of sound to match speakers and preferences.

Installation

1. Before starting, disconnect the negative cable from the car battery and isolate it.
2. Run an appropriate gauge wire from the battery to the amplifier, ensuring proper fusing to prevent fire hazards.
3. Connect the power wire to the battery using a fuse capable of the total current load. Place the fuse close to the battery.
4. Find a clear metal area near the amp for grounding. Remove paint and secure the ground connection.

Mounting

Amplifiers are typically mounted in the hatch/trunk of cars or SUVs, under/behind the seat of pick-up trucks. Ensure proper ventilation and mount with fins facing up vertically or horizontally. Secure the amplifier with provided screws after checking for any obstructions.

Warning

Professional installation by an authorized dealer is recommended to maintain performance and warranty integrity. DIY installation should be done carefully to prevent damage.

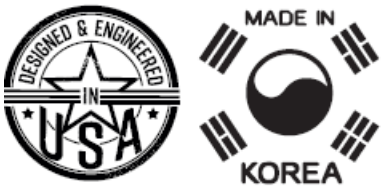
Frequently Asked Questions (FAQ):

- **Q: Where should I mount the amplifier?**
  - A: Amplifiers are typically mounted in the hatch/trunk area of cars or SUVs, or under/behind the seat of pick-up trucks. Ensure proper ventilation and avoid mounting with fins down.
- **Q: How should I connect the power wire?**
  - A: Run an appropriate gauge wire from the battery to the amplifier, ensuring proper fusing to prevent fire hazards. Connect the power wire to the battery using a fuse capable of the total current load.
- **Q: Why is professional installation recommended?**
  - A: Professional installation helps maintain performance, prevents damage, and ensures warranty validity. DIY installation should be done carefully following the manual instructions.

OWNER'S MANUAL
Competition Class D Amplifier

FEATURES

- Competition SPL Monoblock Class-D Subwoofer Amplifier and 4-Channels Stereo Amplifier
- Protection Circuit: Thermal, Over-Load, DC, Short Circuit, Voltage and Clipping
- LED indicate working status: Power/Protection/Clipping
- LED Digital Voltmeter (Only Monoblock Models)
- Tiffany RCA Connectors
- Cooling Fan Inside to improve air flow (only Monoblock models)
- Strap Mode Connection
- Remote Bass Knob with Power and Clip LED Indicator included
- Latest SMC and MOSFET Technology
- Heavy Duty Printed Circuit Board



Thank you for choosing DS18
HOOLIGAN KO amps!

To Take full advantage of the DS18 HOOLIGAN KO amps you have just purchased, please read and follow the instructions in this manual. As with all of our products, professional installation by an authorized DS18 dealer is highly recommended!

INTRODUCTION

The DS18 HOOLIGAN KO Car amplifiers offer high quality audio reproduction for the audiophile and the everyday listener alike. All models feature fully variable crossovers with 12dB per octave slopes, allowing you the ability to tailor the sound to best fit the speakers and your listening preferences.

PLATINUM FINISH CONNECTIONS Ensures solid electrical connections that resist corrosion.

FULLY VARIABLE CROSSOVERS
Fully variable crossovers save the cost of outboard crossovers.
Additionally, they may be used in conjunction with outboard passive or active crossovers, depending on the complexity required by the system. The 12 dB per octave slope offers steep roll-off above or below the selected frequency.

PROTECTION CIRCUITRY
Overload, Short Circuit, Thermal, and Reverse Polarity protection features are designed to protect the amplifier from misuse, as well as from common causes of amplifier failure.

WARNING
Professional installation by an authorized DS18 H-KO amps dealer is highly recommended! Otherwise, the performance of your new gear may not be satisfactory. In the event that you decide to do your own installation, please read and follow this manual very carefully. Failure to do so may compromise the integrity of this product, your automobile, and possibly void the product warranty.

Amplifiers are generally mounted in the hatch/ trunk area of a car or SUV, and under or behind the seat of most pick-up trucks. Select a location that will provide adequate ventilation for the amplifier. Avoid mounting the amplifier with the fins down. The fins should be facing up either vertically or horizontally. Secure the amplifier with the screws provided.

Before securing the amplifier, inspect the mounting location carefully to ensure that you do not drill into or damage any electrical, hydraulic, fluid or fuel lines.

INSTALLATION INSTRUCTIONS

1. Before you start, disconnect the negative cable from the car battery. Tape up the end so it is isolated from the battery.
2. Run an appropriate gauge wire from the battery to the amplifier. Plan this part of the installation carefully. This cable will carry very high current, if it should short to the body and it is not properly fused it could catch fire.
3. Connect the power wire to the battery using a fuse capable of the total current load of all amplifiers connected. Don’t install the fuse yet. Wait until the end. Locate the fuse as close as possible to the battery. If the fuse is further than 18 inches (wire length) from the battery you should reevaluate the wire and fuse placement.
4. Find the closest clear metal area to the amp for a ground. Sand, grind or scrape all paint and undercoating from the body and screw the ground securely in place.
   It is advisable to test the ground with an ohm meter between the ground cable and the negative battery cable to ensure a good low resistance connection. Some panels used in modern cars do not offer the best ground. If you believe this is the case – first consult with the vehicle manufacturer.
5. Run the speaker wire to the speakers. It is advised that you leave some extra wire at this point. You can fix it later.
6. If you haven’t done so already, mount the amp now.
7. Connect the power and ground to the amplifier.
   ONLY AFTER THIS STEP – SHOULD YOU INSTALL THE FUSE AT THE BATTERY.
8. Connect the remote wire from the head unit to the amplifier. Now is a good time to turn on the amp for the first time. Make sure it turns on properly and does not go into protection mode.
9. Connect the speaker wires to the amp and speakers (make sure the amp is off first). Make sure the polarity (+) and (-) is correct.

10. Connect the RCA's to the amp.
11. Double check the amplifier controls at this time. Make sure everything is set correctly for your system.
12. Now you're ready to play it for the first time. It is best to leave the gain all the way down at first. Start with the head unit volume low and work your way up.
13. Now you can tune the amp. Take your time and make only one adjustment at a time. It may take some time to get the system fully adjusted. During this time the amp is drawing current from the battery. You should check the battery voltage from time to time and recharge it, if it gets low.

That's it. You're done. Now have fun.

POWER CONNECTIONS

It is important to have good quality power and ground connections. Remember, to complete an electrical circuit, the ground connection is just as important as the positive power connection. Before any power connections are made, disconnect the ground cable of the battery. Use 1/0 gauge or larger automotive grade wire if the distance from the battery to the amp is excessive. Avoid sharp or rough edges as a safeguard against short-circuiting and potential fire hazards.

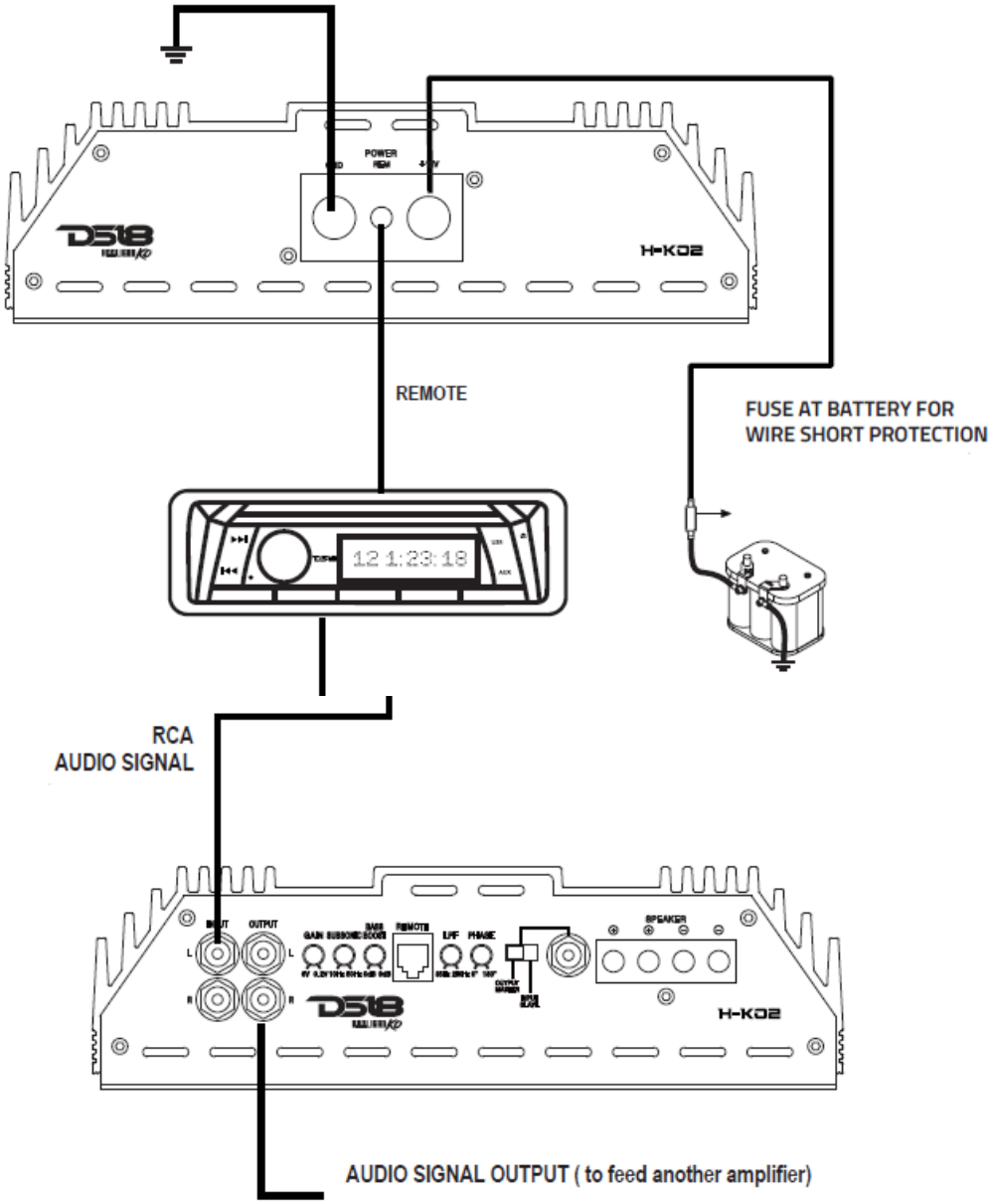
GND = Connect the proper gauge ground wire to the amplifier GND terminal. Locate the position on the chassis of the car where the amplifier will be grounded. Use solder or a crimped ring terminal to connect the ground wire pre-drill the prepped chassis to bolt the ground ring terminal with a nut, bolt, and lock washer to insulate the metal and the connector with paint or silicone to prevent rust and oxidation. Silicone also works great to prevent nuts and bolts from working loose in the harsh environments of an automobile. Upon completion of the ground connection, grab the wire end connector to confirm the connection is solid. To prevent engine noise, it is recommended to ground the head unit and other electronic audio devices in the same location.

REM = Connect the remote wire (power antenna output) from the head unit to the REM terminal. If the head unit is not equipped with a
remote/antenna output, locate a wire that is controlled by the accessory position of the key. It is important to have the amplifier turn off with the radio or key. If the amplifier remains on, the battery will drain.

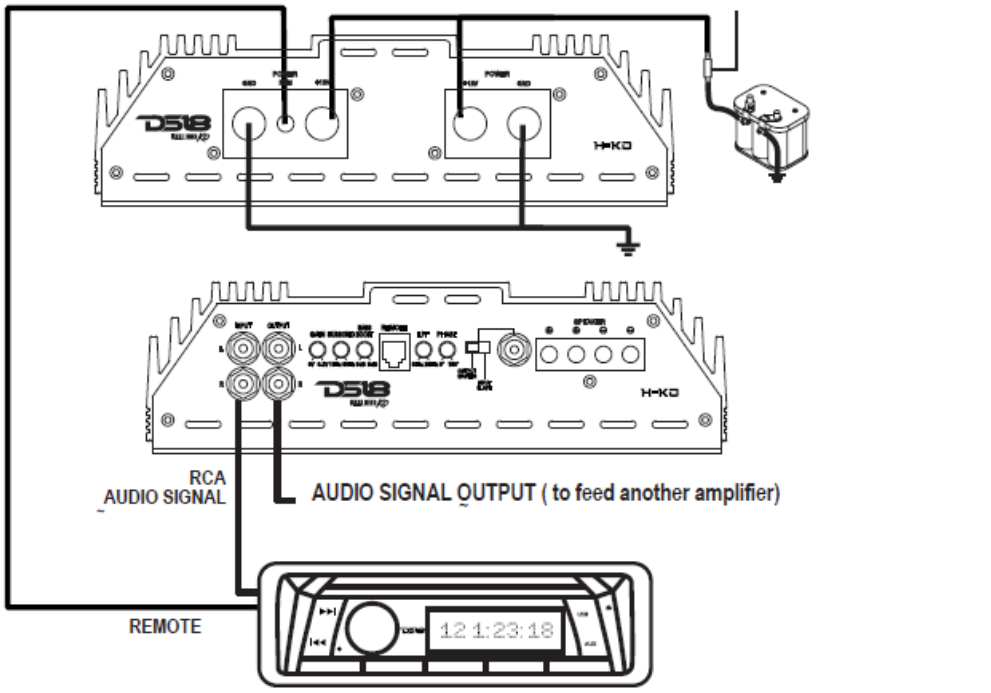
12V = Connect the proper gauge power wire to the B+ terminal. Trace the power wire through the car to the in-line fuse or circuit breaker that is no more than 18″ from the battery. Remember, the ln-line fuse or circuit breaker protects the car in the event of a short circuit, connect the in-line fuse or circuit breaker to the battery, but do not install the fuse or activate the circuit breaker yet.

POWER CONNECTIONS

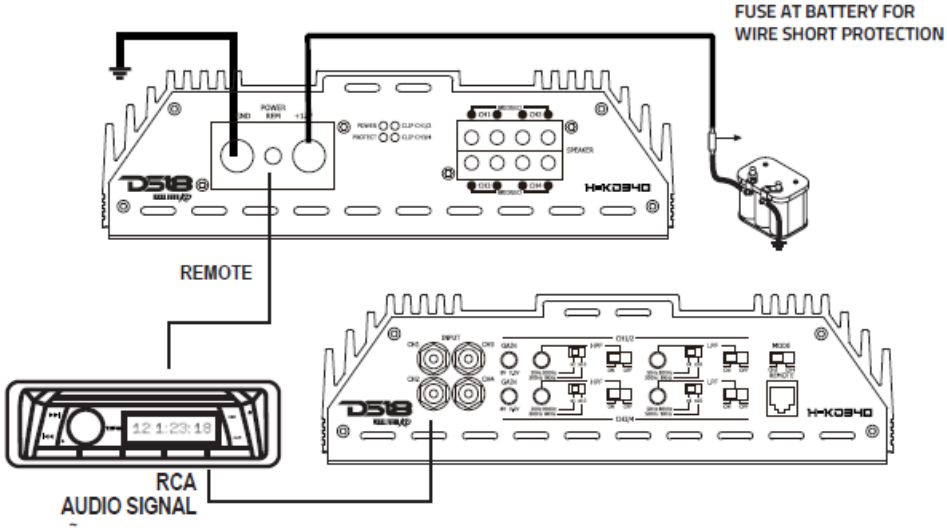
H-K02


H-K02
REMOTE
FUSE AT BATTERY FOR
WIRE SHORT PROTECTION
RCA
AUDIO SIGNAL
H-K02
AUDIO SIGNAL OUTPUT (to feed another amplifier)

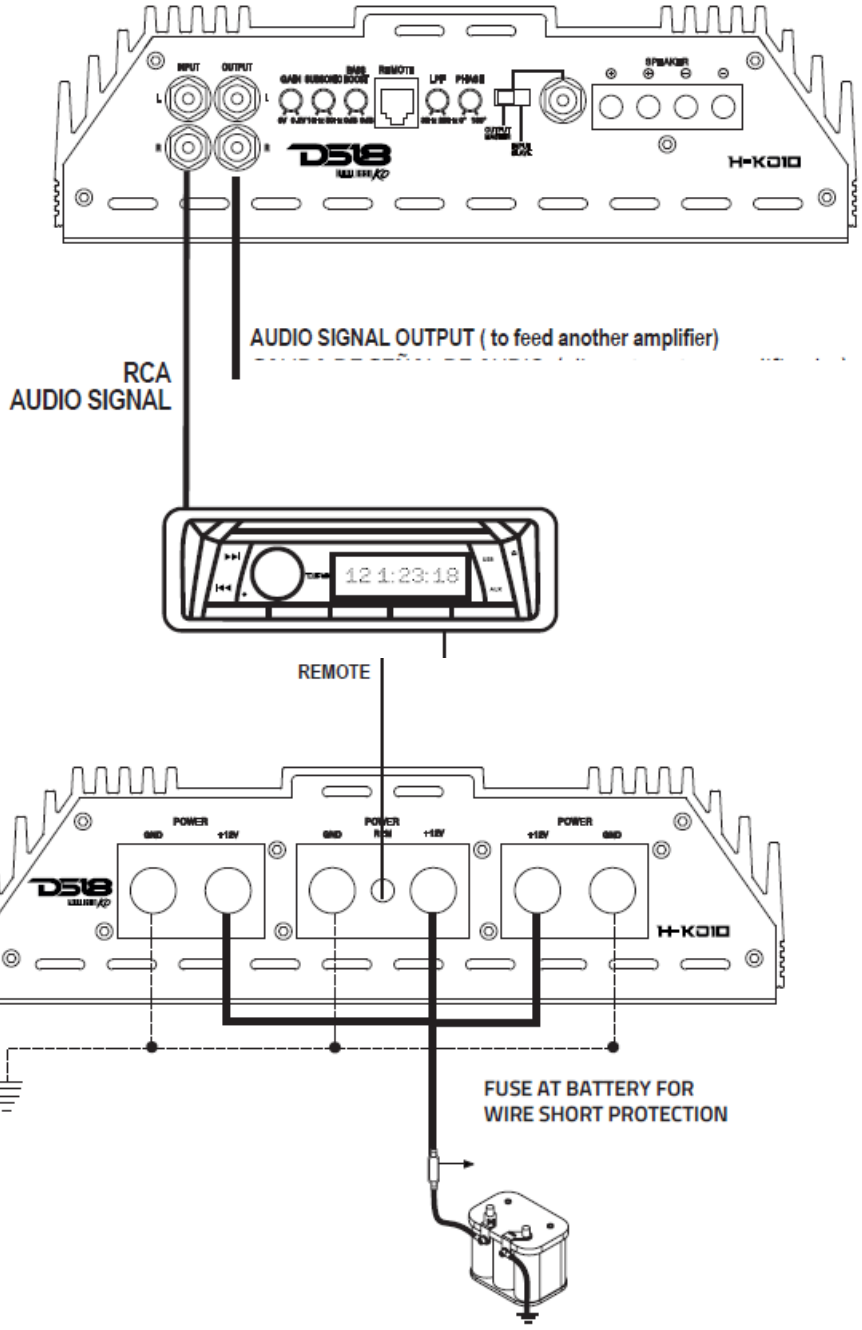
H-K03 / H-K05 / H-K08



H-K0340

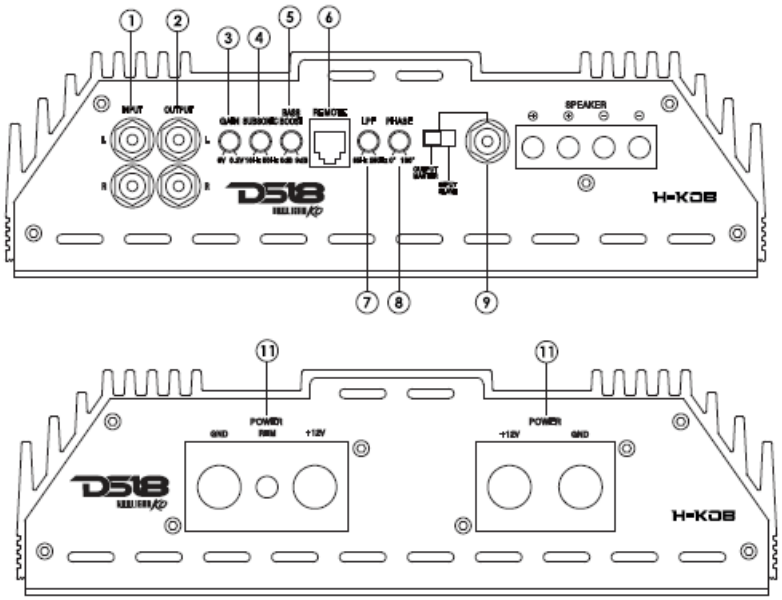


H-K010

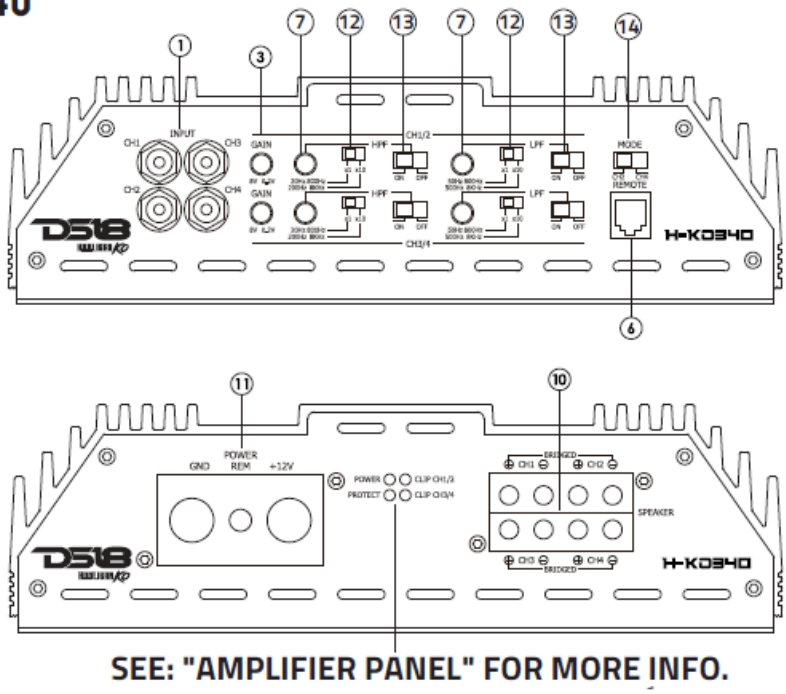


CONTROLS AND ADJUSTMENTS

H-KO2 / H-KO3 / H-KO5 / H-KO8



H-KO340



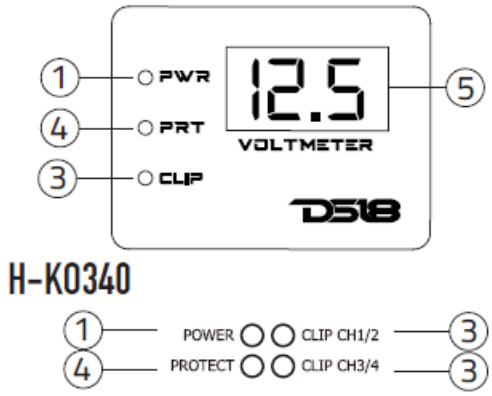
SEE: "AMPLIFIER PANEL" FOR MORE INFO.

CONTROLS AND ADJUSTMENTS

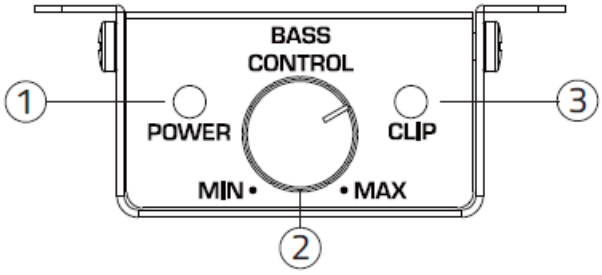
1. **RCA AUDIO INPUT CONNECTION** – Using high-quality shielded stereo RCA cables, connect the source signal to the amplifier RCA inputs.
2. **RCA OUTPUTS** – Output RCA jack to another amplifier.
3. **Level Sensitivity** – Adjust the amplifier's pre-amp sensitivity level. The minimum sensitivity level is 200mV , while the maximum level is 6V Monoblocks 8V 4-channels.
4. **SUBSONIC FILTER** – Adjust the frequency setting of the subsonic crossover. The frequency range is 10Hz-50 Hz. Frequencies lower than the setting will be filtered out of the audio signal.
5. **BASS BOOST –** Adjust the amplifier's 45Hz Bass Boost level up to 6dB.
6. **Remote Level Control Connection** – Connect the remote level control to this terminal. The remote level control allows adjustment of the subwoofer level from a remote location.

7. **LPF/HPF Crossover** – Adjust the frequency setting of the low or high pass crossover. for LPF, Frequencies higher than the setting will be filtered out of the audio signal, for HPF, Frequencies lower than the setting will be filtered out of the audio signal.
8. **PHASE** – The phase setting synchronizes the phase of your Subwoofer output to that of the other speakers in the car. Set your amp to 0 and listen to a track with some bass. Afterward, set the Phase setting to 180 degrees, and see if the bass output improves or becomes worse with the same track. Leave the switch set to whichever setting yields the best results.
9. **STRAP MODE** – Use an RCA to connect between two amplifiers that are in daisy chain mode, move the switch to “MAIN” if this is the main amplifier that receives the RCA signal from the radio and have connected the positive output of the subwoofer. move the switch to “STRAP” if this is the secondary amplifier that have connected the negative output of the subwoofer.
10. **SPEAKER OUTPUT** – Connect speaker cables from speaker terminal block to Subwoofers or Loudspeakers. Speaker’s impedance should be checked carefully. Check the minimum impedance load of each amplifier in the specifications table respectively.
11. **POWER INPUT:** The power and ground will accommodate 0 gauge wire. Use high quality pure copper wire only. REM connector will accept wire sizes from12 to 16 gauge. This terminal is used to remotely turn-on and turn-off. the amplifier when +12V DC is applied.
12. **CROSSOVER FREQUENCY MULTIPLIER** – The multiplier swatch changes the range of frequencies affected by the frequency control. On this crossover, the front & rear channel control can be used to set the crossover point between 20Hz and 800Hz when set to the x1 position. When set to 10x, the crossover point can be set to any frequency between 200Hz and 8000Hz (8kHz).
13. **CROSSOVER SELECTION SWITCH** – Select either a high-pass filter (HPF), low-pass filter (LPF), or opt for full-range operation. Additionally, you have the option to enable both filters simultaneously, creating a bandpass crossover effect.
14. **INPUT MODE –** In 2-channel position the amplifier can use one input signal on the 1&2 channels to drive both 1&2 and 3&4 outputs simultaneously. In 4-channel position, the 1&2 and 3&4 inputs are separated and only output to their respective channels.

AMPLIFIER PANEL PANEL



REMOTE LEVEL CONTROL



AMPLIFIER PANEL / REMOTE LEVEL CONTROL

1. **POWER:** Red Light = Amplifier is ON.
2. **GAIN:** adjust the output level.
3. **Clipping**

   Clipping typically occurs when the gain is set too high to maximize the amplifier's output potential, leading to a squared or clipped sound wave. This can result in significant heat generation from both the amplifier and connected speakers, potentially causing catastrophic damage to your equipment.

   To avoid these issues, follow these simple steps: After setting up your amplifier, keep an eye on the CLIP indicator light. If you notice it blinking, it indicates clipping. In such cases, promptly reduce the gain. Once the CLIP indicator light goes off, you have successfully eliminated clipping.

   Our clipping indicator is highly accurate, comparable to an oscilloscope, providing real-time monitoring of dynamic source material such as music. This ensures that you can effectively manage and control the gain settings to prevent any potential damage to your audio equipment.

   Tips: If you set your gains with an oscilloscope, everything is fine until some factor in your system changes. This change could be in the head unit volume, charging system voltage, source recording level, etc. If any of these factors differ from when you initially set your gains, the amplifier's clipping point will also change.
4. **Power Protection indicator Led**

   When the amplifier is powered on and functioning correctly, the green LED will illuminate. Consult the Troubleshooting Guide if the amplifier fails to power on for potential solutions. If the amplifier enters protection mode, the red LED will illuminate. For guidance on resolving issues related to the amplifier's protection mode, refer to the troubleshooting guide for possible solutions.
5. **Voltmeter**

   shows the input voltage of the amplifier in real time

SETTING THE GAINS

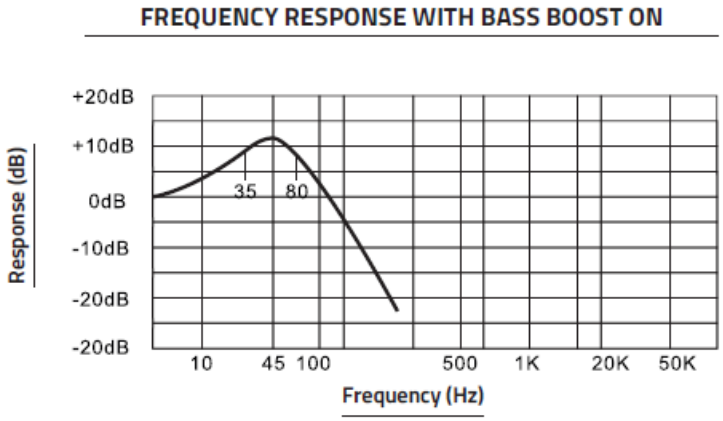
Only a limited number of individuals, including professional installers, possess the knowledge to accurately set amplifier gains. Failure to do so can lead to adverse consequences, including higher distortion, an elevated noise floor leading to reduced dynamic headroom, suboptimal operating conditions for electronic equipment, and an increased risk of failure for both the electronic equipment and transducers.

Despite common practice, setting the gain control based on desired music loudness is not its intended purpose. The control's range spans from 0.25 volts to 6 volts and is designed to match the output of the source unit's signal voltage. For instance, if your source unit has a low output voltage, you would likely set the control towards the 0.25V range. Head units with 4 volts of output signal voltage may have the control set midway through the range. If you use a line driver (signal booster) providing 6 volts or more, you would set the gain at the minimum position, towards the 6V range.

When properly level matched in these examples, the amplifier will play its source material at the maximum volume

without issues. However, setting the control above the appropriate point may lead to damage to the amplifier and speakers, resulting in poor sound quality and undesirable outcomes.

BASS BOOST CONTROL
The mono block amplifiers feature a variable bass boost control centered at 45Hz. You can adjust the amount of boost from OdB to 12dB.



WARNING
We highly recommend that an in-line fuse or circuit breaker be installed within 18″ of the battery. Although your amplifier has adequate internal protection, it is possible a damaged wire between the component and the battery may result in a fire. The in-line fuse or circuit breaker should be installed in a location that is easy to access, and all wiring should be routed safely, following the below suggestions

- Avoid placing wires near hot or moving objects
- Always use wire grommets when routing wire through the firewall or any other metal surfaces.
- Avoid the potential for damaged wires by routing all wires away from moving hinges, seats, brake & gas pedals, hood and trunk hinges, etc.

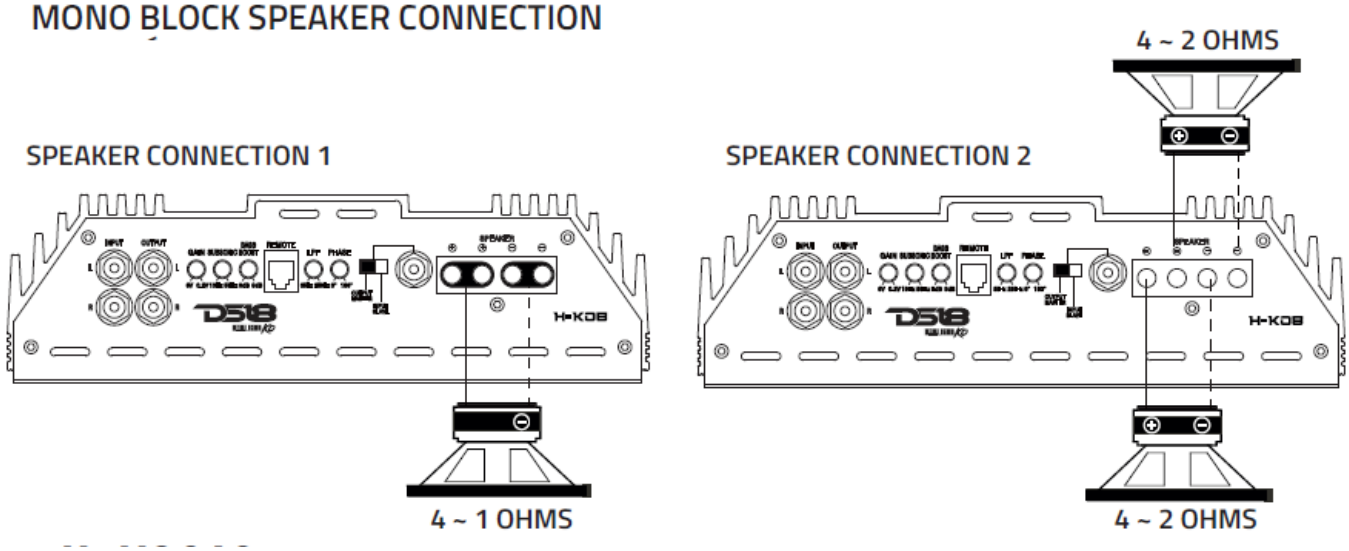
Please read carefully before installing or operating this high powered amplifier

WARNING
Make sure you choose a suitable place to mount the unit. The position should be completely dry with a good circulation of air, and from a mechanical point of view very stable.

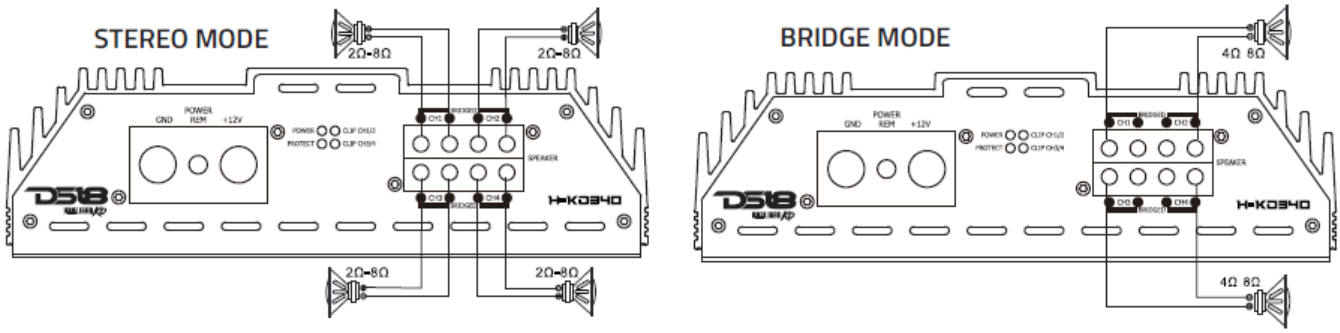
SPEAKER OUTPUTS

H-KO2 / **H-KO3** / **H-KO5** / **H-KO8** / **H-KO10**
MONO BLOCK SPEAKER CONNECTION
CONEXIÓN DE ALTAVOZ MONOBLOQUE

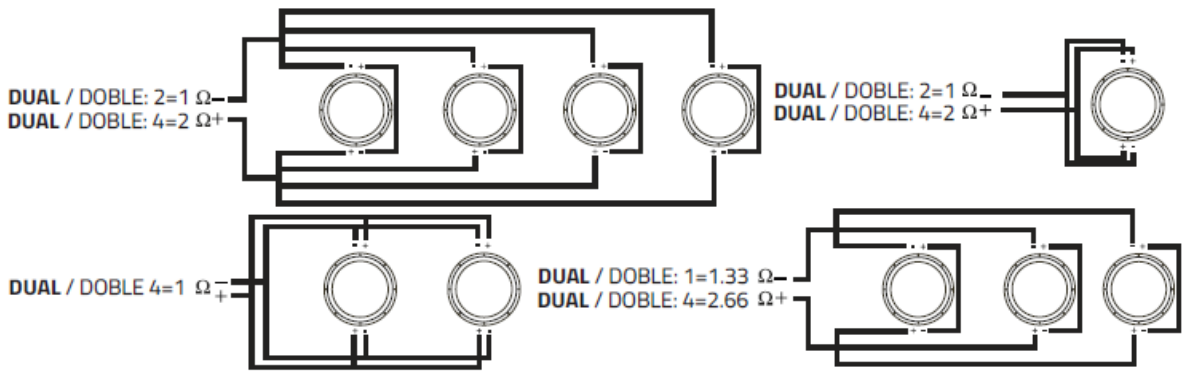
MONO BLOCK SPEAKER CONNECTION



H-KO340
4 CHANNELS SPEAKER CONNECTION



WIRING CONFIGURATION EXAMPLES



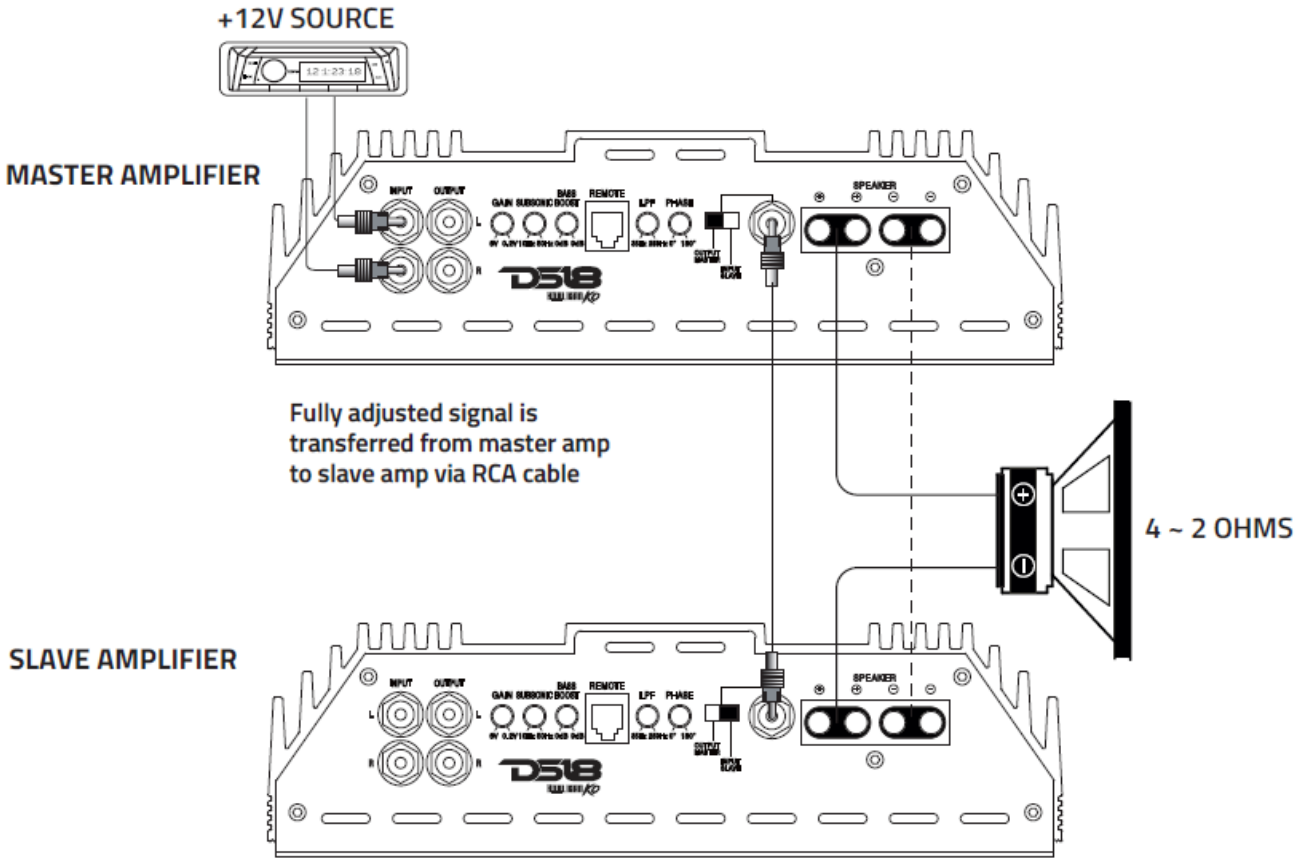
STRAP MODE CONNECTION

INPUT CONNECTION

- **STEP 1.** Connect the master amplifier to the head-unit and set its output master / input slave switch to output master.
- **STEP 2**. Set slave amplifier output master / input slave switch to slave input.
- **STEP 3.** Connect RCA cable from the master to slave amplifier as shown in the diagram.

SPEAKER CONNECTION

- **STEP 1.** Connect speaker cable (+) on master amplifier to subwoofer (+).
- **STEP 2**. Connect speaker cable (+) on slave amplifier to subwoofer (–).
- **STEP 3**. Connect speaker cable (–) on master amplifier to speaker cable (–) on slave amplifier.



IMPORTANT
Minimum strippable working impedance is 2ohm. Lower than 1ohm can damage the amplifier Working voltage : 9V to 16Volts.

H-KO2

- **POWER**

  RMS Power @ 4 ohm ……950W

  RMS Power @ 2 ohm ……1500W

  RMS Power @ 1 ohm……2000W

  RMS Power @ 0.5 ohm …… 3600W (burst only)
- AUDIO / AUDIO

  Frequency Response……13Hz-300Hz

  Signal to Noise Ratio …….. >80dB

  Efficiency @ 4 ohm ……

  95%

  Damping Factor ……..400

  Total Harmonic Distortion (THD) ……<0.2%

  Low Level Input Range ……0.2-6V

Selectable X-Over……Fixed LPF

X-Over Filter Range ……..35-250Hz

Bass Boost Range……0-9dB

Bass Boost Frequency……45Hz

Infrasonic Filter …… 10-50Hz

Phase Selector……..0/180º

- **FEATURES**

Amplifier Class …….. Digital (D)

Amplifier Type……. Monoblock / Subwoofer

Number of Channels ……..1 Channel / 1 Canal

Minimum Impedance……1 ohm

Led Indicator ……..Power | Protect | Clip

Power Input Terminal Size ……1/0Ga

Fuse Size…….. 180A

Remote Level Control ……. Yes (Metal Case)

Cooling Fan……Y

Voltmeter …… Yes

Thermal Protection ……..Yes

Over-Load Protection ……..Yes

DC Output Protection ……Yes

Short Circuit Output Protection ……..Yes

Voltage Input Protection……..Yes

Clipping Protection ……..Yes

LED Clipping indicator …… Yes

Professional Tiffany RCA Connectors ……Yes

Remote Level Knob with Clip indicator ……Yes

Linkable (Strap mode) Amplifier ……..Yes

Reliable Heavy Duty Korean Board Design ……..Yes

Very High Efficiency Digital Circuit Design ……..Yes

Body Color …… H-KO2 – Black / Negro

H-KO2/RD – Red

H-KO2/TI – Titanium

- **MEASUREMENTS**

Overall Length (with end plate) ……10.74″ / 273mm

Overall Wide …….. 9.68″ / 246mm

Overall Height (with end plate …….. 2.85″ / 72.5mm

Heatsink Length …… 9.44″ / 240mm

H-KO3

- POWER

  RMS Power @ 4 ohm ……1500W

  RMS Power @ 2 ohm ……2500W

  RMS Power @ 1 ohm ……3000W

  RMS Power @ 0.5 ohm…… 6200W (burst only)

- **AUDIO**

  Frequency Response ……13Hz-300Hz

  Signal to Noise Ratio …….. >97dB

  Efficiency @ 4 ohm …… 95%

  Damping Factor ……..400

  Total Harmonic Distortion (THD) ……<0.2%

  Low Level Input Range ……0.2-6V

  Selectable X-Over ……..Fixed LPF

  X-Over Filter Range ……..35-250Hz

  Bass Boost Range ……0-9dB

  Bass Boost Frequency……45Hz

  Infrasonic Filter …… 10-50Hz

  Phase Selector ……..0/180º

- **FEATURES**

  Amplifier Class …….. Digital (D)

  Amplifier Type…….. Monoblock

  Number of Channels ……..1 Channel

  Minimum Impedance ……1 ohm

  Led Indicator ……..Power | Protect | Clip

  Power Input Terminal Size ……2 x 1/0Ga

  Fuse Size …….. 300A

  Remote Level Control……Yes (Metal Case)

  Cooling

  Fan……Y

  Voltmeter……

Yes

Thermal Protection……..Yes

Over-Load Protection ……..Yes

DC Output Protection ……Yes

Short Circuit Output Protection ……..Yes

Voltage Input Protection……..Yes

Clipping Protection ……Yes

LED Clipping indicator ……Yes

Professional Tiffany RCA Connectors ……Yes

Remote Level Knob with Clip indicator……Yes

Linkable (Strap mode) Amplifier……..Yes

Reliable Heavy Duty Korean Board Design ……..Yes

Very High Efficiency Digital Circuit Design……..Yes

Body Color …… H-KO3 – Black

H-KO3/RD – Red

H-KO3/TI – Titanium

- **MEASUREMENTS**

Overall Lengh (with end plate) …… 12.2″ / 310mm

Overall Wide l……..

9.68″ / 246mm

Overall Height (with end plate…….. 2.85″ / 72.5mm

Heatsink Length ……11″ / 280mm

H-KO5

- **POWER**

RMS Power @ 4 ohm ……2200W

RMS Power @ 2 ohm ……3500W

RMS Power @ 1 ohm ……5000W

RMS Power @ 0.5 ohm…… 9200W (burst only)

- **AUDIO**

Frequency Response ……13Hz-300Hz

Signal to Noise Ratio…… >96dB

Efficiency @ 4 ohm……

96%

Damping Factor ……..400

Total Harmonic Distortion (THD) ……<0.2%

Low Level Input Range ……0.2-6V

Selectable X-Over ……..Fixed

LPF

X-Over Filter Range ……..35-250Hz

Bass Boost Range ……..0-9dB

Bass Boost Frequency……45Hz

Infrasonic Filter …… 10-

50Hz

Phase Selector

……..0/180º

- **FEATURES**

Amplifier Class …….. Digital (D)

Amplifier Type ……. Monoblock / Subwoofer

Number of Channels ……..1 Channel / 1 Canal

Minimum Impedance ……1 ohm

Led Indicator……..Power | Protect | Clip

Power Input Terminal Size ……2 x 1/0Ga

Fuse Size

…….. 420A

Remote Level Control ……..Yes (Metal Case)

Cooling Fan

…….Yes

Voltmeter

…… Yes

Thermal Protection

a……..Yes

Over-Load Protection ……..Yes

DC Output Protection……Yes

Short Circuit Output Protection……..Yes

Voltage Input Protection …….Yes

Clipping Protection ……Yes

LED Clipping indicator ……Yes

Professional Tiffany RCA Connectors …….Yes

Remote Level Knob with Clip indicator……..Yes

Linkable (Strap mode) Amplifier……..Yes

Reliable Heavy Duty Korean Board Design ……..Yes

Very High Efficiency Digital Circuit Design……..Yes

Body Color …… H-KO5 – Black

H-KO5/RD – Red

H-KO5/TI – Titanium

- **MEASUREMENTS**

Overall Length (with end plate)…….15.35″ / 390mm

Overall Wide …… 9.68″ / 246mm

Overall Height (with end plate …….. 2.85″ / 72.5mm

Heatsink Length ……14.17″ / 360mm

H-KO8

- **POWER**

  RMS Power @ 4 ohm …….2500W

  RMS Power @ 2 ohm …….4800W

  RMS Power @ 1 ohm …….8000W

  RMS Power @ 0.5 ohm……. 15000W (burst only)

- **AUDIO**

  Frequency Response……13Hz-300Hz

  Signal to Noise Ratio ……. >95dB

  Efficiency @ 4 ohm ……
  94%

  Damping Factor ……..500

  Total Harmonic Distortion (THD) ……<0.2%

  Low Level Input Range …….0.2-6V

  Selectable X-Over ……..Fixed
  LPF

  X-Over Filter Range ……..35-250Hz

  Bass Boost Range ……..0-9dB

  Bass Boost Frequency ……45Hz

  Infrasonic Filter ……
  10-50Hz

  Phase Selector
  ……..0/180º

- **FEATURES**

  Amplifier Class …….. Digital (D)

  Amplifier Type …… Monoblock / Subwoofer

  Number of Channels ……..1 Channel

  Minimum Impedance ……1
  ohm

  Led Indicator ……..Power | Protect | Clip

  Power Input Terminal Size ……2 x 1/0Ga

  Fuse
  Size……..
  720A

  Remote Level Control ……..Yes (Metal Case)

  Cooling
  Fan……Y

  Voltmeter
  ……
  Yes

  Thermal Protection ……Yes

  Over-Load Protection ……..Yes

  DC Output Protection ……Yes

  Short Circuit Output Protection ……..Yes

Voltage Input Protection ……..Yes

Clipping Protection ……Yes

LED Clipping indicator ……Yes

Professional Tiffany RCA Connectors ……Yes

Remote Level Knob with Clip indicator……Yes

Linkable (Strap mode) Amplifier……..Yes

Reliable Heavy Duty Korean Board Design ……..Yes

Very High Efficiency Digital Circuit Design ……..Yes

Body Color …….. H-KO8 – Black

H-KO8/RD – Red

H-KO8/TI – Titanium

- **MEASUREMENTS**

Overall Length (with end plate)…… 18.9″ / 480mm

Overall Wide …….. 9.68″ / 246mm

Overall Height (with end plate…….. 2.85″ / 72.5mm

Heatsink Length ……17.71″ / 450mm

H-KO10

- **POWER**

RMS Power @ 4 ohm ……3500W

RMS Power @ 2 ohm ……5800W

RMS Power @ 1 ohm …….. 10000W

RMS Power @ 0.67 ohm …….. 18000W (busrt only)

- **AUDIO**

Frequency Response……13Hz-300Hz

Signal to Noise Ratio …….. >88dB

Efficiency @ 4ohm

…….95%

Damping Factor……..400

Total Harmonic Distortion (THD) ……<0.2%

Low Level input Range ……..0.2-6V

Selectable X-Over …….Fixed LPF

X-Over Filter Range ……..35-250Hz

Bass Boost Range ……0-9dB

Bass Boost Frequency ……45Hz

Infrasonic Filter …… 10-50Hz

Phase Selector …… 0-180°

- **FEATURES**

Amplifier Class …….. Digital (D)

Amplifier Type r …… Monoblock / Subwoofer

Number of Channels ……1 Channel

Minimum Impedance …….. 1 Ohm

Led Indicator……Power | Protect | Clip

Power Input Terminal Size ……3 x 1/0Ga

Fuse Size ……. 830A

Remote Level Control……..Yes (Metal Case)

Cooling Fan …… Yes

Voltmeter …… Yes

Thermal Protection……Yes

Over-Load Protection ……..Yes

DC Output Protection ……Yes

Short Circuit Output Protection ……..Yes

Voltage Input Protection ……..Yes

Clipping Protection ……..Yes

LED Clipping indicator ……Yes

Professional Tiffany RCA Connectors ……Yes

Remote Level Knob with Clip indicator……Yes

Linkable (Strap mode) Amplifier ……..Yes

Reliable Heavy Duty Korean Board Design……Yes

Very High Efficiency Digital Circuit Design ……..Yes

Body Color ……..H-KO10 – Black

H-KO10/RD – Red

H-KO10/TI – Titanium

H-KO10XA – Black with gold

- **MEASUREMENTS**

  ……

  Overall Length (with end plate)…… 23.22″ / 590mm

  Overall Wide…….9.68″ / 246mm

  Overall Height (with end plate ……..2.85″ / 72.5mm

  Heatsink Length ……22″ / 560mm

H-KO340

- **POWER**

  RMS Power @ 4 ohm …… 4 x 300W

  RMS Power @ 2 ohm …… 4 x 550W

RMS Power@ 4 ohm Bridge …… 2 x 1000W

- **AUDIO**

Frequency Response ……10Hz-20KHz

Signal to Noise Ratio ……. >90dB

Efficiency @ 4 ohm

……90%

Damping Factor ……..100

Total Harmonic Distortion (THD) ……<0.2%

Low Level Input Range ……0.2-8V

Selectable X-Over …… HPF/LPF/BAND-PASS

X-Over Filter Range ……HPF: 20Hz-8KHz / LPF: 50Hz-8KHz (1X/10X)

- **FEATURES**

Amplifier Class …….. Digital (D)

Amplifier Type…….Stereo Full-Range

Number of Channels ……..4 Channel

Minimum Impedance ……..2 ohm/Ch (4 ohm Bridge)

Led Indicator ……..Power | Protect | Clip

Power Input Terminal Size……..1/0Ga

Fuse Size

…… 200A

Remote Level Control …….. Yes (Metal Case)

Thermal Protection ……Yes

Over-Load Protection ……..Yes

DC Output Protection ……Yes

Short Circuit Output Protection……..Yes

Voltage Input Protection ……Yes

Clipping Protection ……Yes

\X-Over Frequency Multiplier

……Yes

Input Mode Selectable ……..Yes

LED Clipping indicator ……Yes

Professional Tiffany RCA Connectors ……Yes

Remote Level Knob with Clip indicator……Yes

Reliable Heavy Duty Korean Board Design ……..Yes

Very High Efficiency Digital Circuit Design ……..Yes

Body Color …….. H-KO403 – Black

H-KO340/RD – Red

- **MEASUREMENTS**

Overall Langhe (with end plate)……14.5″ / 370mm

Overall Wide ……..9.68″ / 246mm

Overall Height (with end plate ……2.85″ / 72.5mm

Heatsink Length……13.3″ / 340mm

TROUBLESHOOTING

Before removing your amplifier refer to the list below and follow the suggested procedures. Always test the speakers and their wires first.

AMPLIFIER WON'T POWER UP

- Check for good ground connection.
- Check that remote DC terminal has at least 10V DC.
- Check that there is battery power on the + terminal.
- Check all FUSES.
- Check that Protection LED is not lit. IF it is lit, shut off amplifier briefly and then re-power it.

HIGH HISS OR ENGINE NOISE (ALTERNATOR WHINE) IN SPEAKERS
Disconnect all RCA inputs to the amplifier, if hiss noise disappears, then plug in the component driving the amplifier and unplug Its inputs. If hiss noise disappears, go on until the faulty/noisy component is found. It is best to set the amplifier input level as insensitive as possible. "The best subjective S/N ratio is obtainable this way. Try to drive as high a signal level from the head unit as possible.

PROTECTION LED COMES ON WHEN THE AMPLIFIER IS POWERED UP
Check for shorts on speaker leads. Check that volume control on the head unit is turned down low. Remove speaker leads, and reset the amplifier f the Protection LED still comes on, then the amplifier is faulty. The amplifier will shut down automatically when the units: temperature goes up to 85*C This will protect the units from damage.

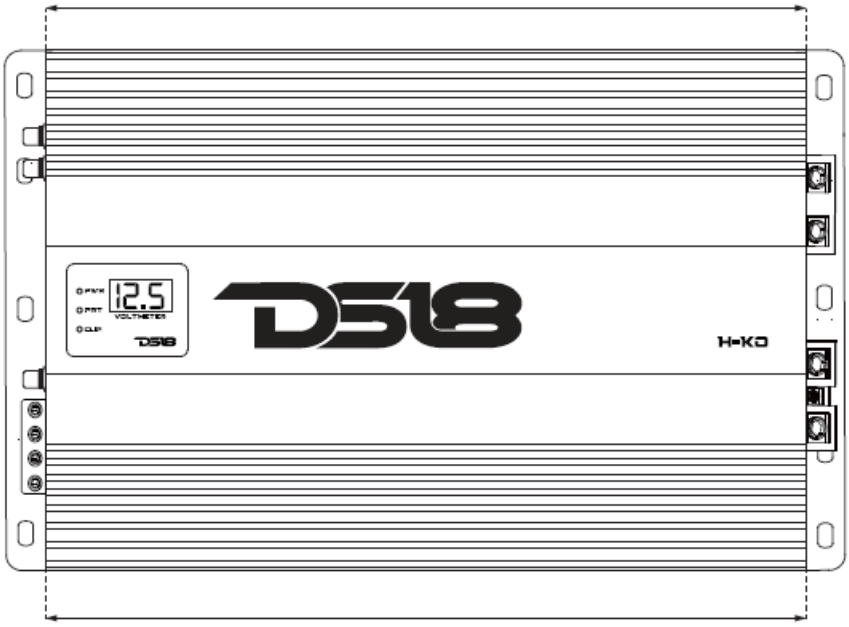
AMPLIFIER GETS VERY HOT
Check that the minimum speaker impedance for that model is correct. Check for speaker shorts. Check that there is good airflow around the amplifier. In some applications, an external cooling fan may be required.

DISTORTED SOUND
Check that the Level controls is set to match the signal. level of the head unit. Check that all crossover frequencies have been properly set. Check for shorts on the speaker leads.

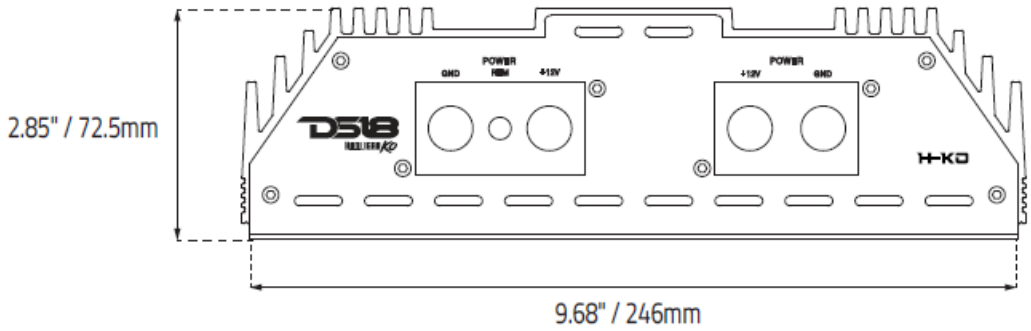
HIGH SQUEAL NOISE FROM SPEAKERS
This is always caused by a poorly grounded RCA wire.

DIMENSIONS

- H-KO2: 10.74″ / 273mm
- H-KO3: 12.2“ / 310mm
- H-KO5: 15.35” / 390mm
- H-KO8: 18.9″ /480mm
- H-KO10: 23.22” / 590mm
- H-KO340: 14.5″ / 370mm



- H-KO2: 9.44” / 240mm
- H-KO3: 11” / 280mm
- H-KO5: 14.17” / 360mm
- H-KO8: 17.71” / 450mm
- H-KO10: 22” / 560mm
- H-KO340: 13.3″ / 340mm



WARRANTY

Please visit our website **DS18.com** for more information on our warranty policy We reserve the right to change products and specifications at any time without notice. Images may or may not include optional equipment.

WARNING
Cancer and Reproductive Harm. **www.P65Warning.ca.gov**

FOR MORE INFORMATION PLEASE VISIT
DS18.COM

Documents / Resources

	**DS18 HOOLIGAN-KO Full Range Class D 4 Channel Car Audio Amplifier** [pdf] Owner's Manual HOOLIGAN-KO Full Range Class D 4 Channel Car Audio Amplifier, HOOLIGAN-KO, Full Range Class D 4 Channel Car Audio Amplifier, Class D 4 Channel Car Audio Amplifier, Channel Car Audio Amplifier, Car Audio Amplifier, Audio Amplifier, Amplifier

References

- **Official DS18 Pro Audio Store - Speakers, Subwoofers, Amps & More!**
- **User Manual**