

DS18 CANDY-X4B

DS18 CANDY-X4B Car Amplifier User Manual

Model: CANDY-X4B | Brand: DS18

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your DS18 CANDY-X4B Car Amplifier. Please read this manual thoroughly before attempting to install or operate the amplifier to ensure proper function and safety. The DS18 CANDY-X4B is a 4-channel Class D amplifier designed for high-performance car audio systems, offering compact size and robust power output.

2. SAFETY INFORMATION

Always observe the following safety precautions when installing and operating the amplifier:

- Disconnect the vehicle's battery negative terminal before any installation work to prevent electrical shorts.
- Ensure all wiring is properly routed and secured to prevent damage from sharp edges or moving parts.
- Use appropriate gauge power and ground wires as specified in the installation section to prevent overheating and potential fire hazards.
- Do not mount the amplifier in areas exposed to direct sunlight, excessive heat, moisture, or dust.
- If the amplifier emits smoke, strange odors, or unusual noises, immediately disconnect the power supply and consult a qualified technician.
- Installation should be performed by a qualified professional if you are unsure about any steps.

3. PACKAGE CONTENTS

Verify that all items are present in the package:

- DS18 CANDY-X4B Amplifier
- User Manual (this document)
- Mounting Hardware (screws)

4. PRODUCT OVERVIEW

The DS18 CANDY-X4B is a compact 4-channel Class D amplifier designed for powerful audio output in a small footprint. It features adjustable crossover settings, bass boost, and comprehensive protection features.



Figure 4.1: Front view of the DS18 CANDY-X4B Car Amplifier, showcasing its black and red design.

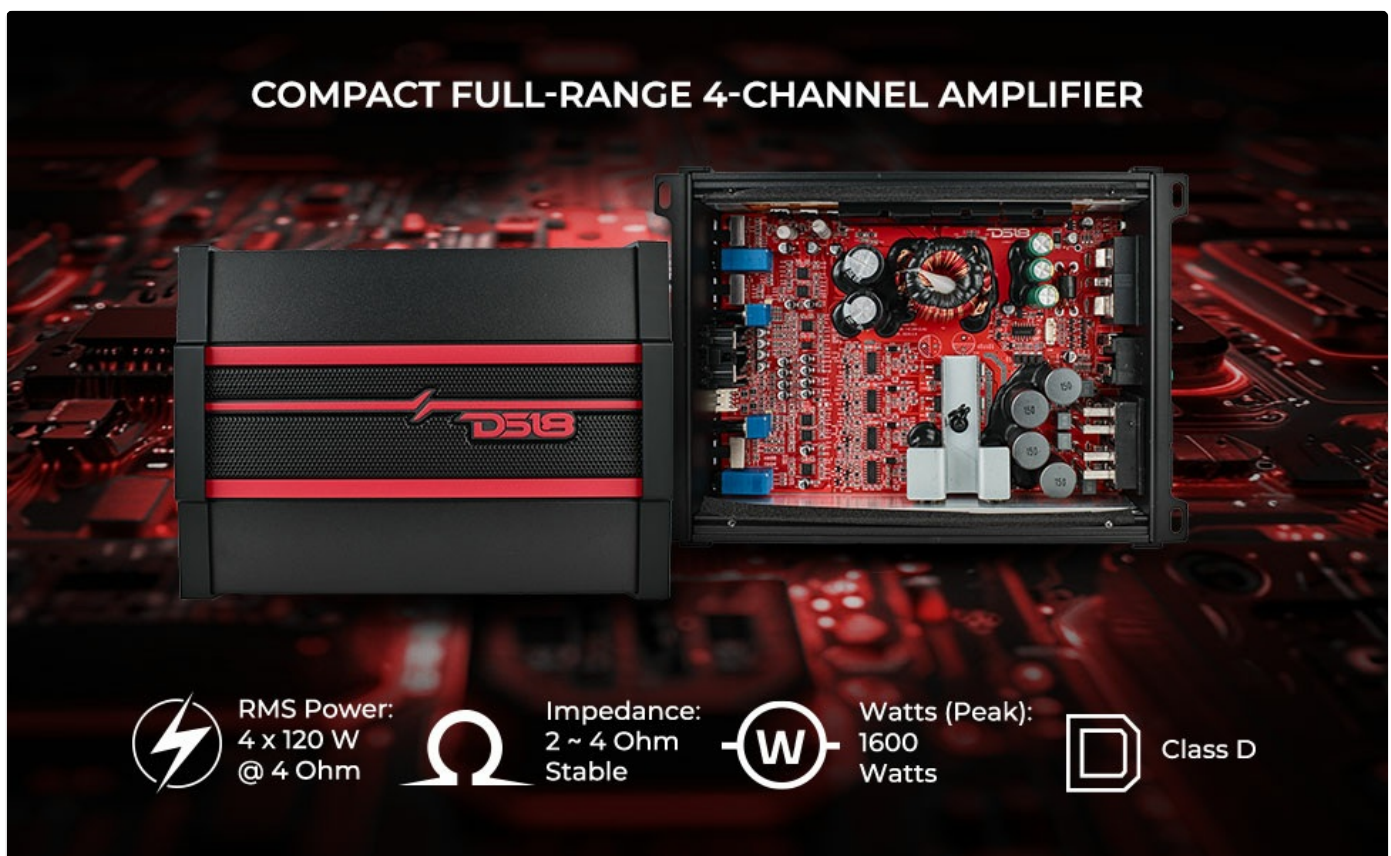


Figure 4.2: The DS18 CANDY-X4B amplifier shown with its internal circuitry, highlighting its Class D design and robust components. Key specifications like RMS power, impedance, and peak watts are also displayed.

4.1. Control Panel Layout

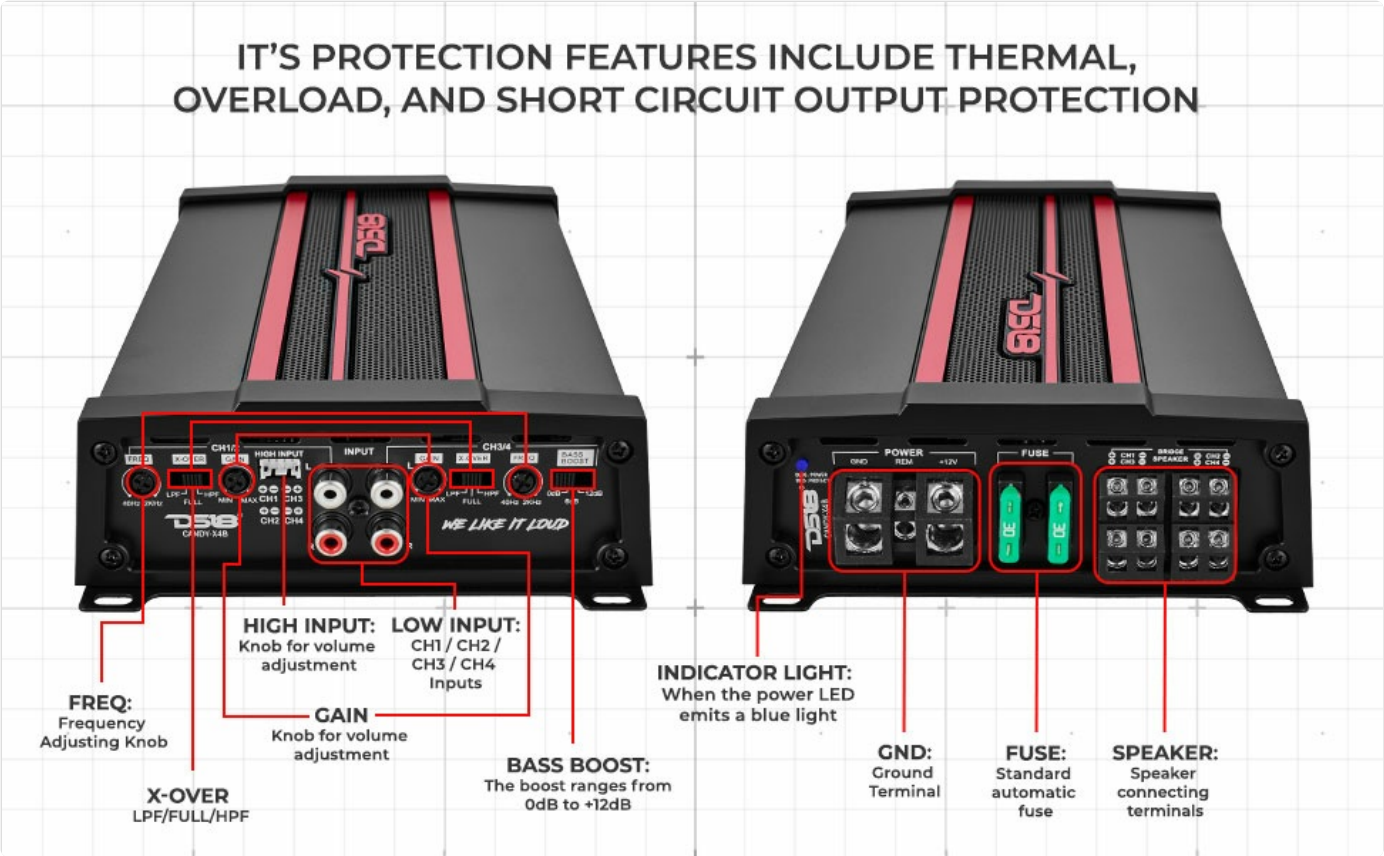


Figure 4.3: Top view of the amplifier's control panel, detailing the various adjustment knobs and input options. This includes Frequency (FREQ), X-OVER (LPF/FULL/HPF), Gain, High Input, Low Input (RCA), and Bass Boost controls.

4.2. Connection Panel Layout

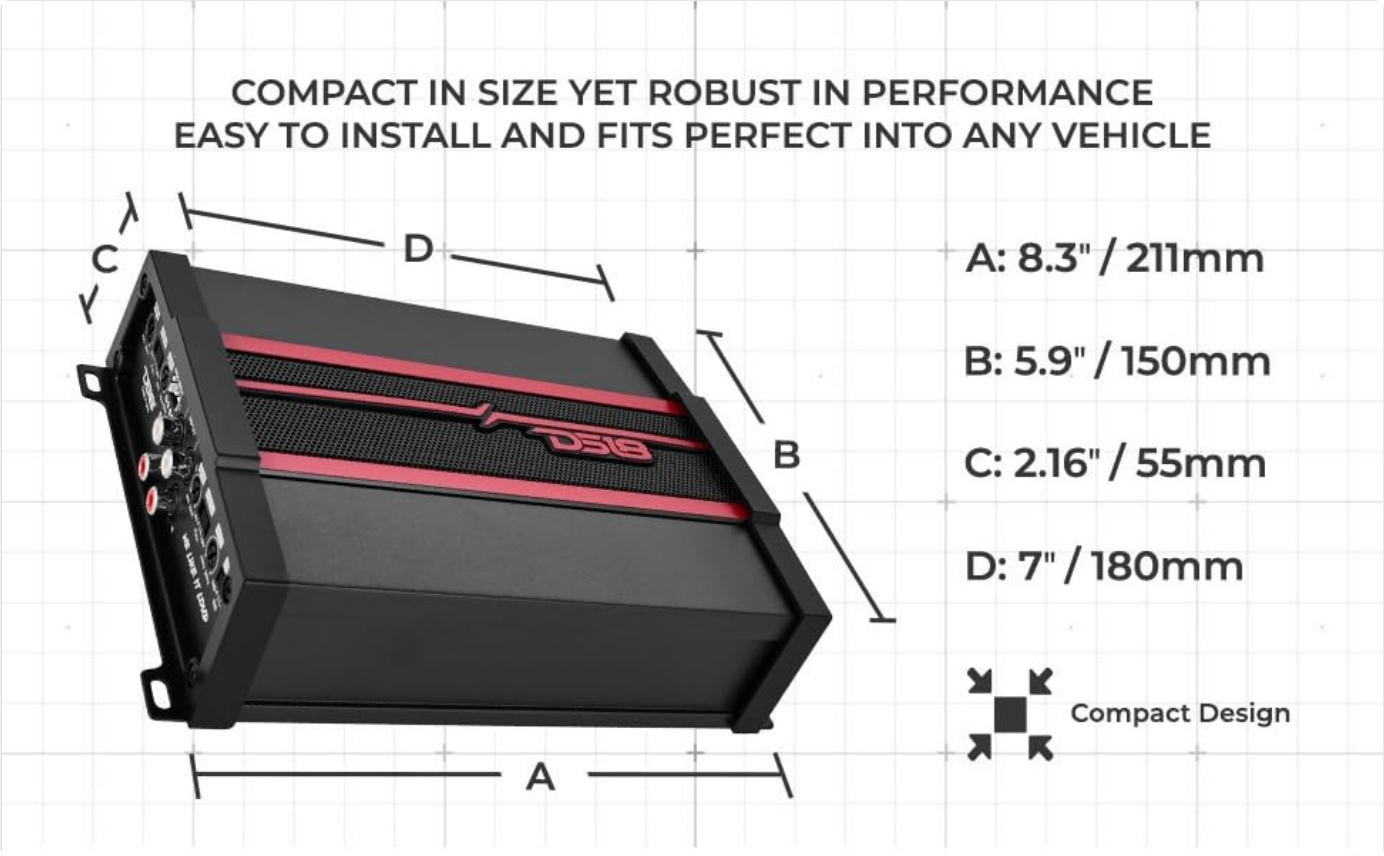


Figure 4.4: Rear view of the amplifier's connection panel, showing the power, ground, remote, fuse, and speaker terminals. An indicator light for power/protection is also visible.

5. SETUP AND INSTALLATION

Proper installation is critical for optimal performance and safety. Follow these steps carefully:

1. **Mounting Location:** Choose a dry, well-ventilated location that is not exposed to direct sunlight or excessive heat. Ensure sufficient airflow around the amplifier. Common locations include under seats, in the trunk, or behind panels.
2. **Power Wiring:**
 - Run a power cable (minimum 8 AWG recommended) directly from the positive terminal of the vehicle's battery to the amplifier's +12V terminal.
 - Install an in-line fuse holder with a fuse (2 x 25A recommended) within 18 inches (45 cm) of the battery.
3. **Ground Wiring:**
 - Connect a ground cable (same gauge as power cable) from the amplifier's GND terminal to a clean, unpainted metal surface on the vehicle's chassis. Ensure a good electrical connection.
4. **Remote Turn-On Wiring:**
 - Connect a remote turn-on wire from your head unit's remote output to the amplifier's REM terminal. This wire turns the amplifier on and off with your head unit.
5. **Audio Input Connection:**
 - For low-level input (RCA): Connect RCA cables from your head unit's pre-amp outputs to the amplifier's RCA input jacks (CH1/CH2 and CH3/CH4).
 - For high-level input: If your head unit does not have RCA outputs, use the high-level input terminals. Connect speaker wires from your head unit's speaker outputs to the amplifier's high-level input.
6. **Speaker Wiring:**
 - Connect your speakers to the amplifier's speaker output terminals (CH1, CH2, CH3, CH4).
 - Ensure correct polarity (+ to + and - to -) for all speakers.
 - For bridged operation (2-channel mode), refer to the diagram on the amplifier or in the specifications section for correct wiring.
7. **Final Checks:** Double-check all connections for proper polarity, secure fit, and insulation. Reconnect the vehicle's battery negative terminal.



Figure 5.1: The DS18 CANDY-X4B amplifier shown installed in a car trunk, demonstrating its compact size and integration into a car audio setup.

6. OPERATING INSTRUCTIONS

Once installed, adjust the amplifier settings for optimal sound performance:

- **Gain Control:** This adjusts the input sensitivity of the amplifier. Start with the gain set to minimum. Play a familiar piece of music at a moderate volume on your head unit. Slowly increase the amplifier's gain until you hear distortion, then back off slightly.
- **Crossover (X-OVER) Switch:**
 - *LPF (Low Pass Filter):* Allows only frequencies below the set frequency to pass. Use for subwoofers.
 - *HPF (High Pass Filter):* Allows only frequencies above the set frequency to pass. Use for full-range speakers or tweeters.
 - *FULL:* Allows all frequencies to pass. Use for full-range speakers without filtering.

Adjust the frequency knob (FREQ) to set the desired crossover point (40Hz - 250Hz).

- **Bass Boost:** This feature enhances low frequencies. Adjust from 0dB to +12dB to achieve desired bass impact. Use sparingly to avoid distortion or speaker damage.
- **Indicator Light:** The blue LED indicates normal operation. If the LED turns red or off, it indicates a protection mode (thermal, overload, or short circuit). Refer to the troubleshooting section.

Note: Fine-tuning amplifier settings often requires some experimentation to match your specific speakers and listening preferences. Consider professional tuning for advanced setups.

7. MAINTENANCE

To ensure the longevity and performance of your amplifier, follow these simple maintenance tips:

- Keep the amplifier clean and free of dust. Use a soft, dry cloth to wipe down the exterior.
- Ensure adequate ventilation around the amplifier. Do not block cooling fins or vents.
- Periodically check all wiring connections to ensure they are secure and free from corrosion.
- Avoid exposing the amplifier to extreme temperatures or moisture.

8. TROUBLESHOOTING

If you experience issues with your DS18 CANDY-X4B amplifier, consult the table below for common problems and solutions:

Problem	Possible Cause	Solution
No Power / Power LED Off	Blown fuse, poor power/ground connection, no remote signal.	Check amplifier fuses, check in-line fuse near battery. Verify +12V and ground connections. Ensure remote wire has +12V when head unit is on.
Protection LED (Red) On	Overheating, speaker short circuit, impedance too low.	Allow amplifier to cool down. Check speaker wiring for shorts (bare wires touching). Verify speaker impedance is within amplifier's rated range (2-4 Ohm stable).
No Sound Output	No audio input, gain set too low, speaker wires disconnected.	Check RCA or high-level input connections. Increase gain setting. Verify speaker wires are securely connected to amplifier and speakers.
Distorted Sound	Gain set too high, improper crossover settings, poor ground.	Reduce gain setting. Adjust crossover frequencies. Check ground connection for cleanliness and security.
Engine Noise / Whining	Poor grounding, RCA cables too close to power wires, faulty RCA cables.	Ensure amplifier and head unit have good, separate ground points. Route RCA cables away from power cables. Try different RCA cables.

If the problem persists after trying these solutions, contact DS18 customer support or a qualified car audio technician.

9. SPECIFICATIONS

Detailed technical specifications for the DS18 CANDY-X4B Car Amplifier:

Feature	Specification
Number of Channels	4

Feature	Specification
Frequency Response	20Hz - 20KHz
Max Power	1600W
RMS Power (14.4V) Per Channel @ 4 Ohm	4 x 120W
RMS Power (14.4V) Per Channel @ 2 Ohm	4 x 200W
RMS Power (14.4V) Bridged @ 4 Ohm	2 x 350W
Speaker Impedance Range	2 Ohm Stable
Input Sensitivity	0.2V - 6V
Low Pass Filter (LPF)	40Hz - 250Hz
High Pass Filter (HPF)	40Hz - 250Hz
Fuse Size	2 x 25A
Signal-to-Noise Ratio (SNR)	100 dB
Total Harmonic Distortion (THD)	0.01%
Bass Boost	0dB - +12dB
Product Dimensions (L x W x H)	234.4 x 127 x 47.5mm (9.23 x 5 x 1.87 inches)
Item Weight	4 pounds
Voltage	14.4 Volts (DC)
Mounting Type	Freestanding
Operating Temperature	158 Degrees Fahrenheit



Figure 9.1: Diagram showing the compact dimensions of the DS18 CANDY-X4B amplifier, with measurements A: 8.3"/211mm, B: 5.9"/150mm, C: 2.16"/55mm, D: 7"/180mm.

10. WARRANTY AND SUPPORT

DS18 products are designed and manufactured to the highest quality standards. For warranty information and technical support, please refer to the official DS18 website or contact their customer service department.

For further assistance, you may visit the [DS18 Store on Amazon](#).

11. IMPORTANT NOTE REGARDING VIDEOS

While some videos related to this product may be available online, this manual only includes official product videos provided by the manufacturer (Seller). Videos created by customers or other third parties are not embedded here to maintain the informational integrity and official nature of this instruction manual.

For example, a video titled "Perfect Amp" (ID: amzn1.vse.video.0c3f98d2cc6a4cae94793d9e92aee5b2) was identified but is not embedded as its creator type is "Customer". This video demonstrates the amplifier's bass output in a car trunk setup.

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Name

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Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question