

Owner's Manual

EL-DA4260B Class D 4CH Bluetooth Amplifier

Specification

Model Name	CPA-200/4BT (4CH Bluetooth Amplifier)
Rated RMS Power 20Hz-22kHz, @14.4V	45W x 4ch, @ 4Ohms, THD ≤1.0% at 1KHz
Rated RMS Power, 20Hz-22KHz, @14.4V	65W x 4ch @ 20hm, THD ≤1.0% at 1KHz
Bridged Mode, 20Hz-22kHz, @14.4V	100W x 2ch @ 40hm, THD ≤1.0% at 1KHz
Bluetooth Remote Control	Included
Bluetooth Gain Control	By BT Remote
BT Remote - Function	Power/Source, Vol Up/Down, Play/Pause, Backward/Forward, Fast-Backward/Fast-Forward
THD (1kHz, 1W,@ 4 Ohms)	≤1%
S/N (A-weighted, 1W @ 4 ohms)	≥70dB
Frequency Response (-3.0dB)	20Hz- 20KHz
Low Level Input Sensitivity	200mv ~ 2Vrms
Allowable Battery Voltage	9 Volts to 16 Volts
Idle Current Consumption	700-750mA
Waterproof	IP67 (Remote control IP65)
Operating Temperature	0°C ~ 65°C
Product Dimension (mm/inch)	185 x 47.2 x 125 mm / 7.28 x 1.86 x 4.92 inch

Limited Warranty - Amplifiers (USA)

JL Audio warrants this product to be free of defects in materials and workmanship for a period of two (2) years from the original date of purchase. This warranty is not transferrable and applies only to the original purchaser from an authorized JL Audio dealer. Should service be necessary under this warranty for any reason due to manufacturing defect or malfunction, JL Audio will (at its discretion), repair or replace the defective product with new or remanufactured product at no charge. Damage caused by the following is not covered under warranty: accident, misuse, abuse, product modification or neglect, failure to follow installation instructions, unauthorized repair attempts, misrepresentations by the seller. This warranty does not cover incidental or consequential damages and does not cover the cost of removing or reinstalling the unit(s). Cosmetic damage due to accident or normal wear and tear is not covered under warranty.

Warranty is void if the product's serial number has been removed or defaced.

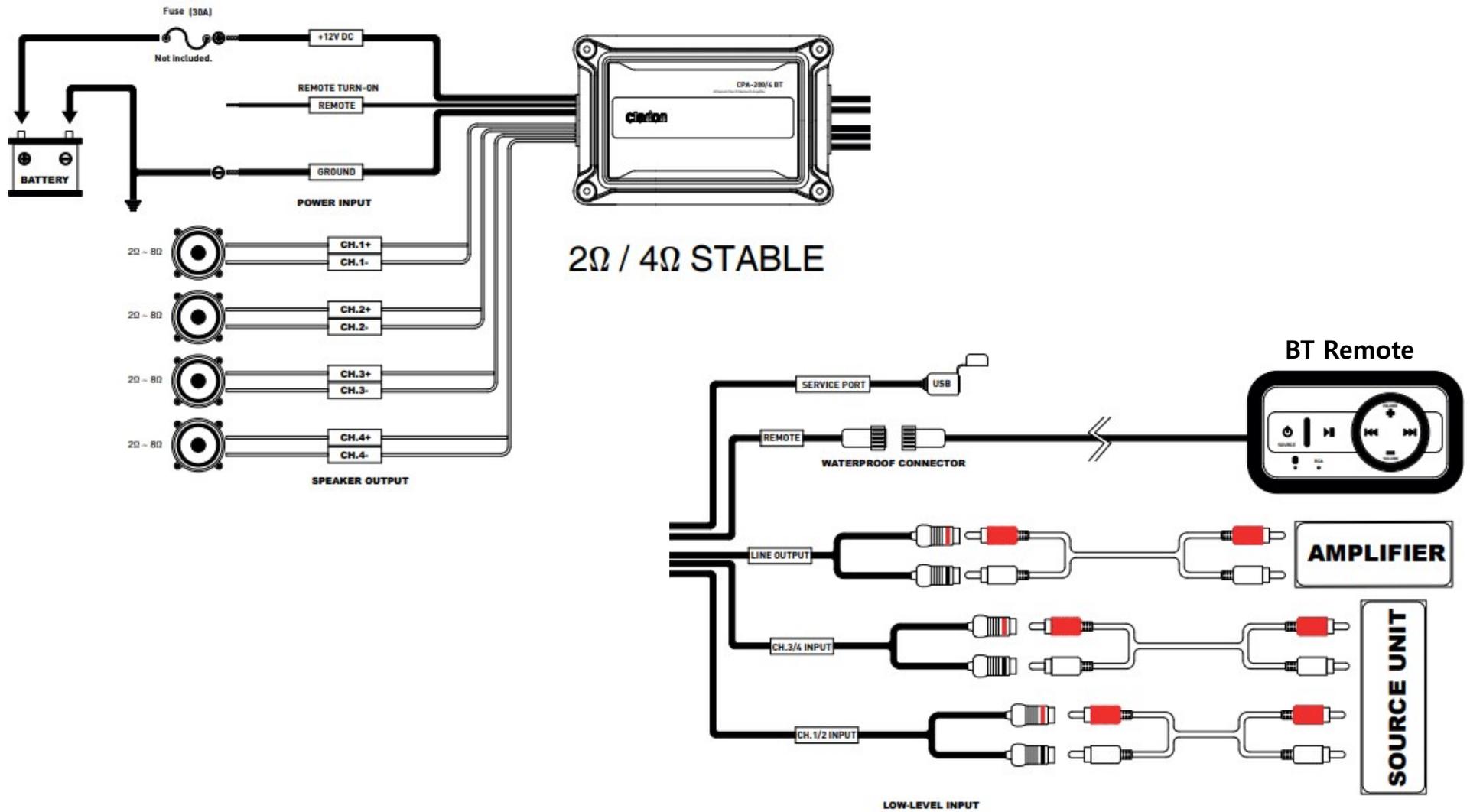
Any applicable implied warranties are limited in duration to the period of the express warranty as provided herein beginning with the date of the original purchase at retail, and no warranties, whether express or implied, shall apply to this product thereafter. Some states do not allow limitations on implied warranties, therefore these exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

If you need service on your JL AUDIO product:

All warranty returns should be sent to JL Audio 's Amplifier Service Facility freight-prepaid through an authorized JL Audio dealer and must be accompanied by proof of purchase (a copy of the original sales receipt). Direct returns from consumers or non-authorized dealers will be refused unless specifically authorized by JL Audio with a valid return authorization number. Warranty expiration on products returned without proof of purchase will be determined from the manufacturing date code. Coverage may be invalidated as this date is previous to purchase date. Non-defective items received will be returned freight-collect. Customer is responsible for shipping charges and insurance in sending the product to JL Audio. Freight damage on returns is not covered under warranty.

For Service Information in the U.S.A. please call
JL Audio Customer Service:
(954) 443-1100 9:00 AM - 5:30 PM (Eastern Time Zone)
JL Audio, Inc. 10369 North Commerce Pkwy. Miramar, FL 33025
(Do not send product for repair to this address)

Wire Diagram



What's Included

(1) Amplifier (4) Stainless steel mounting screws (1) User manual

Installation Applications

This amplifier is designed for operation with 12 volt, negative-ground electrical systems. Using this product in systems with positive ground and/or voltages other than 12V may result in damage to the product and will void the warranty. This product is not certified or approved for use in aircraft.

Safety Considerations

Whenever possible, mount the amplifier in a dry, well-ventilated location that does not interfere with other factory installed electronic devices. If a dry environment is not available, a location that is not exposed to heavy splashing may be used. ◦

- While this amplifier is designed to be water-resistant, it should never be submerged under water or subjected to high-pressure water spray. Do not

install where it will be directly exposed to the elements.

- Do not mount the amplifier in the engine compartment or in any areas of extreme heat.
- Securely mount the amplifier so that it does not come loose in the event of a collision/sudden jolt or as a result of repeated vibrations during normal operation.

Check before drilling to make sure that you will not be drilling into an exterior panel/hull, fuel tank, gas/brake line, wiring harness, or other vital system. Do not run system wiring outside or underneath the vehicle/vessel. This is an

extremely dangerous practice, which can result in severe damage/injury. • Protect all system wires from sharp edges (metal, fiberglass, etc.) by carefully routing them, tying them down and using grommets and loom where appropriate.

Secure all wiring as needed, using cable ties or wire clamps to protect them from moving parts and sharp edges.

IPX7 Water Resistance Rating

This product has been tested to withstand immersion in water, up to 1 meter (3.28 ft.) deep, for up to 30 minutes (with control panel cover properly installed). Note - while designed to be water resistant, this product should never be submerged under water for prolonged periods or subjected to activity that creates pressure on it that exceeds its depth rating.

Installation Procedure/Connections

Disconnect the NEGATIVE battery post connection and secure the disconnected cable to prevent accidental reconnection during installation. This is an essential safety precaution during installation! 1.

Connect the RED power lead to the positive (+12V) battery post. 8 AWG is the minimum power wire size for this amplifier.

An appropriate fuse at the main power wire(s) to the amplifier(s) is vital for vehicle/vessel safety. This fuse must be installed within 18 inches (45 cm) of the positive battery post connection. If this is the only device connected to this main wire, use a 30A fuse. Do not install the fuse until the power wire has been securely connected to the amplifier. 3.

Connect the BLACK negative ground lead to a clean, solid metal grounding point near the amplifier. This can be to metal chassis ground, if available. If no metal chassis ground is available, it may be necessary to make this connection to the NEGATIVE battery post. 8 AWG is the minimum ground wire size for this amplifier. All ground connections (source unit and amplifiers) should be made at the same location. 4.

Connect the BLUE remote turn-on lead to the source unit's positive (+12V) remote turn-on output. If your source unit does not have a dedicated remote turn-on output, the amplifier's turn-on lead can be connected to +12V via a switch that derives power from an ignition-switched circuit. 5.

6. Signal Input (Low-Level): Connect the amplifier's RCA input jacks to the source unit's preamp level output jacks. You may run a stereo or a mono signal into the inputs of the amplifier. The amplifier's input section automatically sums stereo signals to mono for the internal amplifier section. When feeding a single, low-level RCA input connection, use a Y-adaptor splitter to split the mono signal and connect it to both Left and Right RCA inputs.

7. Signal Input (Hi-Level): If your source unit does not offer preamp level signal outputs, you can splice the speaker output wires of the source unit onto a pair of RCA plugs for the input pair or use the JL Audio ECS Speaker Wire to RCA adaptor (XD-CLRAIC2-SW). Make sure to observe correct polarity in making "Hi-Level Input" connections. Failure to do so will result in a loss of signal (poor performance). 7.

8. Connect the speaker output leads to the corresponding speaker wires.

9. Make necessary adjustments to the filter controls and input sensitivity.

10. The amplifier's subwoofer output level can be controlled from the front of the vehicle/vessel with an optional remote level controller (sold separately). Use the RBC-1 for standard (dry) installations or the M-RBC-1 for applications exposed to moisture. Connect the remote's plug to the amplifier's harness-mounted RJ11 input jack. (Refer to Appendix B)

WARNING! Failure to make safe, tight, high-integrity power connections can result in fire and extensive damage!

Troubleshooting

Problem	Possible Cause	Solution
How to properly set input sensitivity		Please refer to Appendix A to set the input sensitivity for maximum, low distortion output.
Amplifier doesn't turn on	Faulty fuse	Remove fuse and check with continuity meter. Replace if necessary.
	Poor connection integrity	Check "+12V", "Ground", and "Remote" leads for pinched wires; ensure tight connections.
	insufficient "Remote" input	Make sure there is a sufficient +12V supply at the "Remote" connection; if not a relay may be required.
Intermittent output, fluctuates when I tap on it or hit a bump	Poor connection integrity	Make sure insulation has been properly stripped back at connection points for good contact area.
		Make sure input connectors are making good contact with input jacks of the amplifier.
Distorted, attenuated, or popping sound	Faulty speaker connection (Short Circuit / Over Current Protection)	Inspect speaker wires for possible short circuit, either together or shorted to the vehicle's chassis ground.
		Check the nominal load impedance at the amplifier is equal to or greater than 2 ohms.
Output shuts off after a while	Overheating condition (Thermal Protection)	Make sure amplifier mounting area has adequate space for ventilation and heat dissipation.

Appendix A:

Input Sensitivity Level Setting

Following the directions below will allow the installer to adjust the input sensitivity of each amplifier channel pair in just a few minutes using equipment commonly available in installation bays.

Necessary Equipment

Digital AC Voltmeter

CD or file with a sine-wave test tone recorded at 0 dB reference level in the frequency range to be amplified for that set of channels (50 Hz for subwoofer channels, 1 kHz for a midrange application). Do not use attenuated test tones (-10 dB, -20 dB, etc.). •

The Nine-Step Procedure

- 1) Disconnect the speakers from the amplifier's speaker output connectors (you need only disconnect one speaker wire).
- 2) Turn off all processing (bass/treble, loudness, EQ, etc.) on the source unit, processors (if used) and amplifier. Set the source unit's fader control to center position and its subwoofer level control to 3/4 of maximum.
- 3) Turn the "Input Sens." control all the way down.
- 4) Set the source unit volume to 3/4 of full volume. This will allow for reasonable gain overlap with moderate clipping at full volume.
- 5) Using the chart on this page, determine the target voltage for input sensitivity adjustment according to the nominal impedance of the speaker system connected to the amplifier outputs.
- 6) Verify that you have disconnected the speakers before proceeding. Play a track with an appropriate sine wave (within the frequency range to be amplified) at 3/4 source unit volume.
- 7) Connect the AC voltmeter to the speaker output connectors of the amplifier. Make sure you test the voltage at the correct connectors (+ and -).
- 8) Increase the "Input Sens." control until the target voltage is observed with the voltmeter.
- 9) Once you have adjusted the amplifier to its maximum low-distortion output level, reconnect the speaker(s) and listen to the system. The "Input Sens!" controls can now be adjusted downward if the amplifier requires attenuation to achieve the desired system balance.

FCC Information to User

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution

Modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC Compliance Information : This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation

A minimum separation distance of 20 cm must be maintained between the antenna and the person for this appliance to satisfy the RF exposure requirements.

English:

This device complies with Industry Canada's license-exempt RSSs. Operation is subject to the following two conditions:

- (1) This device may not cause interference; and*
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.*

French:

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.