



LOWR

OWNER'S MANUAL



ENGLISH

LDX2.4

IMPORTANT SAFETY INSTRUCTIONS



**PLEASE READ CAREFULLY BEFORE
INSTALLING OR OPERATING THIS UNIT.**

For all products

- Installation must be performed by a qualified professional.
- All product connections must be made while the power is OFF.
- A fuse must be installed between the product and the battery for overload protection. The fuse should be installed no more than 30cm (approx. 12 inches) from the battery, and its rating must be compatible with the product's power consumption.
- Perform the installation following the wire gauge requirements specified in this manual to prevent cable

overheating and ensure maximum power output.

- Keep cables as short as possible; this ensures greater sound fidelity and prevents potential noise or power loss.
- Avoid routing cables near the vehicle's original wiring, as this may cause interference and noise in your audio system.
- Make sure to choose a suitable location to mount the unit. The installation area must be completely dry, have proper air circulation, and be structurally secure.
- Never install the product near heat sources such as radiators, heat registers or other heat-producing equipment (including amplifiers).

TABLE OF CONTENTS

IMPORTANT SAFETY INSTRUCTIONS.....	1
1. INTRODUCTION	2
2. PRODUCT OVERVIEW	3
2.1 PRODUCT DESCRIPTION.....	4
3. INSTALLATION	5
3.1 INSTALLATION DIAGRAM	6
4. LOWDR APP.....	7
4.1 APP OVERVIEW.....	8
5. TROUBLESHOOTING.....	9
5.1 FACTORY RESET.....	10
6. TECHNICAL SPECIFICATIONS	11
FCC COMPLIANCE NOTICE.....	12
WARRANTY POLICY	13
MANUAL DE USUARIO ESPAÑOL.....	14

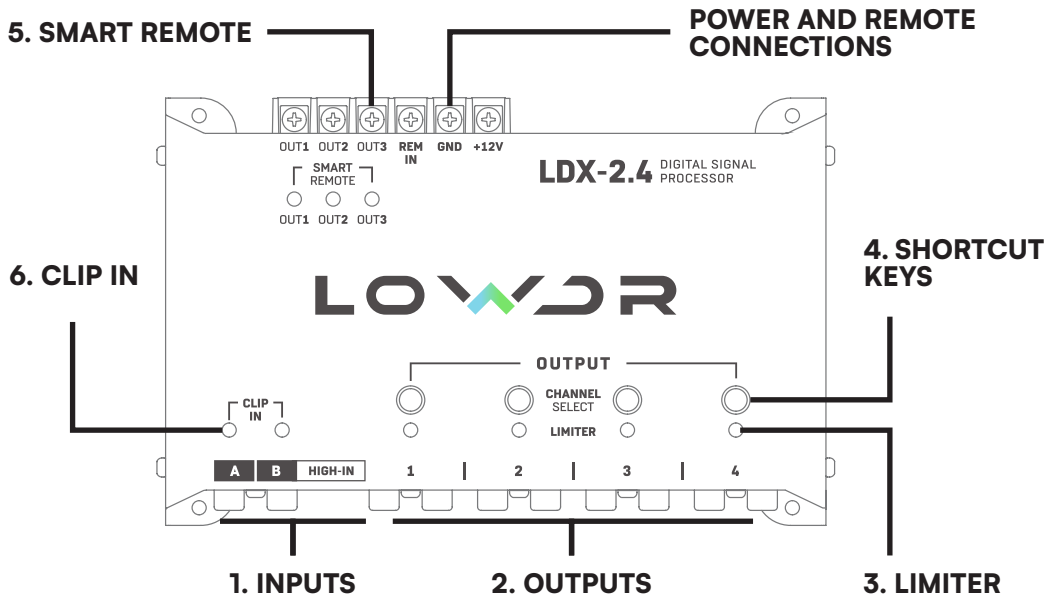
1. INTRODUCTION

Congratulations on your purchase!

This manual provides essential information about the **LDX2.4** processor. We recommend taking a few minutes to read through this manual; it describes the product and includes step-by-step instructions to help you set up and get started. If you have any questions about this product, its installation, or its use, please contact our customer service or visit us at:

www.lowdr.com

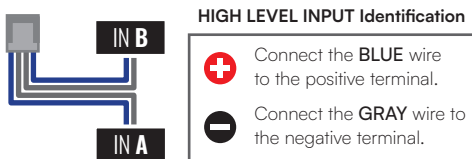
2. PRODUCT OVERVIEW



2.1 PRODUCT DESCRIPTION

1. INPUT CONNECTIONS

The processor features two individual input channels, identified as A and B. The channels are shared between the RCA and HIGH IN connections; use them according to your needs.



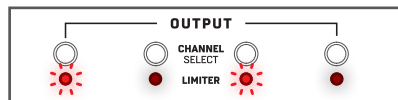
2. OUTPUT CONNECTIONS

The processor features 4 independent RCA outputs (L+R) for connecting amplifiers and other audio equipment. These outputs are processed with the user-defined audio parameters.

3. LIMITER

Individual LEDs to indicate the activation of the LIMITER function.

Even when the LIMITER function is not active, the LEDs act as clipping (saturation) indicators.



4. SHORTCUT KEYS



Quick-press
to select the channel (BLUE LED).



Press and hold to activate the channel's
MUTE function (RED LED).

5. SMART REMOTE

Use this output to remotely trigger other equipment in a sequenced manner, with the timing configured via the application.

6. CLIP IN

LEDs that indicate input signal clipping (RCA and HIGH-IN).

3. INSTALLATION



INSTALLATION MUST BE PERFORMED ONLY BY QUALIFIED PROFESSIONALS AND WITH THE PRODUCT TURNED OFF.

Minimum Installation Requirements

Power Supply Cables:

14 AWG (Positive/Negative)

Remote Activation Cables:

18 AWG (REM IN and SMART REMOTE)

Fuse Rating:

1A

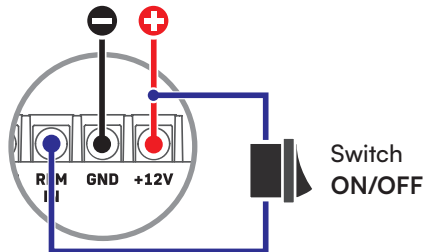
2. Connect the processor's **GND** terminal to the **NEGATIVE** terminal of the battery or to the vehicle's chassis.

3. Use the processor's **REM IN** connection to turn the processor on or off remotely by connecting it to the radio's remote signal output. This installation can also be done using the vehicle's ignition switch (ACC) or an **ON/OFF** switch for manual activation.

Step-by-Step Installation

1. Connect the processor's **+12V** terminal to the **POSITIVE** terminal of the battery or to a compatible power supply.

Note: A fuse must be installed near the battery (at a maximum distance of 12 inches) for electrical installation protection.



3.1 INSTALLATION DIAGRAM

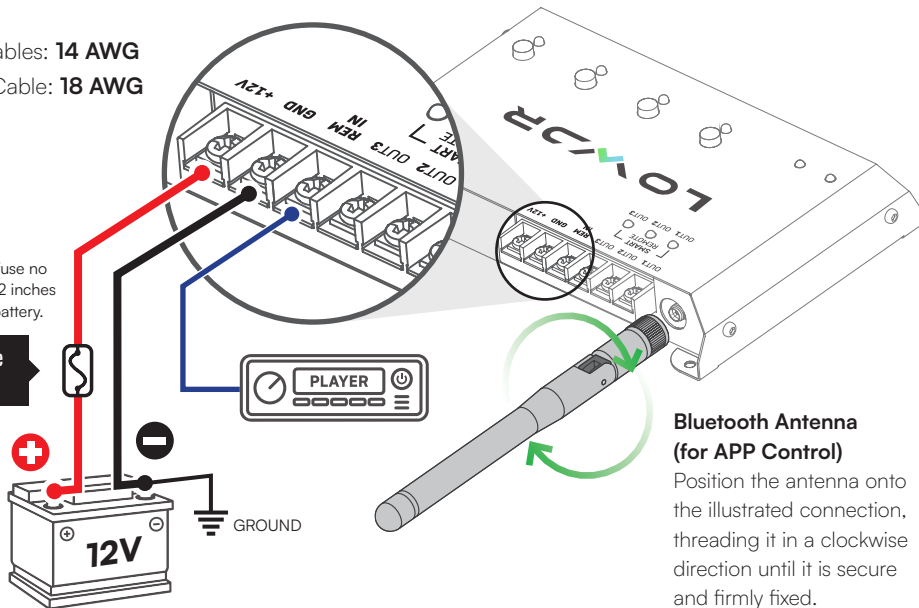
Power Cables: **14 AWG**

Remote Cable: **18 AWG**

Fuse: **1A**

Install the fuse no more than 12 inches from the battery.

Fuse
1A



Bluetooth Antenna (for APP Control)

Position the antenna onto the illustrated connection, threading it in a clockwise direction until it is secure and firmly fixed.

4. LOWDR APP



Download and install the LOWDR app to get more from the product.

Install the app on your device

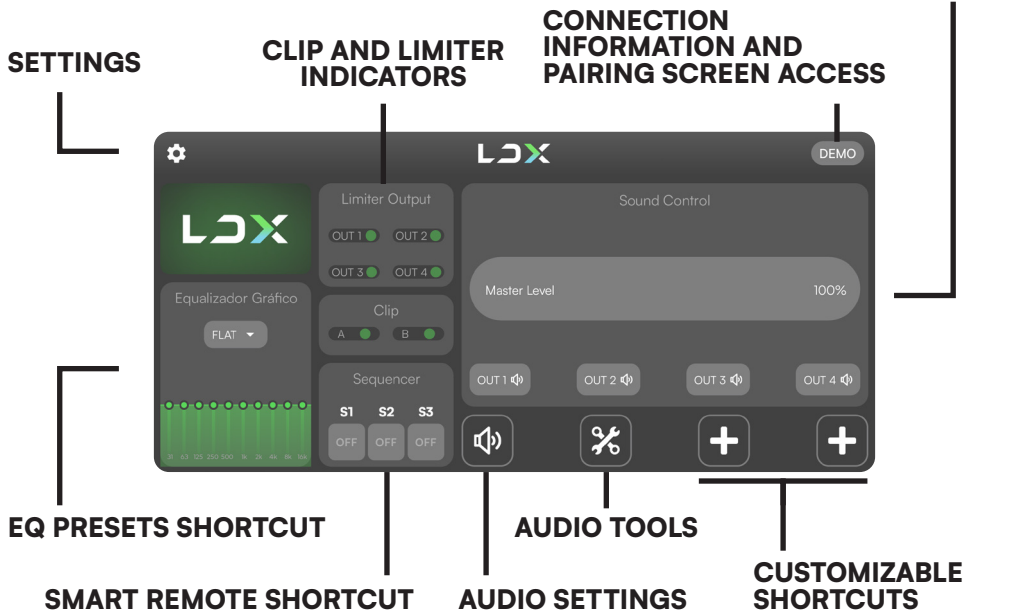
In the app store, search for “**LDX DSP**” or access it through the shortcuts below.



Search the app store for your device or scan the **QR CODE** to be redirected.



4.1 APP OVERVIEW



5. TROUBLESHOOTING:

In cases of malfunction or abnormal product behavior, these tips can help with troubleshooting and problem-solving:

PRODUCT WILL NOT TURN ON

- Check if the cables are properly connected and if all connections have both electrical and mechanical contact.
- Check whether the fuse is faulty or blown. Check its condition and make sure it matches the specifications recommended for the equipment.
- Verify that the battery connections are energized and the charge is sufficient for the product to operate.

NO SOUND

- Check whether the speaker cables or audio connections are disconnected or defective.
- In the app, verify that the LEVEL controls are not set to minimum or that the MUTE option is not active.

AUDIO DISTORTION:

- Check the input signal and the audio settings. The CLIP IN and LIMITER LEDs assist in identifying clipping at the signal input and output; make adjustments if necessary.

CONNECTION ISSUES WITH THE APP

- Make sure all permissions requested by the app are granted to allow pairing with the product.
- Check if the product is within range (up to 10 m).
- Try restarting the product (turn it off for 10 seconds and turn it back on).
- Close the application and reopen it. Check for updates and, if necessary, reinstall the application (this last option will erase the application's internal settings).
- In case of a password connection failure, enter the new password or perform a factory reset on the processor.

5.1 FACTORY RESET

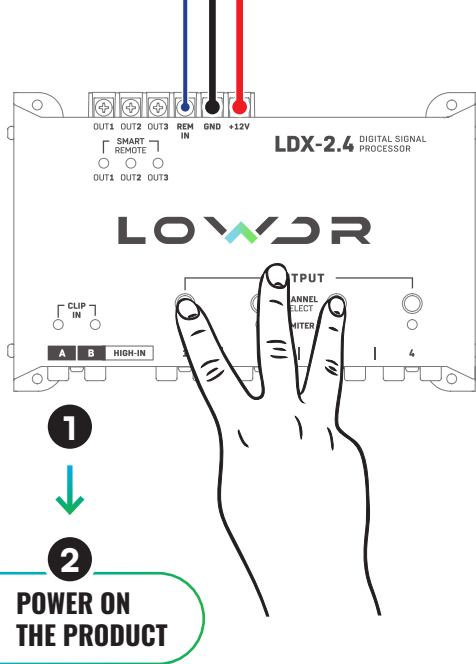
If necessary, the processor parameters can be restored to factory defaults.

Step-by-Step:

1. Simultaneously press the shortcut keys for outputs 1, 2, and 3.
2. While holding the keys, power on the processor.

The keys will flash for a few seconds, indicating that the factory reset was successfully completed.

For further questions, contact the store where the product was purchased or installed. If you prefer, contact us through our customer service center:
+1 (786) 655-9070.



6. TECHNICAL SPECIFICATIONS

Number of Channels:

Input: 2 x RCA/HIGH IN (A, B)

Output: 4 x RCA (1, 2, 3, 4)

Graphic Equalizer: 10 Bands (gain $\pm 12\text{dB}$)

Graphic EQ Presets: 12

Parametric Equalizer:

10 Bands (2 input + 8 output)
(gain $\pm 12\text{dB}$, Q factor 0.4 ~ 10.0)

Crossover with Variable Frequency:

Butterworth: 12/18/24/30/36/42/48 dB/Octave

Linkwitz-Riley: 12/18/24/30/36/42/48 dB/Octave

Bessel: 12/18/24/30/36/42/48 dB/Octave

Routing: A / B / A+B

Alignment: 0ms ~ 8ms (9.0 ft)

Phase Inversion: 0° ~ 180°

Limiter: **Threshold:** -48dB ~ 0dB

Attack: 0.1ms ~ 100.0ms

Release: 1ms ~ 2000ms

Output Gain: -45dB ~ +15dB

Frequency Generator and Frequency Sweep:

10 Hz ~ 22 kHz (Level -60dB ~ 0dB)

Input Impedance: RCA: 55 k Ω / HIGH-IN: 1 k Ω

Output Impedance: 47 Ω

Total Harmonic Distortion (THD): <0.01%

Frequency Response @ -1 dB: 10 Hz ~ 22.5 kHz

Power Supply Voltage: 9.0V ~ 16V DC

Max Smart Remote Current: 180mA

Nominal Current Consumption: 180mA @ 12.6V DC

Maximum Current Consumption: 350mA @ 12.6V DC

Protection Circuit: Short-Circuit Protection (PTC Fuse)

Bluetooth: Bluetooth 5.2 Low Energy

Dimensions (H x W x D): 4.76" x 7.56" x 1.29"

Weight: 1.0 lb



Any updates to this manual will be made available for consumer reference free of charge on the brand's website. It is recommended to consult the updated manual whenever necessary.

FCC WARNING

FCC ID: 2BBF7-LDX24DSP

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.

Note: 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 or more 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.

Note: The Grantee is not responsible for any changes or modifications not expressly approved by the party responsible for compliance. Such modifications could void the user's authority to operate the equipment. The device has been evaluated to meet general RF exposure requirement. To maintain compliance with FCC's RF exposure guidelines, the distance must be at least 20 cm between the radiator and your body, and fully supported by the operating and installation

WARRANTY POLICY

The LOWDR Warranty is validated from the date of sale of the product to the final consumer, following the terms specified in the manual for each product.

READ THE INFORMATION BELOW CAREFULLY

To use the warranty benefit, you must present one of the three documents below:

- The product's manufacturing date must be within the warranty period specified in the manual.
- Final consumer purchase invoice, with the date of sale within the warranty period specified in the manual.
- Warranty certificate dated and stamped by the retailer or installer, within the warranty period specified in the manual.

Warranty may be refused in the following cases:

- Products after it has expired of warranty period.
- If there is a change in the circuit or adaptation of non-original parts.

- If there are signs of tampering.
- If repaired by a person not authorized by LOWDR.
- If there are signs of accidents, such as water inside the product.
- If the date of manufacture label is altered or missing.
- Damage caused by improper use, dropping the device, or improper installation. (Products must be installed in a stable, well-ventilated, dry location, in accordance with the technical specifications in the product manual.)

If you have any questions, contact our Customer Service Center at:

+1 (786) 655-9070 (WhatsApp)

www.lowdr.com