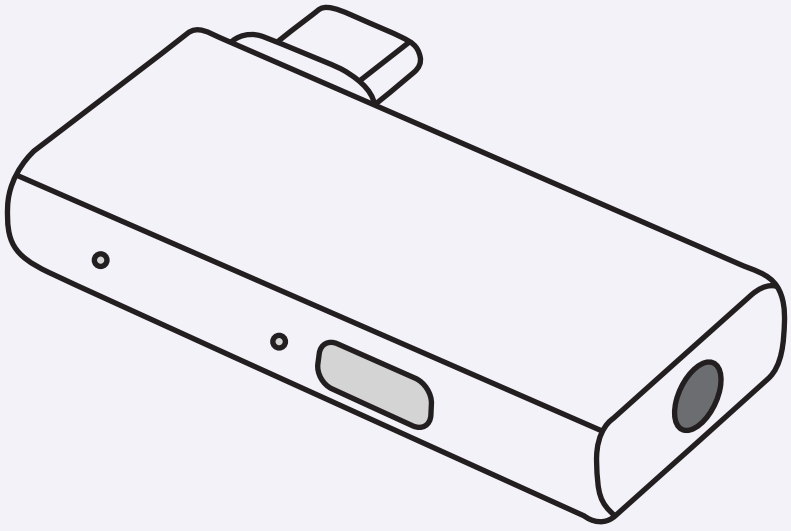
LHDC ONE

Manual



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The Soul of Sound

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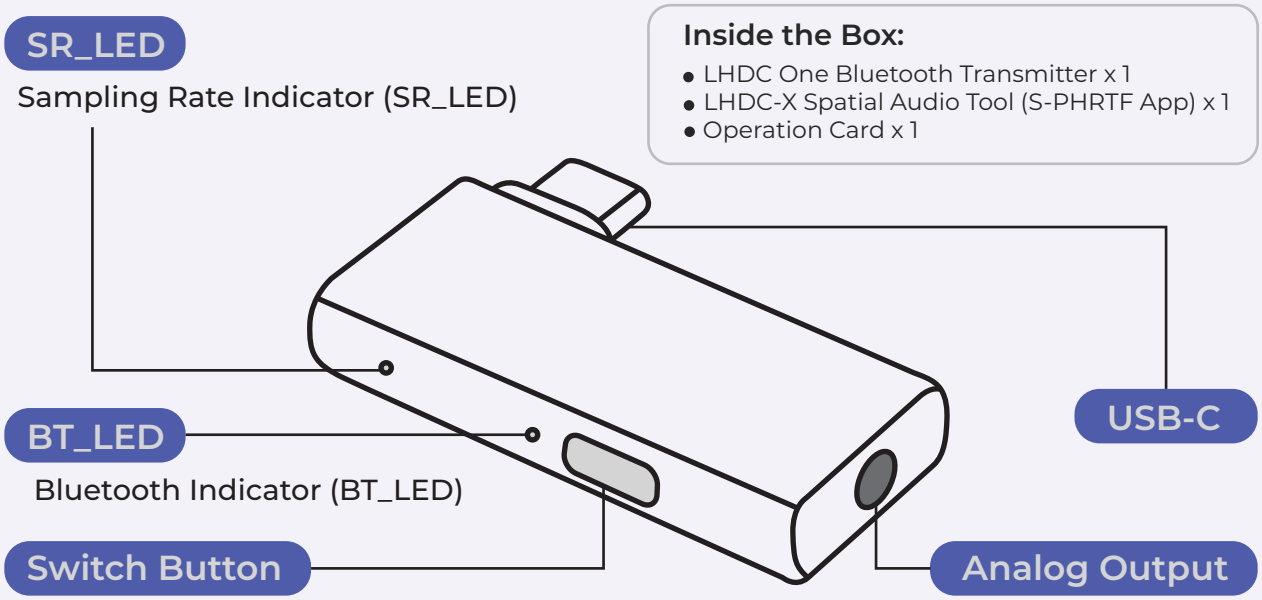
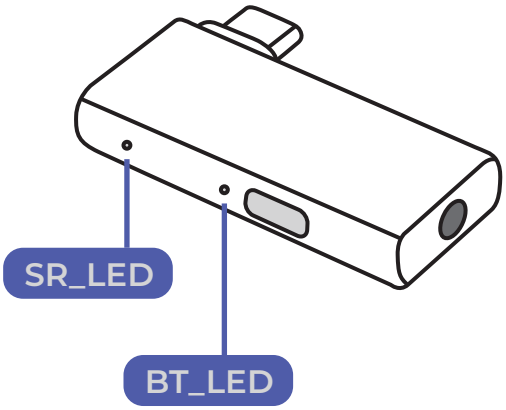


LED Indicator Overview

Sampling Rate Indicator (SR_LED)	Bluetooth Indicator (BT_LED)	Status	Operating Status
⚪	🔵	BT: Constant Blue Light	Successfully Connected to Bluetooth Device
⚪	🔴	BT: Constant Red Light	LHDC ONE is not connected
🔴	🟢	BT: Constant Green Light	LHDC ONE in low latency mode
○	🔴🔵	BT: Flashing Red and Blue Lights	LHDC ONE in pairing mode
⚪	🔵	SR: Constant white Light	SBC 48Hz
🔴	🔵	SR: Constant Red Light	LHDC 48kHz
🔵	🔵	SR: Constant Blue Light	LHDC 96kHz
🟢	🔵	SR: Constant Green Light	LHDC 192kHz

Bluetooth Indicator *(BT_LED)*

- Blue Light: Device connect
- Red Light: Device dis-connected
- Green Light: Device is in low latency mode
- Flashing Red and Blue Lights: LHDC ONE in pairing mode



Sampling Rate Indicator *(SR_LED)*

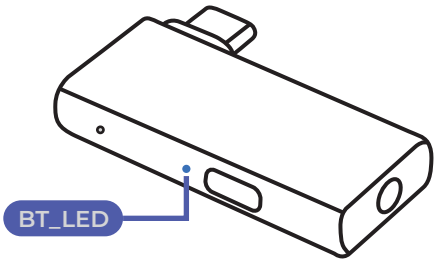
- White Light : SBC 48Hz
- Red Light : LHDC 48kHz
- Blue Light : LHDC 96kHz
- Green Light : LHDC 192kHz

Pairing with LHDC ONE

STEP 1 Connect LHDC ONE to Your Mobile Device

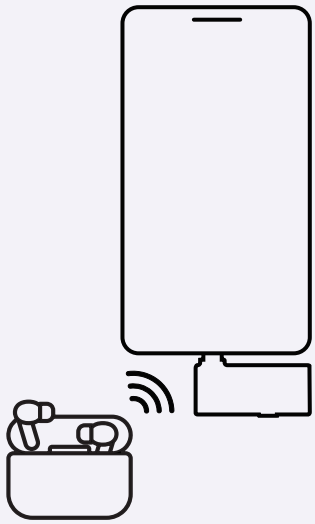
Plug LHDC ONE into the USB-C port of your phone or computer.

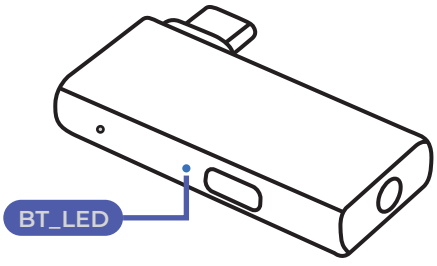
Upon the first use, LHDC ONE will automatically enter pairing mode, and the BT_LED will flash in blue and red lights.



STEP 2 Enable Bluetooth Pairing Mode on Your Device

Turn on your Bluetooth-enabled device and set it to pairing mode, keeping it as close to LHDC ONE as possible. Wait for your device to connect to LHDC ONE.





Status of Indicator Lights:

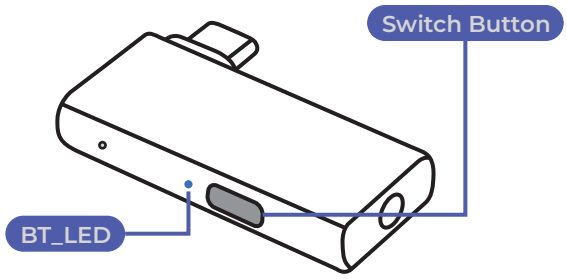
- Connected Successfully (BT_LED : Blue Light)
- Connection Unsuccessful (BT_LED : Red Light)

  Please ensure your Bluetooth device is in pairing mode and proceed to Step 3.

STEP 3 Double-click LHDC ONE to Enter Pairing Mode

If the connection is unsuccessful, double-click the button on LHDC ONE to enter pairing mode.

BT_LED will flash blue/red, indicating pairing mode. When successfully connected, BT_LED will turn blue.



Reconnect LHDC ONE to Bluetooth Device

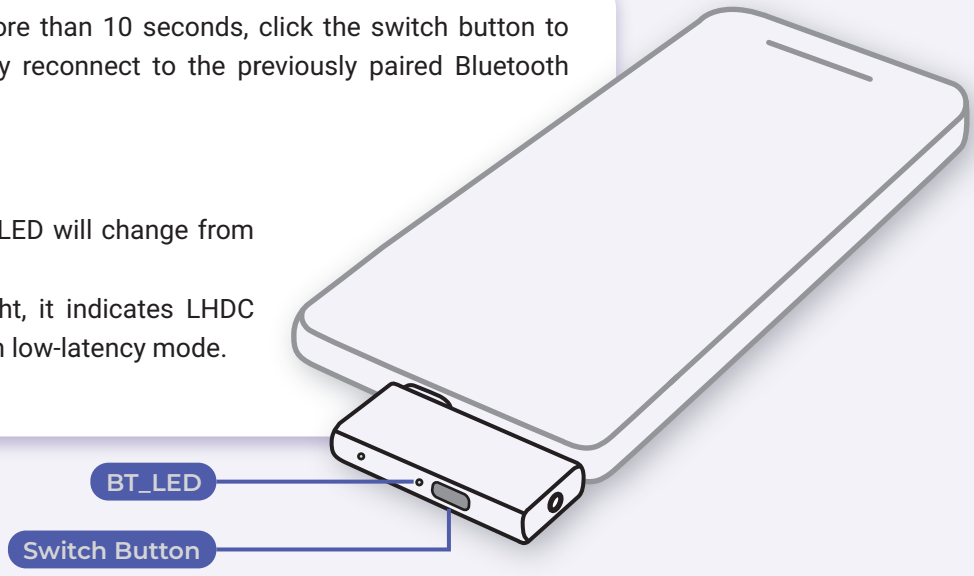
Plug LHDC ONE into the USB-C port of your phone or computer. Enable pairing mode on your Bluetooth device, and LHDC ONE will reconnect to the Bluetooth device.

If BT_LED remains red for more than 10 seconds, click the switch button to prompt LHDC ONE to actively reconnect to the previously paired Bluetooth device.

*** Light Indicator Status :**

Connected successfully : BT_LED will change from red to blue.

If BT_LED shows a green light, it indicates LHDC ONE has reconnected and is in low-latency mode.



Button Switch Functionality

Double-click to enter pairing mode.

LHDC ONE can connect to Bluetooth devices in pairing mode.

Single Click

In the connected state, a single click of the switch button can toggle to low-latency mode.

Light Indicator Status

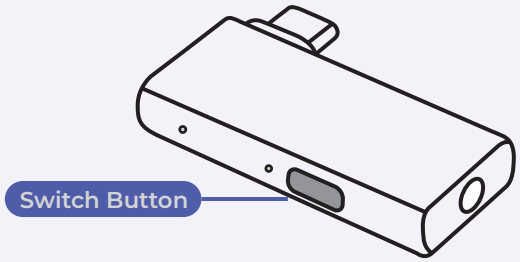
Sampling Rate Indicator (SR_LED)	Bluetooth Indicator (BT_LED)	Status	Operating Status
🔴	🟢	BT: Constant Green Light	LHDC ONE in low latency mode
⚪	🔵	BT: Constant Blue Light	LHDC ONE in Regular Connection Status (Sampling rates have different indicators based on the connected headphones)

- In low latency mode（BT_LED：Green Light）
- In Regular Connect status（BT_LED：Blue Light）

In the disconnected state, a single click on the switch button can actively reconnect to the previously paired Bluetooth device.

Reset Previously Paired Devices

Press and hold for three seconds to reset previously paired devices (up to a maximum of eight sets).
*There will be no indicator light changes.

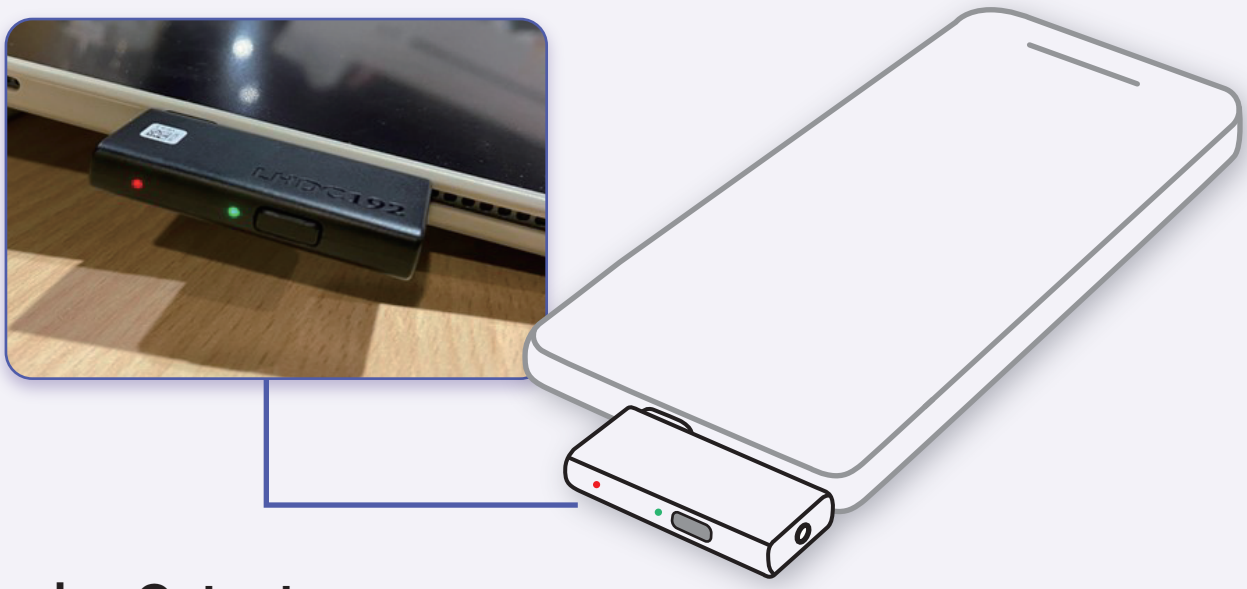


Low Latency Mode

Low Latency Mode Bluetooth devices that support the LHDC Bluetooth protocol and low-latency mode can activate/deactivate low-latency mode by clicking the switch button.

If the previous Bluetooth device was in low-latency mode, it will default to low-latency mode after reconnecting.

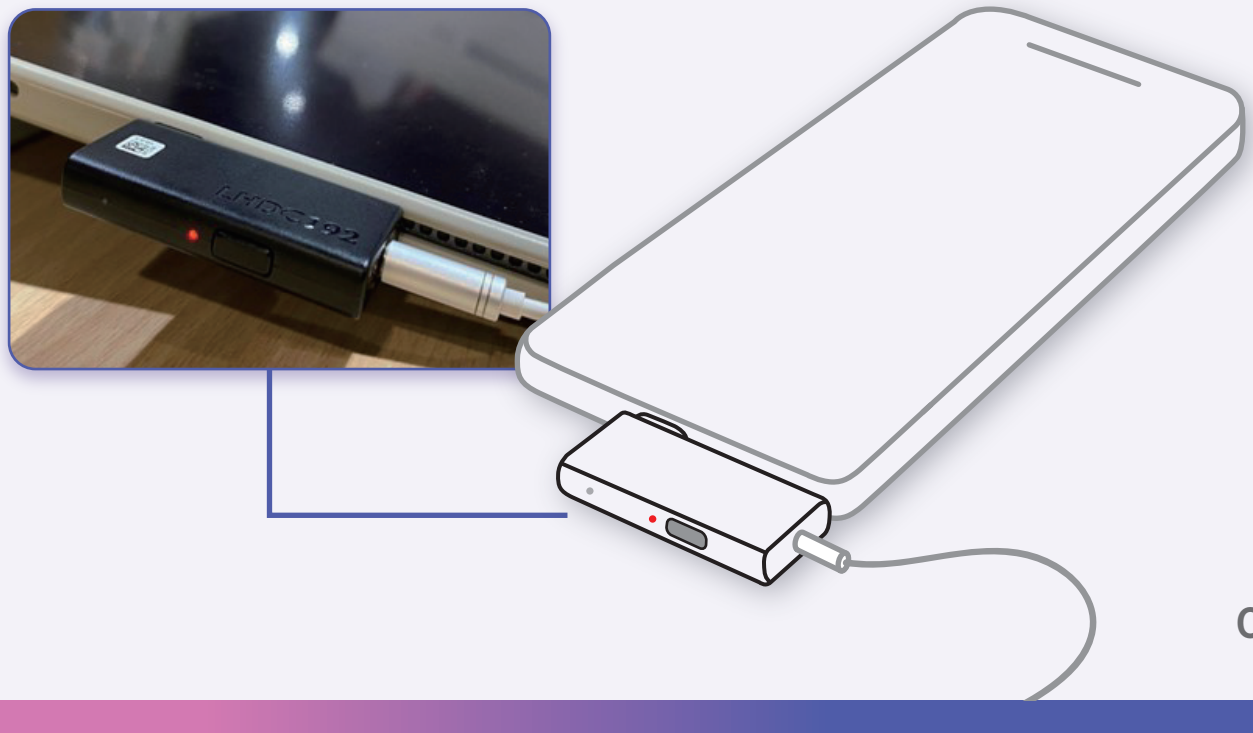
Indicator light status : (SR_LED: Red light, BT_LED: Green light)



Analog Output

LHDC ONE can output through the 3.5mm audio jack without the need for Bluetooth device connection (BT_LED: Red light), and the sampling rate will default to 48kHz.

When connected to a Bluetooth device, LHDC ONE will automatically detect the current sampling rate of the Bluetooth device. (Different sampling rates have different indicator lights, details explained in the Sampling Rate Indicator Light section.)



Troubleshooting and Solutions

Operational Guidelines

During steps 1 to 3, after connecting LHDC ONE to your phone or computer, ensure that the Bluetooth device enters pairing mode immediately after double-clicking the switch button.

The interval between these actions should not be too long, as some Bluetooth devices may require a longer pairing time.

1. Cannot Pair with LHDC ONE with New Bluetooth Device

Scenario 1 : Bluetooth device stays in pairing mode for an extended period; some Bluetooth devices have a longer pairing time.

Solution 1 : Re-plug LHDC ONE, then repeat steps 2-3 (refer to Operational Guidelines for details).

Scenario 2 : Maximum number of remembered paired devices reached.

Solution 2 : Long-press the switch button for 3 seconds to perform a reset; this action clears the pairing memory, then repeat steps 1-3.

2. Unable to Automatically Reconnect Previously Paired Devices

Scenario : When turning on the Bluetooth device (e.g., opening the cover), there is no immediate automatic reconnection.

Solution : If this situation persists for more than 10 seconds, please click the toggle button to manually initiate the reconnection with LHDC ONE. If the issue persists, consider re-pairing the Bluetooth device. To do this, disconnect and reconnect LHDC ONE, following steps 2 to 3 (refer to the operational guidelines for details).

FAQ

After inserting LHDC ONE, will there be any display on the mobile device?

There will be no display on the mobile device. LHDC ONE uses an LED light to indicate its connection status. When LHDC ONE is inserted into the device, the Bluetooth indicator (BT_LED) will show red, indicating the device is not connected.
If you are inserting LHDC ONE into a mobile device for the first time, it will automatically enter pairing mode, and the Bluetooth indicator (BT_LED) will flash red and blue alternately (this function is only applicable for the first use). For more detailed information, please refer to the user guide.

Can the sampling rate be adjusted on the phone?

The sampling rate indicator of LHDC ONE automatically detects the optimal sampling rate based on the Bluetooth device's audio encoding/decoding technology. LHDC ONE displays two Bluetooth encoding/decoding technologies: LHDC and SBC. When used with Bluetooth devices that support LHDC, a more comprehensive experience can be achieved (please refer to the Bluetooth headset/audio brand information below). LHDC ONE supports various headset/audio brands. For specific models, please consult the respective brand's model information.

Which Bluetooth headset/audio brands support LHDC encoding?

When used with Bluetooth devices that support LHDC, a more comprehensive experience can be achieved (please refer to the Bluetooth headset/audio brand information below). LHDC ONE supports various headset/audio brands. For specific models, please consult the respective brand's model information.

SENNHEISER EDIFIER beyerdynamic

TEAC ONEPLUS NOTHING dyson

xiaomi Xiaodu oppo baseus

FAQ

How to turn off LHDC ONE?

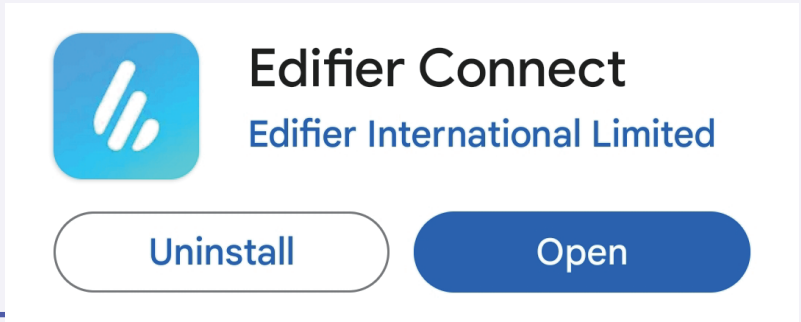
To turn off LHDC ONE, simply disconnect it from the mobile device.

When connecting LHDC ONE to a mobile device with Edifier, Nothing, or other headphones, why does the sample rate indicator (SR_LED) still show white light (SBC 48kHz)? How can I set it to display green light (LHDC 192kHz)?

Please first confirm whether your Bluetooth device supports the LHDC architecture and whether its version can support 192kHz. Additionally, check if your headphones are updated to the latest version. For example, after updating Nothing headphones to the latest version, it will automatically switch to a 192kHz sample rate. You can verify this information on the official website of the headphone brand.

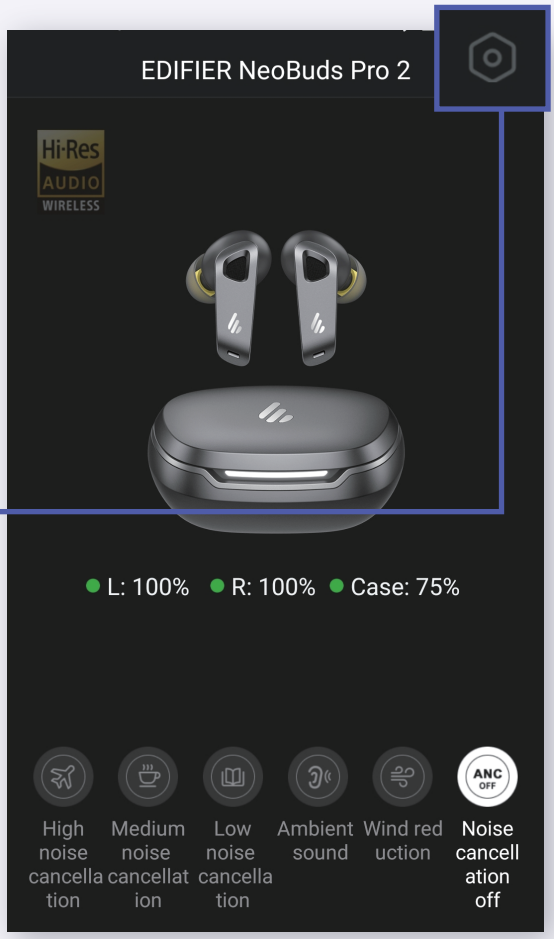
For Edifier headphones, you need to use the official app to configure LHDC architecture. However, there is a prerequisite: for iPhones or other iOS devices, since their audio codec is AAC, even if you download the app for settings, there won't be an option to switch to a high-definition audio codec. Therefore, to enable LHDC 192kHz functionality, you need to perform the settings on an Android device. Here are the steps:

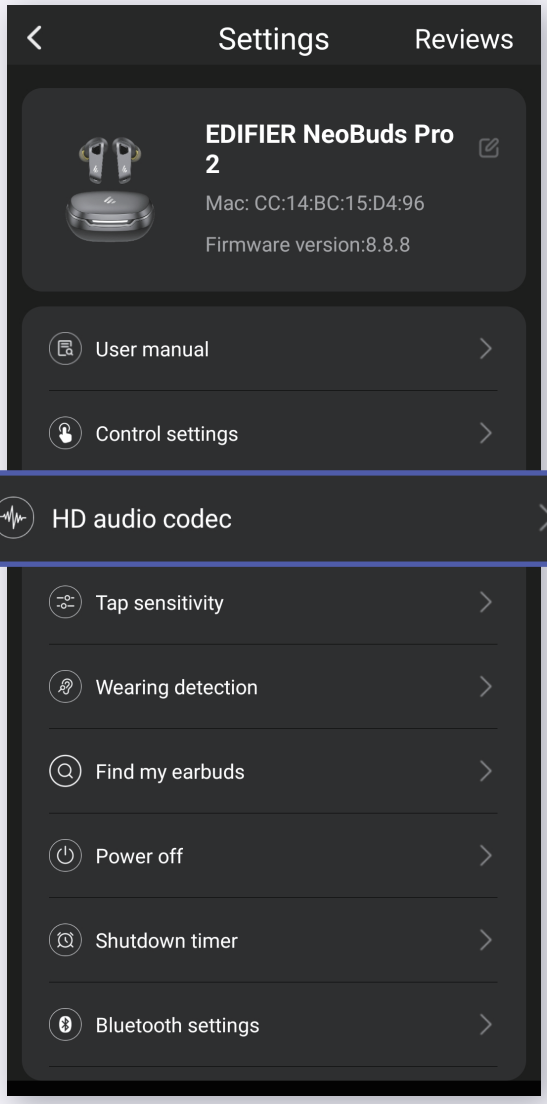
1. Please download "Edifier Connect" from the Google Play Store.



FAQ

2. After connecting the headphones to the Android mobile device via Bluetooth, open the app to view the model and status of the Edifier headphones. Click on the icon in the upper right corner for further settings.

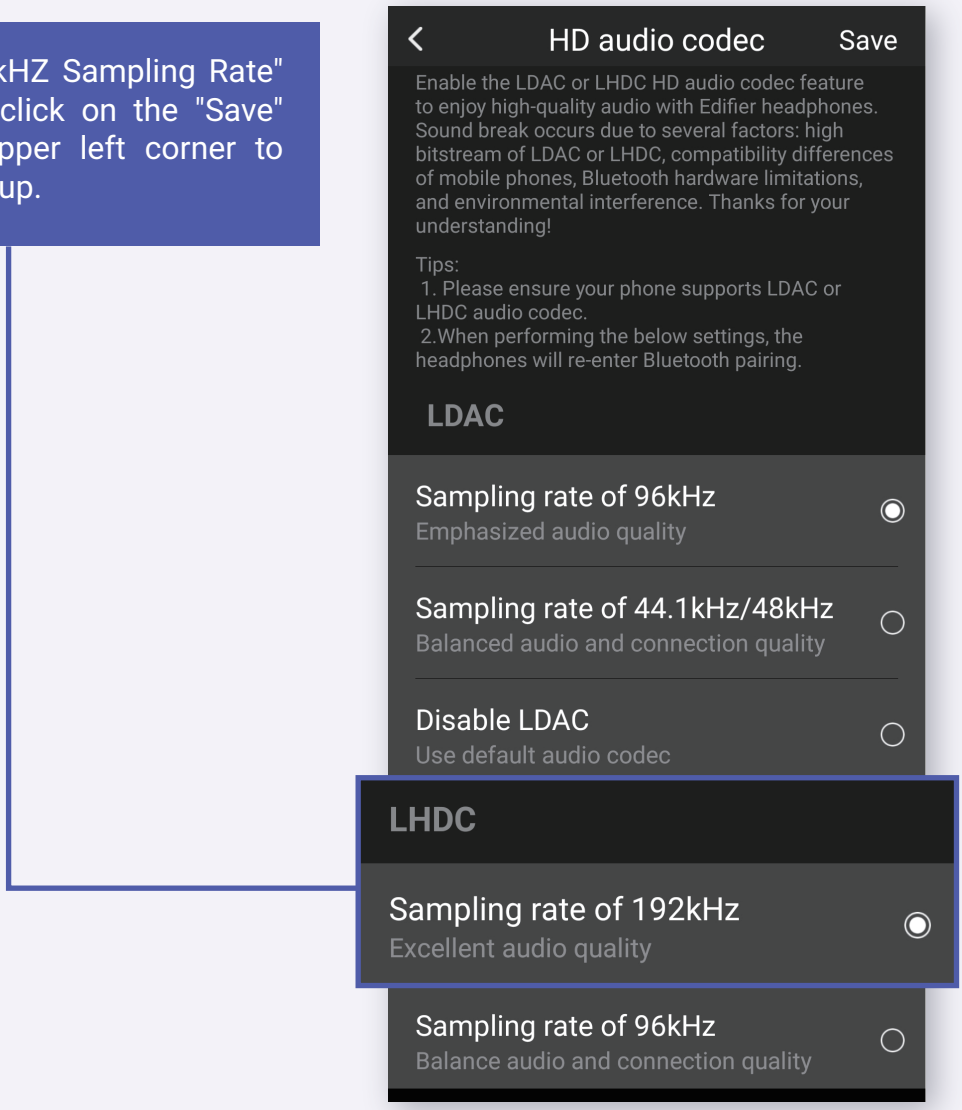




3. Click on "HD audio codec"

FAQ

4. Enable the "192kHZ Sampling Rate" for LHDC, then click on the "Save" button in the upper left corner to complete the setup.



Using LHDC ONE to Answer Calls on Mobile/Computer Devices

The primary function of LHDC ONE is to optimize audio output; it does not provide audio input functionality. Therefore, when answering calls, you will hear the other party's voice through your headphones, while your voice will be picked up by the built-in microphone of your mobile or computer device. If you experience low volume during the call, please place your phone or other device within the microphone's range to achieve better audio reception. Otherwise, being too far away may result in insufficient voice capture.

FAQ

Can LHDC One be used to listen to smartphone audio via USB connection?

LHDC One supports audio input via USB and is compatible with devices that support USB audio. It is important to note that there may be a small number of specific devices that do not adhere to standard USB audio protocols, which could result in compatibility issues.

How to use LHDC ONE on Android devices?

Insert LHDC ONE into the USB-C port of your phone, then use LHDC ONE as a transmitter to send audio to your Bluetooth audio device. If the Bluetooth audio device supports the LHDC codec, you can enjoy better sound quality compared to the SBC codec.

Where can LHDC ONE be used?

LHDC ONE is compatible with the following operating systems: Windows, Android phones with a Type-C port, Mac OS, iPhone 7 and above models, and iPads with a Type-C port. Right image: The indicator light shows the successful connection of LHDC ONE with Bluetooth headphones.

Windows

Android Phone with Type-c

FAQ

Mac OS

iPhone15 and above with Type-C

iPad with Type-C

FAQ

Does LHDC ONE require LHDC X software to operate?

No, the LHDC ONE Bluetooth transmitter does not require LHDC X software to function. Simply plug it in and pair it with your device to enjoy high-resolution audio.

Can LHDC ONE be used as a travel adapter on airplanes?

For example, pairing it with headphones and connecting it to the airplane's audio output through an adapter. Most airlines use dual-prong plugs for audio output, but LHDC ONE is equipped with a USB-C connector. Additionally, most in-flight entertainment systems do not offer high-resolution content. Therefore, even if you manage to connect LHDC ONE to the airline's audio system, you won't be able to fully utilize the core features of our product, which is rather unfortunate.

Besides LHDC, does LHDC ONE support other Bluetooth codecs such as aptX, Adaptive, AAC, or LDAC? If a device does not support LHDC but supports aptX or LDAC, can LHDC ONE improve the sound quality?

Unfortunately, LHDC ONE does not support LDAC, AAC, or aptX.

FAQ

How to use LHDC ONE to listen to music on an Android device?

You can insert LHDC ONE into the USB-C port of your phone, then use LHDC ONE as a transmitter to send audio to your Bluetooth audio device. If your Bluetooth audio device supports the LHDC codec, you can enjoy better sound quality compared to the SBC codec.

Can LHDC ONE work without LHDC X software?

LHDC X is an auxiliary software that allows you to immerse yourself in surround sound on PC and Android devices.
The LHDC ONE Bluetooth transmitter does not require any additional software to operate. Simply plug it in, pair it, and you can enjoy Hi-Res audio.
We apologize for the confusion. LHDC-X is a subscription-based spatial audio solution. Through personalized HRTFs (Head-Related Transfer Functions), we can achieve 7.1 surround sound, providing you with cinema-quality clarity with distance and depth.

If your issue or malfunction still cannot be resolved, please contact us, and we will respond to you as soon as possible!

service@lhdc.co

Supported Device List for LHDC ONE

VENDER	TYPE	MODEL	LHDC FEATURE
Xiaomi	TWS	Air2S	LHDC-V3
Xiaomi	TWS	Air2 Pro	LHDC-V3
Xiaomi	Speaker	Sound Move	LHDC-V4 + LHDC-V5
Xiaomi	TWS	Xiaomi Buds 3 pro	LHDC-V4
Xiaomi	TWS	Xiaomi Buds 4 pro	LHDC-V4 + LHDC-V5
Xiaomi	TWS	Xiaomi Buds 4	LHDC-V4 + LHDC-V5
Xiaomi	Neck strap headphones	xiaomi earphones necklace	LHDC-V4
Xiaomi	TWS	Redmi Buds 5Pro	LHDC-V5
Xiaomi	TWS+dongle	Redmi Buds 5Pro 电竞版	LHDC-V5 + dongle
Blackshark	Headset	BE16	LHDC-V3
OPPO	TWS	Enco X	LHDC-V3
OPPO	TWS	Enco X2	LHDC-V4
Oneplus	TWS	Oneplus buds Pro	LHDC-V4
Oneplus	TWS	Oneplus buds Pro 2	LHDC-V4 + LHDC-V5
Dyson	noise-cancelling headphones	Dyson zone	LHDC-V4
Nothing	TWS	Ear 2	LHDC-V4 + LHDC-V5
Edifier	TWS	GM5 极速版	LHDC-V3
Edifier	TWS	DreamPods	LHDC-V3
Edifier	TWS	Neobuds Pro	LHDC-V3
Edifier	TWS	Neobuds Pro 2	LHDC-V4 + LHDC-V5
Edifier	Headset	W820NB 空间音频版本	LHDC-V5 + LHDC-X
Edifier	TWS	GX07	LHDC-V4
Edifier	TWS	GX05 Pro	LHDC-V5
Xiaodu	TWS	Dupods Pro	LHDC-V3

VENDER	TYPE	MODEL	LHDC FEATURE
Xiaodu	Speaker	Tiantian Casa PENINSULA	LHDC-V4
Xiaodu	Speaker	Tiantian Casa ARIA	LHDC-V4
Baseus	TWS	Baseus Bowie M2s	LHDC-V4
Baseus	Headset	Baseus Bowie H1i	LHDC-V4
Baseus	Headset	Baseus H1 Pro	LHDC-V4
Nubia	TWS	DAO TWS	LHDC-V5
Beyerdynamic	Neck strap headphones	Xelento wireless (2nd gen.)	LHDC-V3
IFI	BT Receiver	Zen Blue	LHDC-V3
HiFiman	Headset	ANANDA-BT	LHDC-V3
Sennheiser	Headset	IE80S BT	LHDC-V3
TEAC	Home Audio	UD-505SE	LHDC-V3
TEAC	Home Audio	NT-505SE	LHDC-V3
TEAC	Home Audio	UD-701N	LHDC-V3
DA&T	Home Audio	Qi	LHDC-V3
DA&T	Home Audio	Q16	LHDC-V3
DA&T	Home Audio	Qz	LHDC-V3
Grell Audio	TWS	Grell TWS/1	LHDC-V3