Made in china

STEREO

UHF WIRELESS IN-EAR MONITORING

USER MANUAL

Please read this manual carefully before use. If you encounter any problems, please contact customer service at any time.

⚠ WARNING!

LISTENING TO AUDIO AT EXCESSIVE VOLUMES CAN CAUSE PERMANENT HEARING DAMAGE.

USE AS LOW A VOLUME AS POSSIBLE.

Over exposure to excessive sound levels can damage your ears resulting in permanent noise-induced hearing loss (NIHL). Please use the following guidelines established by the Occupational Safety Health Administration (OSHA) on maximum time exposure to sound pressure levels before.

EST-12

Professional Wireless In-Ear Monitor System

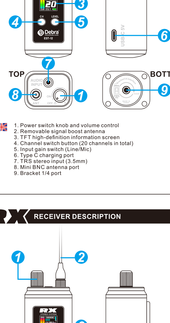
This is a stereo portable wireless in-ear monitoring system that uses UHF digital signal transmission and ultra-low noise floor to achieve almost imperceptible ultra-low latency while ensuring the clarity and high sound quality of the audio. It is a large-capacity battery can ensure long-term battery life. Users can switch between mono and stereo freely. The built-in multi-channel switchable system can avoid signal interference in complex environments.

The system is small and easy to take out.Whether it is a personal music lover or a professional stage performance,it can be a good partner for your music journey!

PRODUCT FEATURES

- UHF signal transmission, strong signal penetration, good anti-interference and good signal range
- No sense of delay, users can hardly perceive the delay of signal and sound, suitable for real-time use
- Built-in rechargeable lithium battery, good battery life, convenient to use anytime and anywhere
- Small size and light weight, metal shell and detachable antenna, excellent workmanship
- The receiver can switch between stereo/mono modes, suitable for monitoring in various scenes
- Strong scalability: the transmitter can input music or microphone (dynamic/condenser/lavalier microphone)

TX TRANSMITTER DESCRIPTION



1. Power switch knob and volume control
2. Antenna amplification signal adjustment
3. TFT high-definition information screen
4. Channel switch button (20 channels in total)
5. Input gain switch (Line/Mic)
6. Type C charging port
7. TRS stereo input (3.5mm)
8. Mini BNC antenna port
9. Bracket 1/4 port

EST-12 STEREO WIRELESS IEM TRANSMITTER DESCRIPTION

1. Perilla de encendido y control de volumen
2. Antena de amplificación de señal extraible
3. Pantalla de información TFT de alta definición
4. Botón de cambio de canal (20 canales en total)
5. Interruptor de ganancia de entrada (Línea/Micrófono)
6. Puerto de carga Type-C
7. Entrada estéreo TRS (3.5 mm)
8. Puerto de antena mini BNC
9. Puerto de soporte de 1/4"

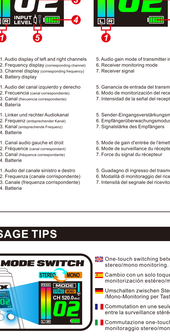
1. Ein-/Ausschalter und Lautstärkeregler
2. Abnehmbare Empfangsantenne
3. TFT-HD-Informationsbildschirm
4. Kanalumschalter (insgesamt 20 Kanäle)
5. Eingangsverstärkungsschalter (Line/Mikrofon)
6. Type-C Ladeanschluss
7. TRS-Stereoeingang (3,5 mm)
8. Mini-BNC-Antennenanschluss
9. 1/4-Zoll-Anschluss für Halterung

1. Bouton d'alimentation et réglage du volume
2. Antenne d'amplification de signal amovible
3. Écran d'information TFT haute définition
4. Bouton de changement de canal (20 canaux au total)
5. Commutateur de gain d'entrée (Ligne/Micro)
6. Port de charge de type-C
7. Entrée stéréo TRS (3,5 mm)
8. Port d'antenne mini BNC
9. Interface 1/4 pour connecter le support

1. Manopola di accensione e controllo del volume
2. Antenna rimovibile per amplificazione del segnale
3. Schermo informativo TFT ad alta definizione
4. Pulsante di cambio canale (20 canali in totale)
5. Interruttore di guadagno in ingresso (Linea/Microfono)
6. Porta di ricarica Type-C
7. Ingresso stereo TRS (3,5 mm)
8. Porta antenna Mini BNC
9. Porta da 1/4 di pollice

RX RECEIVER DESCRIPTION

EST-12 STEREO WIRELESS IEM RECEIVER DESCRIPTION



1. Power switch knob and volume control
2. Removable signal boost antenna
3. TFT high-definition information screen
4. Channel switch button (20 channels in total)
5. Monitoring mode switch (stereo/mono)
6. Type C charging port
7. TRS headphone output (3.5mm)
8. Mini BNC antenna port

1. Perilla de encendido y control de volumen
2. Antena extraíble para amplificación de señal
3. Pantalla de información TFT de alta definición
4. Botón de cambio de canal (20 canales en total)
5. Selector de modo de monitorización (estéreo/mono)
6. Puerto de carga tipo C
7. Salida de auriculares TRS (3,5 mm)
8. Puerto de antena mini BNC

1. Ein-/Ausschalter und Lautstärkeregler
2. Abnehmbare Empfangsantennenverstärker
3. TFT-HD-Informationsbildschirm
4. Kanalumschalter (insgesamt 20 Kanäle)
5. Überwachungsmodus-Schalter (Stereo/Mono)
6. Type-C Ladeanschluss
7. TRS-Kopfhörerausgang (3,5 mm)
8. Mini-BNC-Antennenanschluss

1. Bouton d'alimentation et réglage du volume
2. Antenne d'amplification de signal amovible
3. Écran d'information TFT haute définition
4. Bouton de changement de canal (20 canaux au total)
5. Commutateur de mode de surveillance (stéréo/mono)
6. Port de charge de type-C
7. Sortie casque TRS (3,5 mm)
8. Port d'antenne mini BNC

1. Manopola di accensione e controllo del volume
2. Antenna amplificatore di segnale rimovibile
3. Schermo informativo TFT ad alta definizione
4. Pulsante di cambio canale (20 canali in totale)
5. Selettore della modalità di monitraggio (stereo/mono)
6. Porta di ricarica Type-C
7. Uscita cuffie TRS (3,5 mm)
8. Porta antenna Mini BNC

TFF screen information introduction for transmitter and receiver

1. Audio display of left and right channels
2. Channel display (corresponding channel)
3. Channel display (corresponding frequency)
4. Battery display
5. Audio del canale sinistro e destro
6. Canale (canale corrispondente)
7. Canale (frequenza corrispondente)
8. Batteria

1. Linker und rechter Audiokanal
2. Kanal (entsprechender Kanal)
3. Kanal (entsprechender Frequenz)
4. Batterie

1. Canal audio gauche et droit
2. Canal (canal correspondant)
3. Canal (fréquence correspondante)
4. Batterie

1. Audio del canale sinistro e destro
2. Frequenza (canale corrispondente)
3. Canale (frequenza corrispondente)
4. Batteria

5. Audio gain mode of transmitter input
6. Receiver monitoring mode
7. Receiver signal

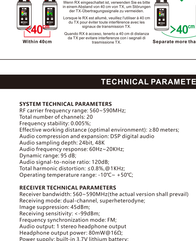
5. Ganancia de entrada del transmisor
6. Modo de monitorización del receptor
7. Intensidad de la señal del receptor

5. Sender-Eingangsverstärkungsmodus
6. Empfängerüberwachungsmodus
7. Signalstärke des Empfängers

5. Mode de gain d'entrée de l'émetteur
6. Mode de surveillance du récepteur
7. Force du signal du récepteur

5. Guadagno di ingresso del trasmettitore
6. Modalità di monitoraggio del ricevitore
7. Intensità del segnale del ricevitore

USAGE TIPS



Connect the audio source output port to the TX's 3.5mm jack (TRS)

Salida de la fuente de audio al conector 3.5 mm (TRS) del TX

Geben Sie die Audioquelle an die 3.5mm Buchse(TRS) TXaus.

Il trasnfirez la source audio vers la prise jack 3.5 mm (TRS) du TX

Invia la sorgente audio al jack da 3,5 mm (TRS) del TX

Switch the RX channel to same as the TX channel, and the green color indicates successful matching.

Cambia el canal RX al mismo que el canal TX y el color verde indica una coincidencia exitosa.

Schalten Sie den RX-Kanal auf den gleichen wie den TX-Kanal und die grüne Farbe zeigt eine erfolgreiche Übereinstimmung an.

Basculez le canal RX sur le même canal que le canal TX, et la couleur verte indique une correspondance réussie.

Imposta il canale RX sullo stesso canale TX: il colore verde indicherà la corrispondenza riuscita.

If the pairing is complete but there is no sound from the receiver, you can switch channels and pair again.

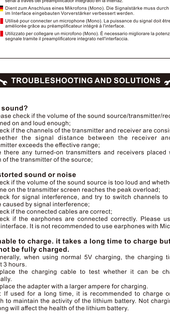
Si el emparejamiento está completo pero no hay sonido desde el receptor, puede cambiar de canal y emparejarse nuevamente.

Wenn die Kopplung abgeschlossen ist, aber kein Ton vom Empfänger kommt, können Sie die Kanäle wechselnd und die Kopplung erneut durchführen.

Si l'appariement est terminé mais aucun son n'est émis par le récepteur, vous pouvez changer de canal et effectuer un nouveau jumelage.

Se l'associazione è completa ma il ricevitore non emette alcun suono, è possibile cambiare canale ed effettuare nuovamente l'associazione.

USAGE TIPS



The transmitter can be mounted on a bracket and placed anywhere.

El transmisor se puede montar en un soporte y colocar en cualquier lugar.

Der Sender kann auf einer Halterung montiert und überall platziert werden.

L'émetteur peut être monté sur un support et placé n'importe où.

Il trasmettitore può essere montato su una staffa e posizionato.

One-touch switching between stereo/mono monitoring.

Cambio con un solo toque entre monitorización estéreo/mono.

Umschalten zwischen Stereo-/Mono-Monitoring per Tastendruck

Commutazione con un solo tocco tra monitoraggio stereo/mono

50m signal range is stable, and can reach 80m in ideal environment.

El alcance de la señal de 50 m es estable y puede alcanzar los 80 m en un entorno ideal.

Die Signalreichweite von 50 m ist stabil und kann in einer idealen Umgebungen 80 m erreichen.

La portée du signal de 50 m est stable et peut atteindre 80 m dans un environnement idéal.

La portata del segnale è stabile fino a 50 m e, in condizioni ambientali ideali, può raggiungere gli 80 m.

CHARGING & PRECAUTIONS

It can be charged via 5V TypeC and can be used while charging. When completely out of power, it takes 3 hours to charge.

Se carga a través de 5V Tipo C y se puede utilizar mientras se carga. Cuando está completamente sin energía, la carga demora 3 horas.

Es wird über 5V Typ C aufgeladen und kann während des Ladens verwendet werden. Bei völliger Entladung dauert das Aufladen 3 Stunden.

Il est chargé via 5V TypeC et peut être utilisé pendant la charge.Il faut 3heures pour charger complètement la batterie

Si ricarica tramite TypeC da 5V e può essere utilizzato durante la ricarica.Ci vogliono 3 ore per caricare completamente la batteria.

Transmitter Line / Mic input mode explained

LINE INPUT

For connecting line-level signals from electric guitars, mixers, etc. without additional amplification

Para conectar señales de nivel de línea de guitarras eléctricas, mezcladores, etc. sin amplificación adicional.

Zum Anschluss von Line-Pegel-Signalen von E-Gitarren, Mischpulten etc. ohne zusätzliche Verstärkung.

Pour connecter des signaux de niveau ligne provenant de guitares électriques, de mixeurs, etc. sans amplification supplémentaire.

Per collegare segnali di linea da chitarre elettriche, mixer, ecc. senza amplificazione aggiuntiva.

MIC INPUT

Used to connect a microphone (Mono). The signal strength needs to be improved through the preamplifier built into the interface.

Se utiliza para conectar un micrófono (Mono). Es necesario mejorar la intensidad de la señal a través del preamplificador integrado en la interfaz.

Dient zum Anschluss eines Mikrofons (Mono). Die Signalstärke muss durch den im Interface eingebauten Vorverstärker verbessert werden.

Utilisé pour connecter un microphone (Mono). La puissance du signal doit être améliorée grâce au préamplificateur intégré à l'interface.

Utilizzato per collegare un microfono (Mono). È necessario migliorare la potenza del segnale tramite il preamplificatore integrato nell'interfaccia.

TECHNICAL PARAMETERS

SYSTEM TECHNICAL PARAMETERS

RF carrier frequency range: 500~599MHz;
Total number of channels: 20
Frequency stability: 0.005%
Effective working distance (open environment): ≥80 meters;
Audio frequency response: DSP digital audio
Audio sampling depth: 24bit, 48k
Audio frequency response: 60Hz~20KHz;
Dynamic range: 95 dB;
Audio signal-to-noise ratio: 120dB;
Total harmonic distortion: ≤0.8%,@1kHz;
Operating temperature range: -10℃ ~ +50℃;

RECEIVER TECHNICAL PARAMETERS

Receiver bandwidth: 560~598MHz(the actual version shall prevail)
Receiving mode: dual-channel, superheterodyne;
Receiving sensitivity: ≤ 2μV;
Receiving sensitivity: ≥ -99dBm;
Frequency synchronization mode: FM;
Audio output: 1 stereo headphone output
Headphone output power: 80mW@16Ω;
Power supply: built-in 3.7V lithium battery;
can also support external power bank power supply
Normal working current: 130mA;
Battery use time: ≥6 hours;

TRANSMITTER TECHNICAL PARAMETERS

Carrier bandwidth: 540~599MHz;
Oscillation mode: PLL frequency synthesis;
Carrier power: 10mW;
Carrier error: 0.005%;
Harmonic radiation: -32dBm;
Modulation mode: GFSK;
Frequency error: <±10ppm
Stereo input interface: Ø3.5mm
Input impedance: 2.2KΩ;
Frequency setting: FM;
Power supply: built-in 3.7V lithium battery ;
It can also support external power bank power supply
Normal working current: 160mA;
Battery use time: ≥4 hours;

TROUBLESHOOTING AND SOLUTIONS

•No sound?

1.Please check if the volume of the sound source/transmitter/receiver is turned on and loud enough.
2.Check if the channels of the transmitter and receiver are consistent;
3.Whether the signal distance between the receiver and the transmitter exceeds the effective range;
4.Are there any turned-on transmitters and receivers placed within 40cm of the transmitter of the source;

•Distorted sound or noise

1.Check if the volume of the sound source is too loud and whether the volume on the transmitter screen reaches the peak overload;
2.Check for signal interference, and try to switch channels to avoid noise caused by signal interference;
3.Check if the connected cables are correct;
4.Check if the earphones are connected correctly. Please use the TRS interface. It is not recommended to use earphones with Mic.

• Unable to charge, it takes a long time to charge but still cannot be fully charged.

1.Generally, when using normal 5V charging, the charging time is about 3 hours.
2.Replace the charging cable to test whether it can be charged normally.
3.Replace the adapter with a larger ampere for charging.
Note: If used for a long time, it is recommended to charge once a month to maintain the activity of the lithium battery. Not charging for too long will affect the health of the lithium battery.

If the problem is still not solved or you have questions, you can contact the customer service staff at any time.