

# **THEOS DXTX**

**User Manual** 

English

## **Preface**

Thank you for using this product. In order to use this product better and safer, please read the user manual carefully.

## **Scope Of Application**

This user manual is suitable for the THEOS wireless microphone system of Shenzhen Aputure Innovation Technology Co., Ltd. (hereinafter referred to as Aputure), and describes its external dimensions, characteristics, technical requirements and precautions.

THEOS wireless microphone system is a wireless microphone system specially designed for film and television recording and shooting. It can provide stable wireless audio transmission and anti-interference ability in various environments and conditions, and is suitable for complex environments and multi-person use occasions. Full metal jacket is adopted with compact and portable design, which is easy to carry and install, simple and easy to use.

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## **Important Hint**

- · Please read this product manual carefully.
- Keep this product manual. Always include this product manual when passing the products on to third parties.
- Heed all warnings and follow all instructions in this product manual.



**Warning:** Do not place the product near any corrosive chemicals. Corrosion may cause the product to malfunction.

- Only use a micro iber or dry cloth to clean the product.
- Operate carefully dropping or hitting the product may cause damage.
- Keep all liquids away from the product. Liquids entering the product can short-circuit the electronics or damage the mechanics.
- Store the product in a dry, clean, dust-free environment.
- Please contact authorized maintenance personnel when maintenance is needed.
   There are precise electronic circuits in this product. Failure caused by unauthorized disassembly is not covered by our warranty, but users can pay for maintenance.
- This product has been certified by CE, RoHS, UKCA, KC and NCC, etc. Please
  adhere to the operation standards. The warranty does not cover repairs arising out of the
  misuse of the product, although you may request such repairs on a chargeable basis.
- The instructions and information in this manual are based on thorough, controlled company testing procedures. Further notice will not be given if the design and speci ications change.
- DEITY AA batteries are disposable lithium iron non-rechargeable batteries, please do not charge them.

# **List Of Articles**







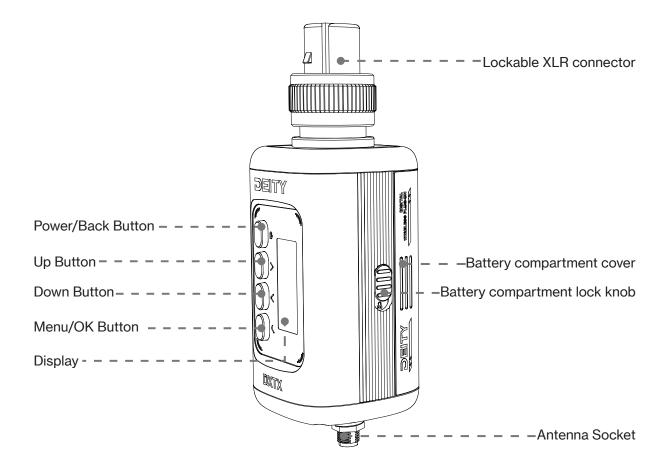
DEITY AA Battery ×1

Micro SD Card ×1



SMA Antenna ×1
(The length of antennas are different in different regions)

# Introduction



## **Installations And Use**

### **DXTX Function Operations**

#### 1. Button Functions

**Power/ Back Button:** Long press to turn the DXTX on and off. A short press returns to the previous layer. Additionally, a short press of this button on the main interface can mute the sound, and a quick triple tap can lock the screen.

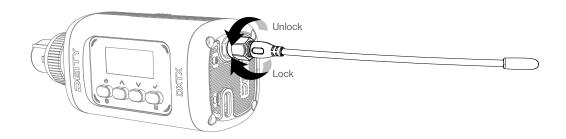
**Up /Down Button:** The Up and Down buttons are used to select various options and adjust values in the setup screens. long press UP bottom to enter the recording interface. Long press the Down button to enter timecode setting interface.

**OK /MENU Button:** This button is used to enter the menu and select highlighted items or enter menu interface. (Under the 5-pin stereo input interface, press and hold this button to quickly switch between gain adjustments.)

#### 2. Antenna Installation

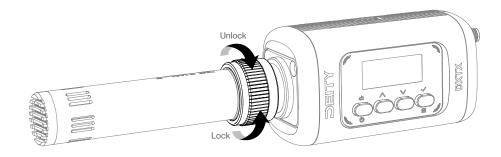
Rotate and install the matching antenna on the antenna socket on the upper part of DXTX, and then tighten and fix it to complete the installation of the antenna.

The antenna of DXTX is a whip antenna with SMA interface.



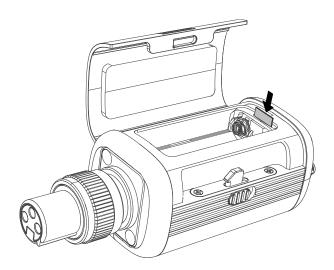
## 3. Microphone Installation

Insert the shotgun microphone into the XLR connector located on the top of the DXTX and secure the microphone by rotating it to lock.



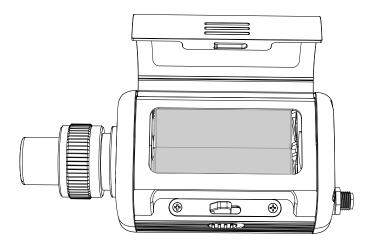
### 4.Insert-and-replace Micro SD Card

The micro SD card need to be located at the lower part of the battery compartment of DXTX. Open the battery compartment cover and directly insert the micro SD card into the card slot before install the AA battery.



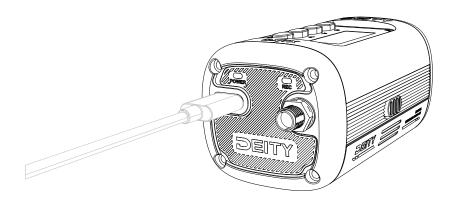
## 5.Battery Installation

Flick the unlock button on the battery compartment cover located on the side of the device, open the battery compartment cover and install the AA battery into the battery compartment with right directions.



### **6.Read The Audio Files (USB-C Port)**

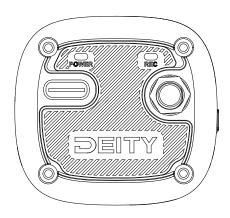
You can power on the DXTX by using USB-C cable connected to a DC adapter. If you want read and download the audio file from micro SD card through USB-C port, you need to enter to come to main interface and enter "SYSTEM" to select the READER model .In addition, the USB-C port allows for audio transmission, enabling real-time output of sound to devices such as computers.



#### 7. Definitions Of LED Indicator

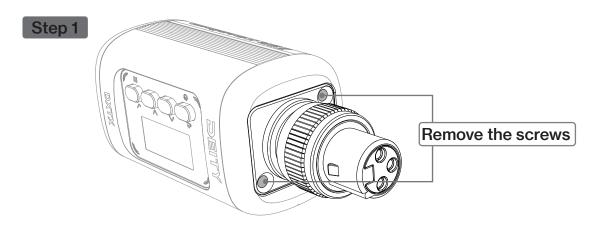
**(REC) LED Indicator**: When recording, the REC led stays red.

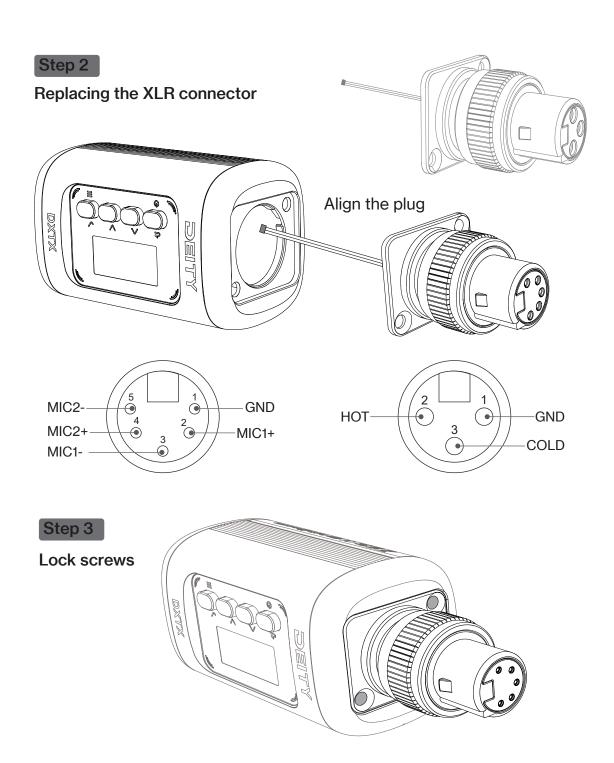
**(POWER) LED Indicator**: The power led glows green when the battery is good. The color changes to red when the battery is low, and a slow-flashing red light when in mute mode.



## 8.XLR Connector Replacement

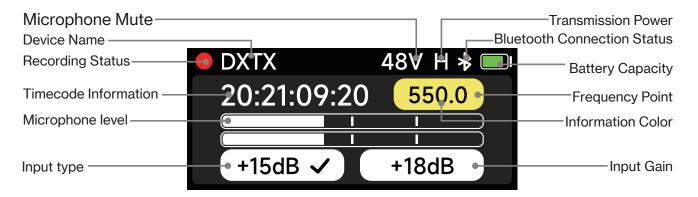
DXTX supports replacing the XLR 3-pin connector with a 5-pin connector. Remove the screws on the top of the product. Take out the 3-pin connector. Insert the 5-pin connector's plug into the internal socket of the product. Secure the panel by tightening the screws. (Note: After replacing with a 5-pin connector, the product interface will be slightly different from when using the 3-pin connector, but the functionality remains largely the same. The interfaces described in the next chapter are based on the 3-pin connector.)





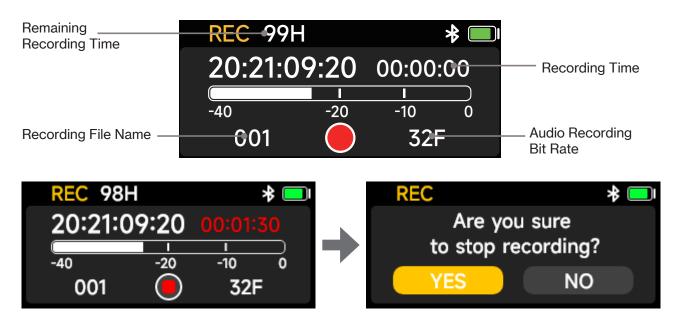
## **DXTX Interface Function Operation**

#### 1. DXTX Main Screen Interface



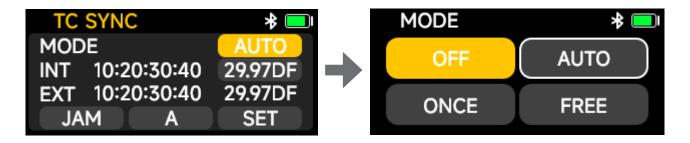
## 2. Recording Interface

Long press the "Up Button" to enter the recording interface. Click the OK button to start recording audio; Click the OK button in the recording state to jump to the prompt to confirm the end of the recording, click OK to end the recording.



#### 3. Timecode Interface

Long press"Down button"to enter the timecode interface,and "EXT" displays external timecode data when connecting external timecode device.



Under the MODE option, you can set the timecode mode, and you can choose "OFF", "AUTO", "ONCE", "FREE" and "REC" modes.

**OFF:** timecode is off;

**AUTO:** the default setting, which automatically recognizes the wired/wireless timecode for synchronization;

**ONCE:** automatically synchronize the timecode information once and then lock it. After locking, the timecode will not be automatically synchronized again, and the lock will be released by switching modes;

**FREE:** the time information set by the current device is timecode, which does not support restart timecode and does not accept external timecode signals.

**REC:** the timecode follows the 'start/stop' of the recording function. In this mode, when recording is started, the timecode automatically starts running; when recording is stopped, the timecode automatically stops running.

#### **Timecode frame rate setting**

The frame rate of timecode recording, you can set the frame rate as 23.98,24,25,29.97,29.97DF,30 as required. DF stands for dropped frame. The default frame rate of the system is 25, so it is suggested to set an appropriate frame rate in advance.

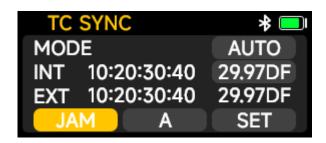


#### JAM synchronization

If you don't have a DEITY wireless timecode device around you, you need to synchronize it by cable. In Auto or Jam mode, the device will automatically identify and synchronize

the timecode signal of the XLR input port; in Free mode or synchronized JMD mode, the system can recognize external signals.

**Note:** This feature can only be used when the microphone power supply voltage is set to 5V or in line mode. It cannot be used when the microphone power supply voltage is set to 48V.



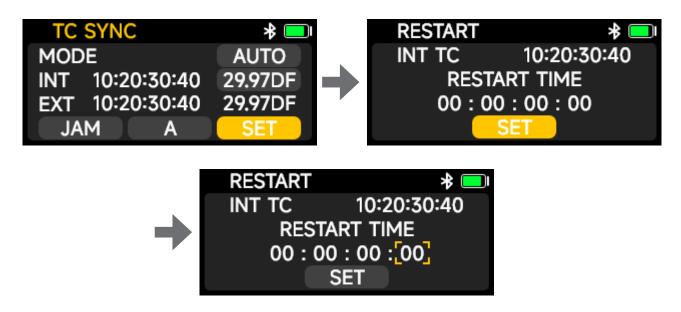
#### **Timecode channel setting**

In order to facilitate your DEITY timecode management, we provide A-H timecode synchronization group, and only devices in the same group can synchronize, except bluetooth operation synchronization.



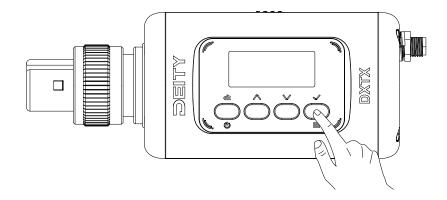
#### Timecode data manual adjustment

Select SET to manually customize the starting timecode and start running.



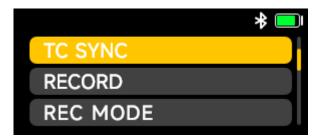
## **DXTX Menu Settings Operation**

Press "Menu Button" to confirm.



#### 1. FREQ

FREQ information can be manually set through FREQ frequency point setting.



#### **PAIR**

When DXTX enters "PAIR", RX also enters "PAIR" pairing mode and the device shall pair.



#### **MANUAL**

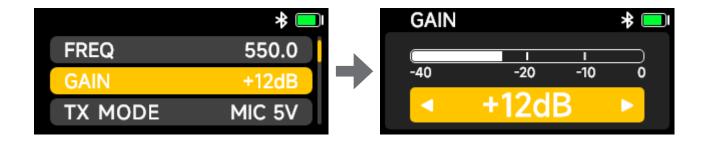
In this mode, use the up and down buttons to adjust the value, allowing for manual setting of the DXTX frequency point.



**Note:** The available range for frequency settings varies depending on the restrictions of each country.

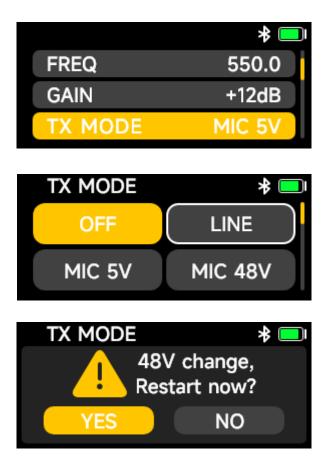
#### 2. GAIN

The gain value of microphone input can be adjusted, which can be increased by 42dB at most.



#### 3. TX MODE

This mode can manually switch the driving voltage of the microphone. There are multiple optional states, and the power supply voltage of the microphone can be selected according to the type you need.



#### 4. TC SYNC

Set the timecode and operation mode. Refer to page 14.



#### 5. REC MODE

In this mode, you can adjust the recording parameters and you can set the bit-rate of the built-in recording of the memory card: 24-bit and 32-bit float recording.

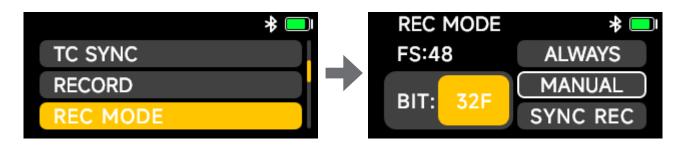
Note: 32-bit float is not supported under the 5-pin connector.

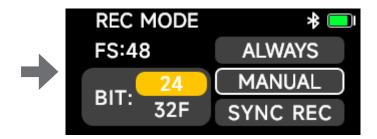
In this mode, you can also select the default recording status:

Select ALWAYS to start recording automatically after turning on, stop recording and save the recording file automatically ater turning off;

Select MANUAL to manually switch the recording status, and the default status is MANUAL.

Select the SYNC REC option to start recording automatically after manual recording + time code synchronization; When the SYNC REC option is turned off, recording will not automatically start after synchronizing the time code; If the device is in the recording state when synchronizing the time code, you need to stop recording first and then adjust the time the code is synchronized, and the recording is not automatically started after synchronization.





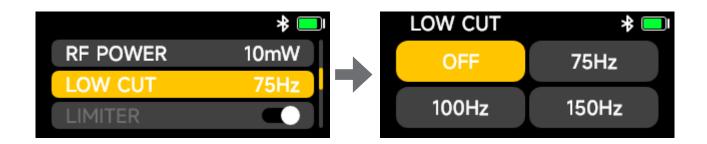
#### 6. RF POWER

In this mode, you can choose the power of RF transmission, and the RF power corresponding to the legal frequency band that meets the requirements will be selected as needed.



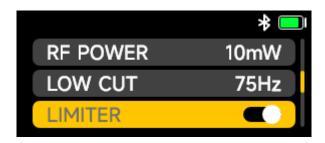
#### 7. LOW CUT

In this mode, you can set the low cut value according to your needs, and there are four low cut value options to choose from: OFF, 75Hz, 100Hz and 150Hz.



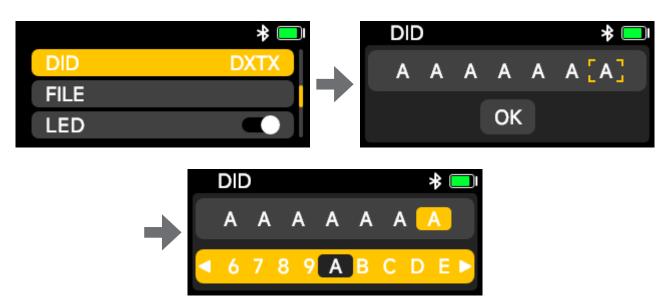
#### 8. LIMITER

The DXTX has a built-in limiter function, and the device has the limiter enabled by default, with no option for the user to manually turn it off.



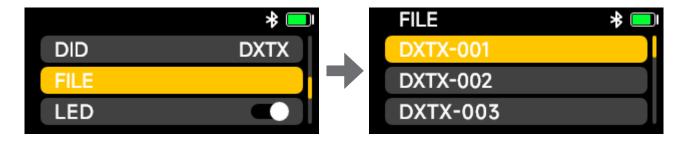
#### 9. **DID**

In this mode, you can change the name of the device according to your needs, select the characters to be adjusted by selecting the up and down keys, and click OK key to save the selection or click back key to restore the previous settings.



#### **10. FILE**

In this mode, you can view the material files in the recording memory card, and choose the corresponding file by pressing the up and down keys.



#### 11. LED

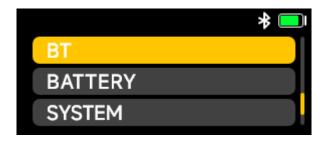
In this mode, users can choose to turn on and off the LED indicators of the device according to their needs.



#### 12. BT

In this mode, you can turn the bluetooth function on/off. Bluetooth is turned on by default. Select "RESET" and click "YES" to reset bluetooth. When the "SUCCESS" message appears, it means that the reset is complete.

The MAC address is the bluetooth physical address number of the current device, which is the unique identification code of the device from the factory, and can distinguish different devices when the mobile phone is connected with bluetooth.



#### 13. BATTERY

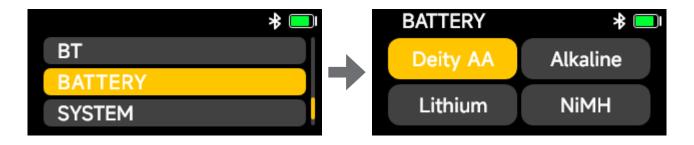
In this mode, you can choose the corresponding battery type according to the actual sage, so that the machine can calculate the remaining battery life of the device more accurately. There are four battery type options in this mode:

**DEITY AA:** DEITY lithium iron battery;

**Alkaline:** a traditional alkaline battery;

**Lithium:** 1.5V stabilized lithium battery;

**NiMH:** 1.2V Ni-MH rechargeable battery.

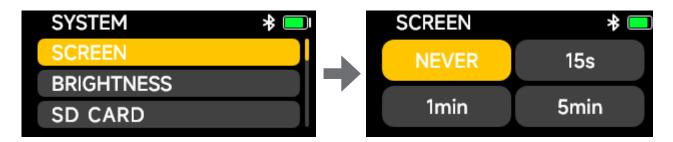


#### 14. SYSTEM



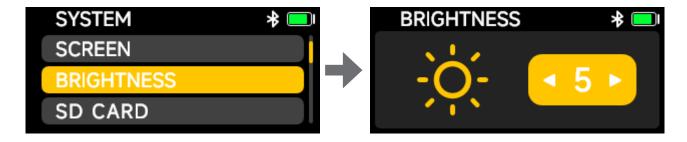
#### **SCREEN**

In this mode, you can choose to set the time for the screen to light continuously when it is not in operation (the system defaults to never). There are four options: Never, 15s, 1min and 5min. After the first use, the system will keep the previous settings.



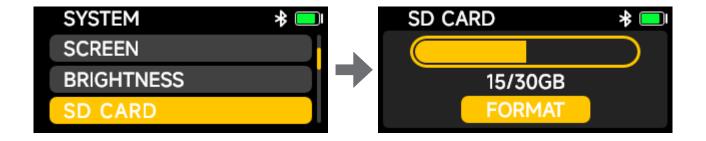
### **Brightness**

In this mode, you can choose to adjust the brightness of the screen, and five brightness gears can be adjusted. By default, the brightness is the brightest "5". After you adjust the settings, the system will keep the previous settings.



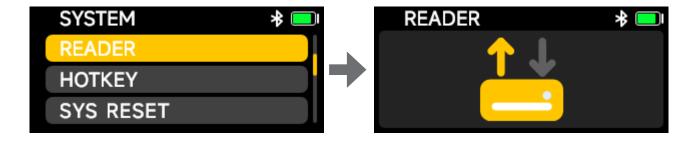
#### SD CARD

In this mode, you can see the storage space occupied by the memory card. Select "FORMAT" and click "YES" to format the memory card. When the "SUCCESS" message appears, the formatting is completed. (The memory card is formatted and then used when it enters the device, which can get higher recording stability.)



#### READER

In this mode, you can connect the computer through the data cable to transfer the recorded files.

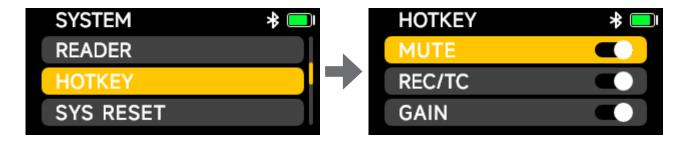


#### HOTKEY

This mode can choose whether to turn on the function of shortcut keys in the main interface.

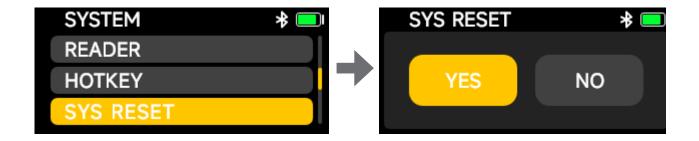
Turn on MUTE mode to turn on mute by short pressing the power key in the main interface. When the REC/TC mode is turned on, you can enter the recording or timecode interface by long pressing the "up/down direction key" for a long time, while when it is turned off, you cannot use the shortcut key function.

Turn on the GAIN mode to quickly adjust the gain level of the microphone.



#### **RESET**

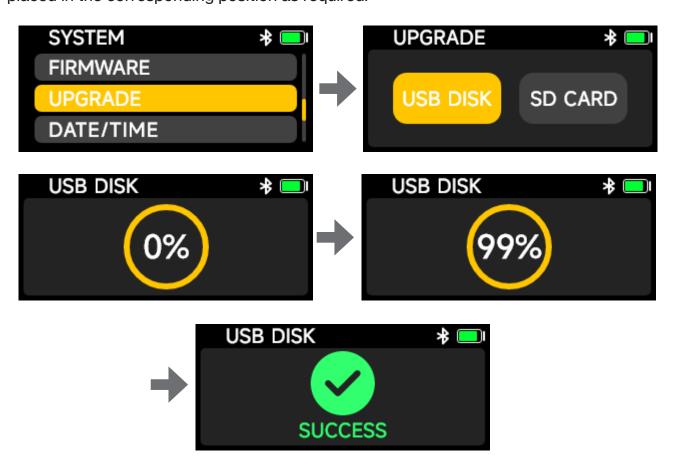
In this mode, you can choose to reset the system (system reset only resets the device system settings, not the frequency band data), click "YES" to reset the system settings, and when the "SUCCESS" message appears, the system settings are reset.



#### **UPGRADE**

This product can be upgraded by USB STICK or SD card, and supports exFat/FAT32 partition format U-Disk. When upgrading, please load the latest firmware in official website and put it in the root directory of U-Disk or SD card. You can use "USB-C to USB-A firmware upgrade adapter" to connect U-Disk to USB Type-C input port. After the frmware update is completed, the firmware version will display the latest version number. You can enter the "FIRMWARE" option in the system settings menu to inquire the firmware version information of the current device.

If you don't insert the SD card or U-Disk into the device, or the device can't read the internal upgrade file, "NO DISK" will be prompted. Please check whether the SD card or U-Disk is correctly inserted into the device, or whether the upgrade file is complete or placed in the corresponding position as required.



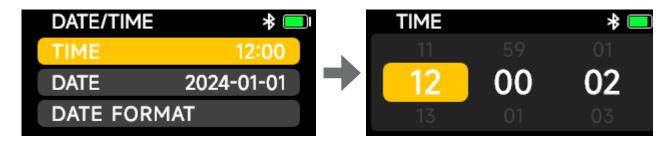
#### DATE/TIME

Enter the mode to set the used date and time.



You can customize the current time information for the device. Click OK to enter the time adjustment.

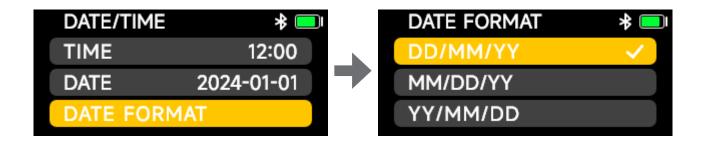
Press the up and down keys to adjust the time number. After the adjustment is completed, click OK to save the set time information, and click Back to return to the time information set last time or initially.



DATE setting can customize the current date information for the device. Click OK to enter the date adjustment. Press the up and down keys to adjust the date number. After the adjustment is completed, click OK to save the set date information, and click Back to return to the date information set last time or initially.

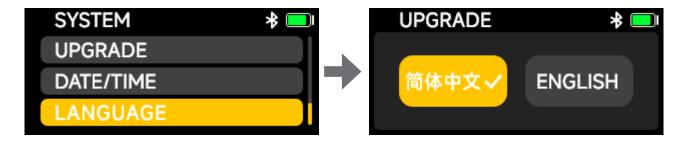


DATE FORMAT can be set, and in the "DATE/TIME" setting, you can see a variety of date formats to choose from. You can choose a common date format: "DD/MM/YY", "MM/DD/YY" or "YY/MM/DD". You can select the corresponding date/time format by pressing the up and down keys and click OK to save the selected settings. The date and time format shall not be saved by clicking Back.



#### **LANGUAGE**

In this mode, you can set the display language for the device. This product supports interface display in Chinese or English. After entering the language settings, use the up and down buttons to select the language. Once adjusted, click "OK" to save the selected language. Clicking "Back" will return to the previous or default language setting.



# **DXTX Specifications And Parameters**

RF Modulation	Proprietary Digital RF Modulation
RF Freq Ranges	According to different regions, the legitimate frequency bands in line with local conditions are allocated
RF Frequency Step	100kHz
RF Bandwidth	200kHz
Minimum Frequency Interval	700kHz
Antenna Connector	50Ω SMA
Power Output	10/25/50/100mW-Software Select (varies by regulation)
Dynamic Range	105dB
Distortion	<0.5%
Frequency Response	20~20kHz
Low Cut	0FF/75Hz/100Hz/150Hz
Mic Power	MIC-5V,MIC-48V,LINE
Mic Connector	XLR 3Pin / XLR 5Pin
Input Gain	0~+42dBu
ADC Bit-Depth	2x 24 bit
ADC Sampling-Rate	48KHz

Timecode Reader/Generator		
Clock Accuracy	0.15 PPM (1 Frame in 72 Hours)	
Timecode Type	LTC(SMPTE)	
Timecode Frame-Rates	23.98, 24, 25, 29.97, 29.97DF, 30	
Internal Recording		
Media	MicroSD Card (Flash Memory)	
File Format	.WaV	
Sample Rate	48kHz	
Record Format	24 / 32bit float	
Power		
Battery Type	AA×2	
Battery Life (48V DEITY AA)	8h+	
Physical		
Dimensions (HxWxD)	119x44.8x42mm	
Weight	Without battery and antenna: 190g Without battery and with antenna: 196g With battery and antenna: 228g	
Operating Temperature	-20°C ~45°C (-4°F~113°F)	

**Note:** The illustrations in this manual are only for reference. Due to the continuous development of the new version of the product, if there is any difference between this product and the user manual, please refer to the product itself.

## **Disclaimer**

Before using this product, please read the product manual to ensure correct use under the complete understanding. After reading, please keep the product manual properly for future reference. In case of not operating this product correctly, it may seriously harm yourself or others, or result in product damage and property loss. When using this product, it shall be deemed that you have understood, recognized and accepted all clauses and contents of this document. The user commits to be responsible for their own behaviors and all consequences thereof. DEITY shall not be liable for any loss due to the user who does not use this product in accordance with the product manual.

Under the laws and regulations, our company holds the final explanation right of this document and all related documents of this product. No prior notice will be given for any update, revision or termination.

Please visit the official DEITY website for the latest product information.