



LARK MAX

User Manual

V1.0.0

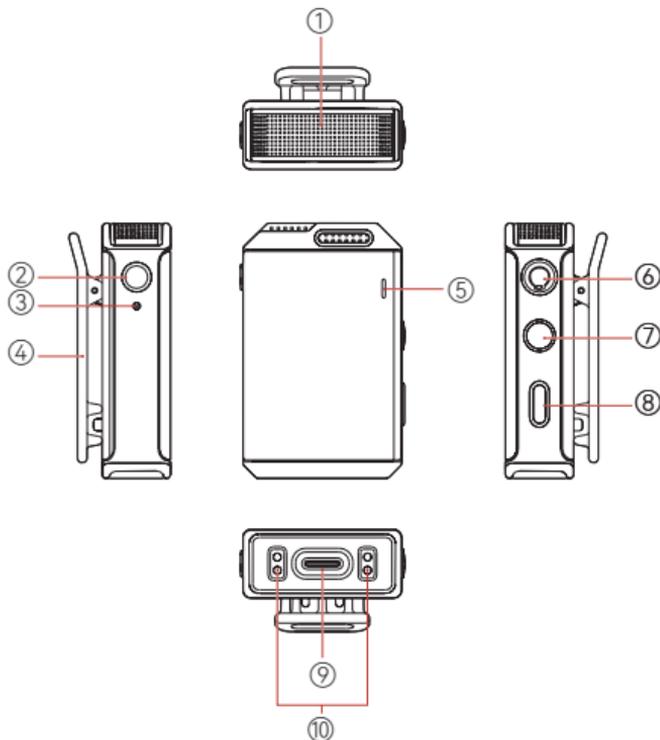
Introduction

Thank you for purchasing Hollyland LARK MAX wireless microphone system.
Please read this User Manual carefully before using the product.

Key Features

- Extremely compact, portable design
- 2 TX + 1 RX and 1 TX + 1 RX modes
- Multiple LARK MAX systems working together in the same environment with frequency hopping technology
- Built-in lithium battery with ultra-long operating time
- Charging case for storage and charging
- Automatic switch to the external microphone
- Professional-level wireless audio specifications
- Environmental Noise Cancellation (ENC) technology on the transmitter to eliminate environmental noise
- 2.4GHz digital wireless transmission to deliver crystal-clear sound
- Transmitter capability of working as a standalone recorder, with 8GB of built-in storage
- AMOLED touchscreen on the receiver to display recording status, wireless information, and more

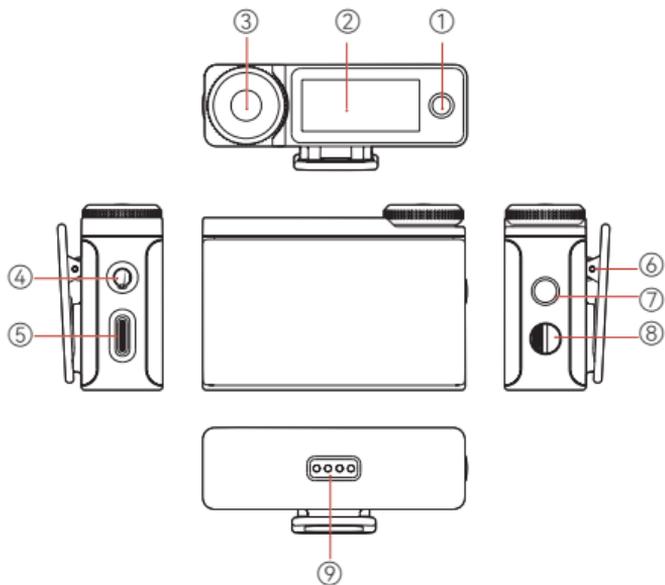
Interface Description



A: Transmitter

- ① Built-in Microphone
- ② REC Button
- ③ REC Indicator
- ④ Back Clip
- ⑤ Status Indicator
- ⑥ 3.5mm Audio Input Interface
- ⑦ Power Button
- ⑧ Pairing/Noise Cancellation Button
- ⑨ USB-C Interface
- ⑩ Contacts

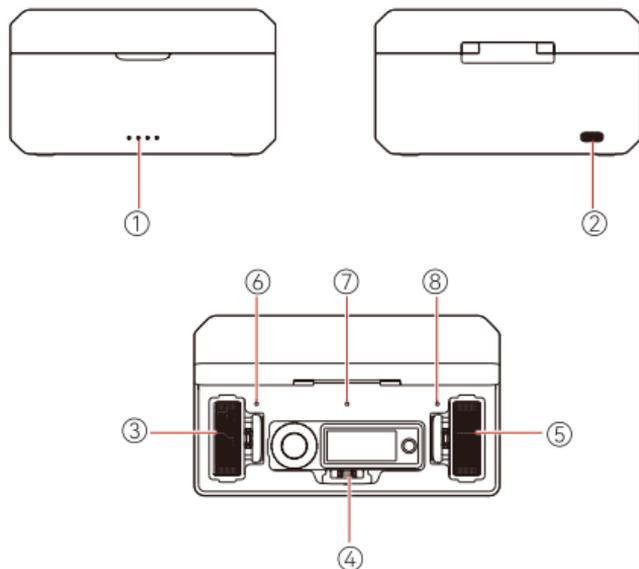
Interface Description



B: Receiver

- ① On-Screen Home Button
- ② AMOLED Touchscreen
- ③ Control Knob
- ④ 3.5mm TRS Headphone Interface
- ⑤ USB-C Interface
- ⑥ Back Clip
- ⑦ Power/Screen Lock Button
- ⑧ 3.5mm TRS Audio Output Interface
- ⑨ Contacts

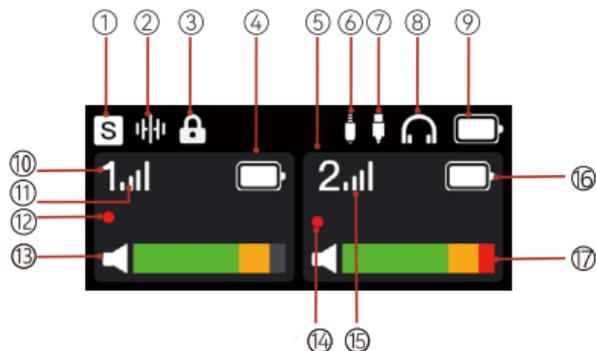
Interface Description



C: Charging Case

- ① Charging Case Battery Level Indicator
- ② USB-C Interface
- ③ Transmitter 1 Charging /Storage Slot
- ④ Receiver Charging/ Storage Slot
- ⑤ Transmitter 2 Charging /Storage Slot
- ⑥ Transmitter 1 Charging Indicator
- ⑦ Receiver Charging Indicator
- ⑧ Transmitter 2 Charging Indicator

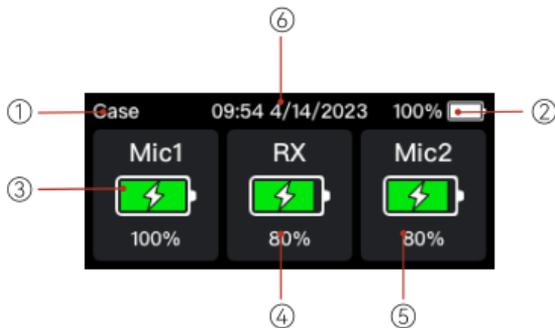
Display Description



A: Receiver Main Interface (Outside the Charging Case)

| | | |
|---------------------------------|---------------------------------|---------------------------------|
| ① Recording Mode | ⑦ USB Connection | ⑬ Transmitter 1 Input Volume |
| ② Noise Cancellation Status | ⑧ Headphone Connection | ⑭ Transmitter 2 Recording |
| ③ Screen Lock Status | ⑨ Receiver Battery Level | ⑮ Transmitter 2 Signal Strength |
| ④ Transmitter 1 Battery Level | ⑩ Transmitter 1 Identifier | ⑯ Transmitter 2 Battery Level |
| ⑤ Transmitter 2 Identifier | ⑪ Transmitter 1 Signal Strength | ⑰ Transmitter 2 Input Volume |
| ⑥ 3.5mm Audio Output Connection | ⑫ Transmitter 1 Recording | |

Display Description

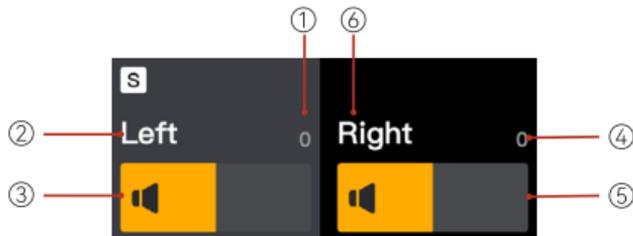


B: Receiver Main Interface (in the Charging Case)

| | | | |
|---|--------------------------------------|---|-----------------------------|
| ① | The Receiver Is in the Charging Case | ④ | Receiver Battery Level |
| ② | Charging Case Battery Level | ⑤ | Transmitter 2 Battery Level |
| ③ | Transmitter 1 Battery Level | ⑥ | Date & Time |

Display Description

C: Receiver Output Volume Interface



| | | | |
|---|---------------------------------------|---|--|
| ① | Output Volume on the Left Channel | ④ | Output Volume on the Right Channel |
| ② | Left Channel in Stereo Mode | ⑤ | Output Volume Bar on the Right Channel |
| ③ | Output Volume Bar on the Left Channel | ⑥ | Right Channel in Stereo Mode |

Settings: To enter the receiver output volume interface from the main interface, simply rotate the control knob. You can adjust the output volume on the left or right channel by rotating the control knob or tapping on the touchscreen.

Display Description



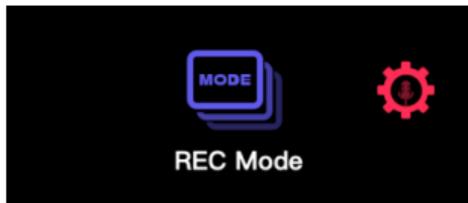
D: Receiver Quick Settings Interface

| | | | |
|---|--|---|------------------|
| ① | Quick Settings Interface for Transmitter 1 | ③ | Mute Switch |
| ② | ENC Switch | ④ | Recording Switch |

Settings: To enter the quick settings interface for transmitter 1 from the main interface, simply tap the on-screen home button. You can switch between the functions on the quick settings interface by rotating the control knob or tapping the function icons. To enter the quick settings interface for transmitter 2, simply rotate the control knob to the right. To return to the main interface, simply tap the on-screen home button again.

Display Description

E: Receiver Menu Interface



Settings: Press the control knob to enter the menu interface from the main interface. Rotate the control knob or tap on the touchscreen to select a menu, and then press the control knob or tap the menu to enter its sub-menu interface. To return to the previous interface, simply tap the on-screen home button.

Indicator Description

Transmitter Status Indicator

| Pattern | Description |
|---|---|
| Blue light flashing quickly | Pairing |
| Blue light flashing slowly | Disconnected from the receiver |
| Steady blue light | Connected to the receiver |
| Steady green light | ENC ON & Connected to the receiver |
| Green light flashing slowly | ENC ON & Disconnected from the receiver |
| Steady pink light | Upgrading |
| Red and blue lights flashing quickly and alternately | Malfunctioning |
| Steady red light | Mute ON |
| Breathing red light flashing | Low battery |
| Breathing orange light, returning to the previous state after 5 seconds | Power ON & Charging |
| Breathing orange light | Power OFF & Charging |
| Steady orange light | Power OFF & Fully charged |

Indicator Description

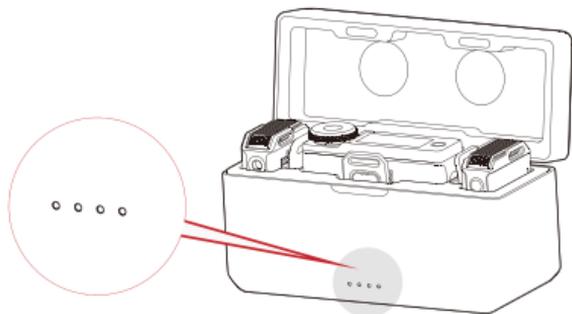
Transmitter REC Indicator

| Pattern | Description |
|------------------|---------------|
| Steady red light | Recording |
| Light OFF | Not recording |

Charging Case Indicator

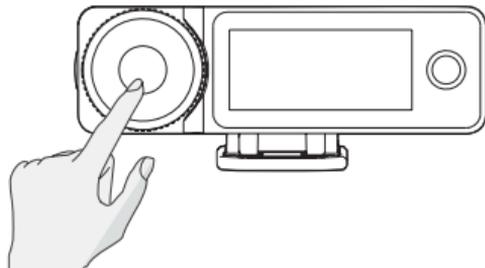
| Pattern | Description |
|--|---------------------------------------|
| One light outside the charging case flashing when the charging case is connected via USB | Charging case in charging mode |
| Four steady lights outside the charging case | Charging case fully charged |
| Breathing light inside the charging case | Transmitter/Receiver in charging mode |
| Steady light inside the charging case | Transmitter/Receiver fully charged |

Indicator Description



| Pattern | Battery Level |
|--------------------------|--|
| One LED ON, flashing red | Low battery. The transmitter and the receiver cannot be charged using the charging case. |
| One LED ON | 25% |
| Two LEDs ON | 50% |
| Three LEDs ON | 75% |
| Four LEDs ON | 100% |

Receiver Menu Description



Press the control knob to enter the menu interface from the main interface. The menu operations are as follows:

1. Select **REC Mode** to set the receiver output mode.
 - a. **Stereo**
 - b. **Mono**
 - c. **Safety Track**
2. Select **Mic Settings** to set the transmitter parameters.
 - a. **Mic Gain**: Press the control knob or tap to adjust the transmitter input gain.
 - b. **Auto Record**: The default value is **OFF**. If **Auto Record** is set to **ON**, the transmitter will automatically start internal recording when it is turned on.

Receiver Menu Description

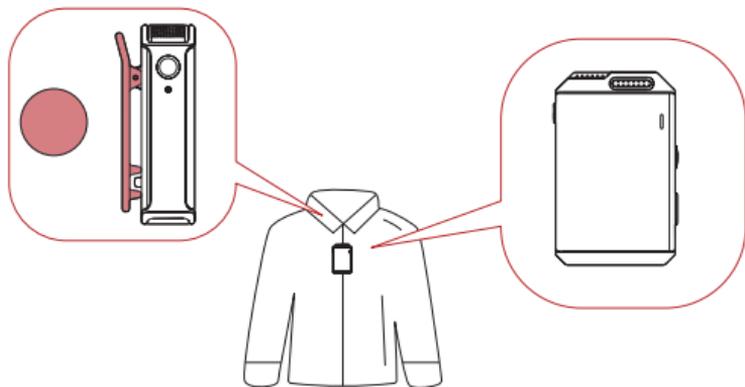
- c. **Auto OFF:** The default value is **15min**, indicating that the transmitter will automatically turn off when it is not paired with the receiver and there is no operation of it within 15 minutes. If **Auto OFF** is set to **Never**, the transmitter will not turn off automatically.
 - d. **LED Brightness:** The default value is **Normal**. It allows you to set the brightness of the transmitter status indicator light. You can set it to **Low** as required.
 - e. **Storage:** Press the control knob or tap to view the remaining recording time of the transmitter and format the transmitter storage (when the storage is full, the earliest recording file will be automatically deleted).
3. Select **Phone Speaker** to set whether audio can be played on the phone speaker without unplugging the receiver from the mobile phone.
- a. **OFF:** Audio play on the phone speaker is disabled.
 - b. **ON:** Audio can be played on the phone speaker without unplugging the receiver from the mobile phone.
4. Select **EQ** to configure audio settings.
- a. **Hi-Fi:** Select this mode to ensure Hi-Fi audio pickup with high restoration.
 - b. **Low Cut:** Select this mode to filter low-frequency sound.
 - c. **Vocal Boost:** Select this mode to increase voice intelligibility.

Receiver Menu Description

5. Select **System Settings** to configure system settings.
 - a. **Pairing:** Press the control knob or tap to set the receiver to pairing mode.
 - b. **Brightness:** Press the control knob or tap to adjust the brightness of the receiver touchscreen.
 - c. **Upgrade Mode:** Press the control knob or tap to activate the device upgrade process.
 - d. **Date:** Press the control knob or tap to set the date for the receiver. The settings will be synchronized to the connected transmitter.
 - e. **Time:** Press the control knob or tap to set the time for the receiver. The settings will be synchronized to the connected transmitter.
 - f. **Language:** Press the control knob or tap to set the device language to English or Chinese.
 - g. **Factory Reset:** Press the control knob or tap to reset the device to the default settings.
 - h. **Version Info:** Press the control knob or tap to check the receiver firmware version, connected transmitter firmware version, and SN.

Operation Instructions

The preferred position for attaching the transmitter is the collar near the speaker's neck area. If the speaker's voice is louder, position the transmitter in the upper chest area. The transmitter can be attached via its back clip or the clip magnet.

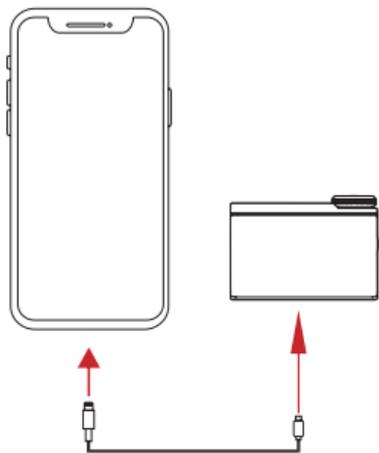


Note: Placement of the transmitter in different positions will result in recorded sound volume fluctuations. Avoid any obstructions of the transmitter during recording. It is recommended to use the furry windshield to prevent audio interference when using the transmitter outdoors.

Operation Instructions

Connecting the Receiver to an iPhone

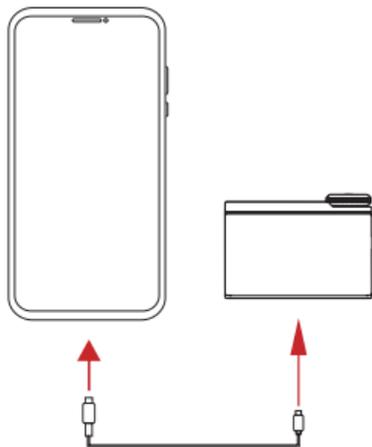
1. Connect the receiver to an iPhone using a USB-C to Lightning cable.
2. A USB connection icon will be displayed on the receiver touchscreen.
3. Open the recorder or camera app on the mobile phone to start recording.



Operation Instructions

Connecting the Receiver to an Android Phone with a USB-C Interface

1. Connect the receiver to an Android phone with a USB-C interface using a USB-C to USB-C cable.
2. A USB connection icon will be displayed on the receiver touchscreen.
3. Open the recorder or camera app on the mobile phone to start recording.

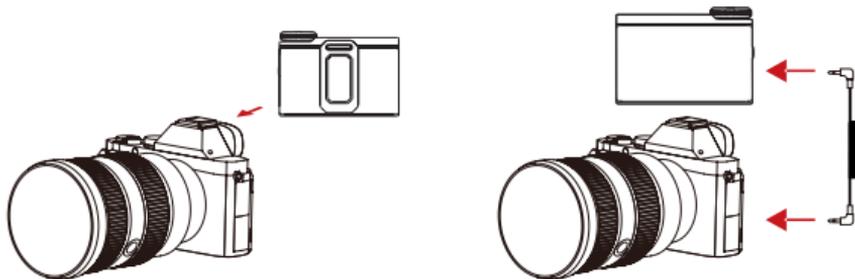


Note: It is recommended to use the original USB-C to Lightning and USB-C to USB-C cables. Otherwise, compatibility issues may occur, which could result in sound distortion or other audio problems.

Operation Instructions

Connecting the Receiver to a Camera

1. Attach the receiver to a camera via the hot shoe or cold shoe using the back clip.
2. Connect the 3.5mm audio output interface on the receiver to the 3.5mm audio input interface on the camera using a 3.5mm TRS to 3.5mm TRS cable.
3. Set the recording volume of the camera to the lowest and the output volume of the receiver to the medium to ensure the best recording level.



Operation Instructions

Pairing

The transmitter and the receiver are paired by default. Follow either of the following two ways to pair the transmitter and the receiver if they are disconnected.

1. Auto pairing: Place the transmitter and the receiver in the charging case, and they will pair automatically. (Figure 1)
2. Manual pairing: Turn on the transmitter and the receiver, and press and hold the pairing button on the transmitter to enter pairing mode. In this case, the transmitter status indicator light flashes quickly. Then, select **System Settings** on the receiver touchscreen and tap **Pairing** to start pairing. If the transmitter status indicator light turns steady blue, pairing is successful. (Figure 2)

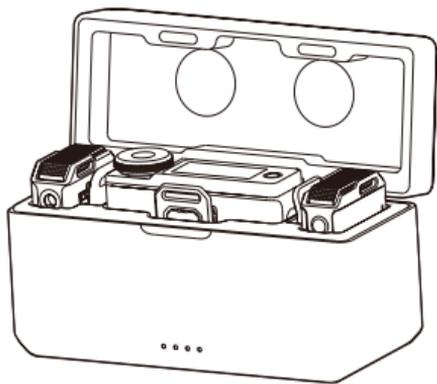


Figure 1

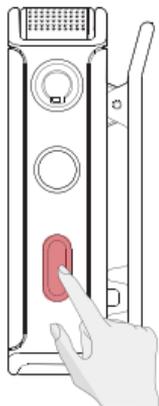
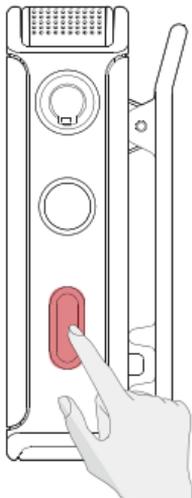


Figure 2

Operation Instructions

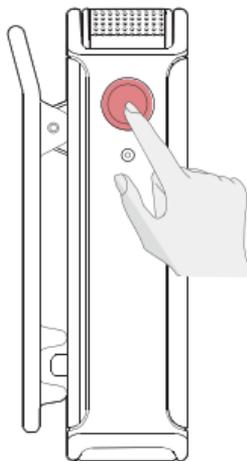
Noise Cancellation

Press the noise cancellation button on the transmitter to enable the noise cancellation function. In this case, the transmitter status indicator light turns green.



Recording

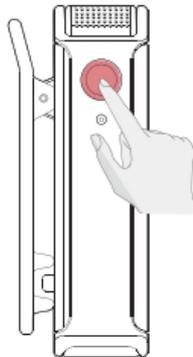
Press the REC button on the transmitter to enable the recording function. In this case, the transmitter REC indicator light turns steady red.



Operation Instructions

Transmitter Recording

1. After turning on the transmitter, press the REC button to start recording. In this case, the transmitter REC indicator light turns steady red. Press the REC button again to stop recording.
2. The recorded audio format of the transmitter is lossless 48 kHz/24-bit mono WAV — an unprocessed RAW file. When the recording lasts for an extended period, the file will be split up automatically every 30 minutes.
3. The transmitter is supported with 8GB of built-in memory for storing the recording files automatically. If the storage is full, newly recorded audio will overwrite the older recorded audio automatically.
4. The recording file can be exported by connecting the transmitter to a computer or mobile phone.
5. The transmitter storage can be formatted via the receiver or other devices such as a computer or mobile phone.



Firmware Update

When new firmware is available, update the firmware by connecting the transmitter, the receiver, and the charging case to a computer separately.

How to Update the Firmware:

Receiver Firmware Update

1. Select **System Settings** > **Upgrade Mode** from the main interface on the receiver touchscreen.
2. Connect the receiver to the computer using the USB-C cable provided and copy the firmware update file to the receiver.
3. Unplug the USB-C cable from the computer after the file is copied. Then, the receiver firmware update will start automatically and the message "Upgrading..." will be displayed on the receiver touchscreen. During the firmware update, operations of the receiver are not allowed until the message "Upgraded successfully. The device will restart soon." is displayed.
4. After the firmware is updated successfully, the receiver will restart automatically.

Firmware Update

Transmitter Firmware Update

1. Turn on the transmitter, connect the transmitter to the computer using the USB-C cable provided, and copy the firmware update file to the transmitter.
2. Unplug the USB-C cable from the computer after the file is copied. Then, the transmitter firmware update will start automatically. During the firmware update, the transmitter status indicator light turns steady pink and will return to the previous state after the firmware update is completed.
3. After the firmware is updated successfully, the transmitter will restart automatically.

Specifications

| | |
|-----------------------|--|
| Name | LARK MAX Transmitter |
| Dimensions | Approx. 48.5mm x 30.3mm x 19.37mm (1.9" x 1.2" x 0.76") |
| Weight | Approx. 33g (1.16oz) |
| Transmission Range | Up to 820ft (250m) for LOS/197ft (60m) for NLOS |
| Modulation Mode | GFSK |
| EIRP | <20dBm |
| Operating Frequency | 2400MHz-2483.5MHz |
| Battery Type | RoHS-compliant LiPo |
| Battery Capacity | 300mAh |
| Battery Voltage | 3.87V |
| Battery Energy | 1.161Wh |
| Charging Temperature | 0° C to 45° C |
| Operating Temperature | -20° C to 45° C |
| Charging Time | <2 hours |
| Operating Time | Approx. 7.5 hours |

Specifications

| | |
|-----------------------|---|
| Recording Time | Approx. 14 hours |
| Recorded Audio Format | 48 kHz/24-bit WAV |
| Mic Polar Pattern | Omnidirectional |
| Mic Sensitivity | -36dBFS±1dB@1 kHz, 94dB SPL |
| Input Dynamic Range | 98dB (Default)/106dB (Max) |
| Frequency Response | 20 Hz–20 kHz (Low Cut disabled) |
| Signal-to-Noise Ratio | 70dB |
| Sound Pressure Level | 120dB SPL (Default)/128dB SPL (Max) |
| Equivalent Noise | 24dBA |

Note: The transmission range is measured in an unobstructed outdoor environment free of interference.

Specifications

| | |
|------------------------|--|
| Name | LARK MAX Receiver |
| Dimensions | Approx. 58mm x 40.83mm x 23.17mm (2.3" x 1.6" x 0.9") |
| Weight | Approx. 60g (2.1oz) |
| Touchscreen | 1.1" AMOLED |
| Touchscreen Resolution | 126 x 294 pixels |
| Modulation Mode | GFSK |
| EIRP | <20dBm |
| Operating Frequency | 2400MHz-2483.5MHz |
| Battery Type | RoHS-compliant LiPo |
| Battery Capacity | 490mAh |
| Battery Voltage | 3.87V |
| Battery Energy | 1.896Wh |
| Charging Temperature | 0° C to 45° C |
| Operating Temperature | -20° C to 45° C |
| Charging Time | <2 hours |
| Operating Time | Approx. 9 hours |

Specifications

| | |
|-----------------------|---|
| Name | LARK MAX Charging Case |
| Dimensions | Approx. 115mm x 46mm x 63mm (4.5" x 1.8" x 2.5") |
| Weight | Approx. 193.5g (6.8oz) |
| Battery Type | RoHS-compliant LiPo |
| Battery Capacity | 2800mAh |
| Battery Voltage | 3.85V |
| Battery Energy | 10.78Wh |
| Charging Time | <2 hours |
| Operating Temperature | -20° C to 45° C |
| Charging Temperature | 0° C to 45° C |
| Max Charging Times | Approx. two times of charging for 2 TX and 1 RX |

Note: The data provided above is based on laboratory testing results.

Disclaimer

1. Please read and follow all the instructions carefully.
2. Please note all the warnings.
3. Do not place the product near or inside heating devices (including but not limited to microwave ovens, induction cookers, electric ovens, electric heaters, pressure cookers, water heaters, and gas stoves) to prevent the battery from overheating and exploding.
4. Use only parts and accessories specified or provided by Hollyland. The use of non-original parts or accessories may cause electric shock, fire, explosion, or other dangers.
5. Please hand over all maintenance work to qualified personnel. No matter what kind of damage the product suffers, such as damage to the power cable or plug, liquid penetration, objects falling into the product, rain, dampness, failure to work normally, or fall, maintenance is required.

Support

If you encounter any problems in using the product or need any help, please contact Hollyland Support Team via the following ways:



Hollyland User Group



HollylandTech



HollylandTech



HollylandTech



support@hollyland-tech.com



www.hollyland.com

Statement

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Note:

Due to product version upgrades or other reasons, this User Manual will be updated from time to time. Unless otherwise agreed, this document is provided as a guide for use only. All representations, information, and recommendations in this document do not constitute warranties of any kind, express, or implied.

FCC Requirement

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. 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.

FCC Radiation Exposure Statement:

The device has been tested and found to comply with FCC SAR limits.

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:

FCC Requirement

- 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.