

9816-B0-BB Mars

X

BASIC INFORMATION

Device Name 9816-B0-BB

Domestic Trade Name MARS X

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Product Department Assessor

Translator Alec February 29th 2020

Assessor Lawrence March 5th, 2020

Revise

Version V1.0

Version No.	Producer/Modifier	Producer/Modifier date	Modify the directory	Main changes (Just mention main points)
v1.0	蒋文辉	2020/1/14	No	No

Note 1: 'Modify the directory' & 'Main changes' should fill "no" for the first time filed the doc;

Note 2: This form is required for each subsequent to archive

CONTENT INFORMATION

DESCRIPTION

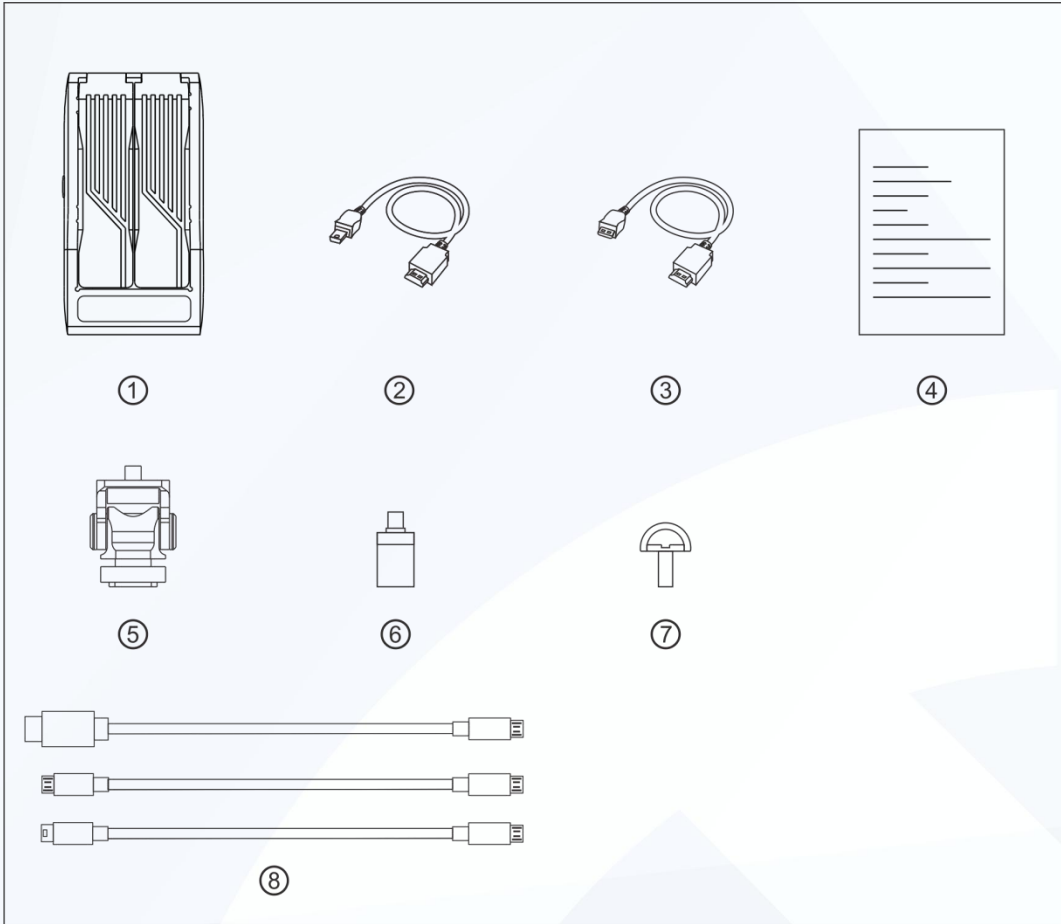
Thank you for purchasing Hollyland MARS X wireless HD video transmission system. The product uses the latest coding, decoding technology, and 5G wireless transmission technology and can achieve ultra-low latency wireless video transmission. MARS X transforms a tablet or a smartphone into the monitor. The device is very portable, easy to carry and operate. It supports three users monitoring the video in real-time. It has a transmission range over 300ft with a clean line of sight (LOS), supports up to 1080P 60Hz image resolution, and in the end achieves full HD HDMI video transmission.

KEY FEATURES

- Up To 3 iOS and Android Devices Monitoring
- CCU Camera Control (Aperture, Shutter, ISO, etc.)
- 300ft Transmission Range (LOS)
- Ultra-Low Latency, <0.06s
- Single HDMI IN With Various Resolution Formats
- 8 Frequency Channels
- Support Type-C Power Charging (5V-12V)
- Built-In 1300mA Lithium Battery
- OLED Display Screen
- Collapsible Antennas
- Micro USB Firmware Upgrade

APPLICATIONS

- Camera Viewfinder
- Indie Filmmaking
- YouTubing
- Commercial Shooting
- Documentary Shooting

PACKING LIST


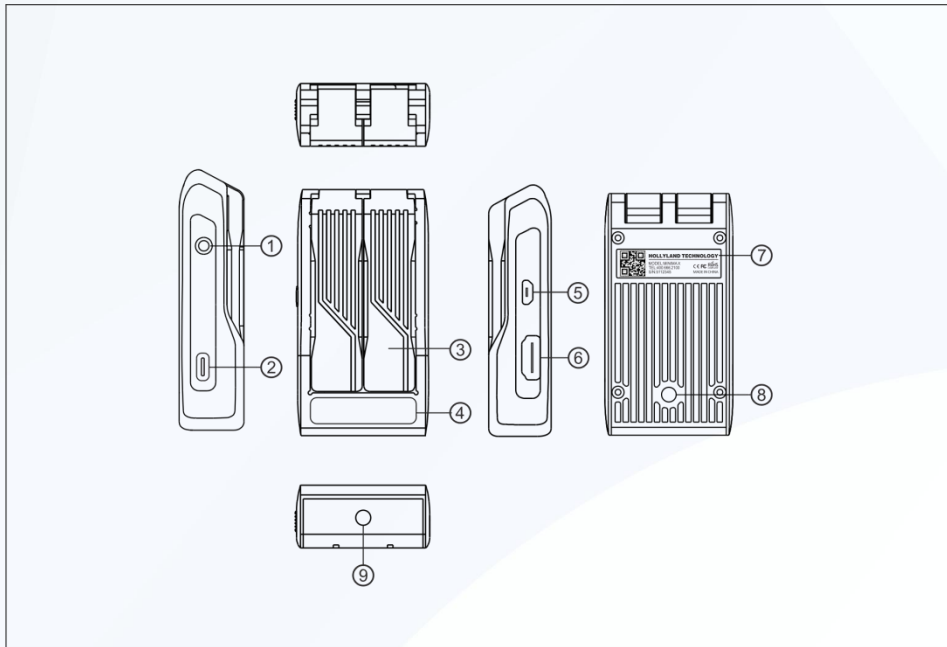
- | | | |
|-------------------------------------|----|----|
| ① Transmitter | x1 | |
| ② Type-D to Type-A HDMI Cable | x1 | |
| ③ Type-C to Type-A HDMI Cable | x1 | |
| ④ User Manual | x1 | |
| ⑤ Cold Shoe to 1/4"-20 Mount | | x1 |
| ⑥ USB Type-A to Micro USB Adapter | | x1 |
| ⑦ C-Type Screw | x1 | |
| ⑧ CCU Cable (Mini USB to Micro USB) | | x1 |
| CCU Cable (Micro USB to Micro USB) | | x1 |
| CCU Cable (USB Type-C to Micro USB) | | x1 |

TYPICAL SETUP



MARS X wireless HD video transmitter connects the interface through the HDMI Cable. It uses 5G Wi-Fi transmission technology to transmit video to your phones and/or tablets. Open the HollyView APP on your mobile device and scan the QR code on MARS X or manually input the system ID after it is connected to the device Wi-Fi by the password , then you can monitor the real-time video from the camera.

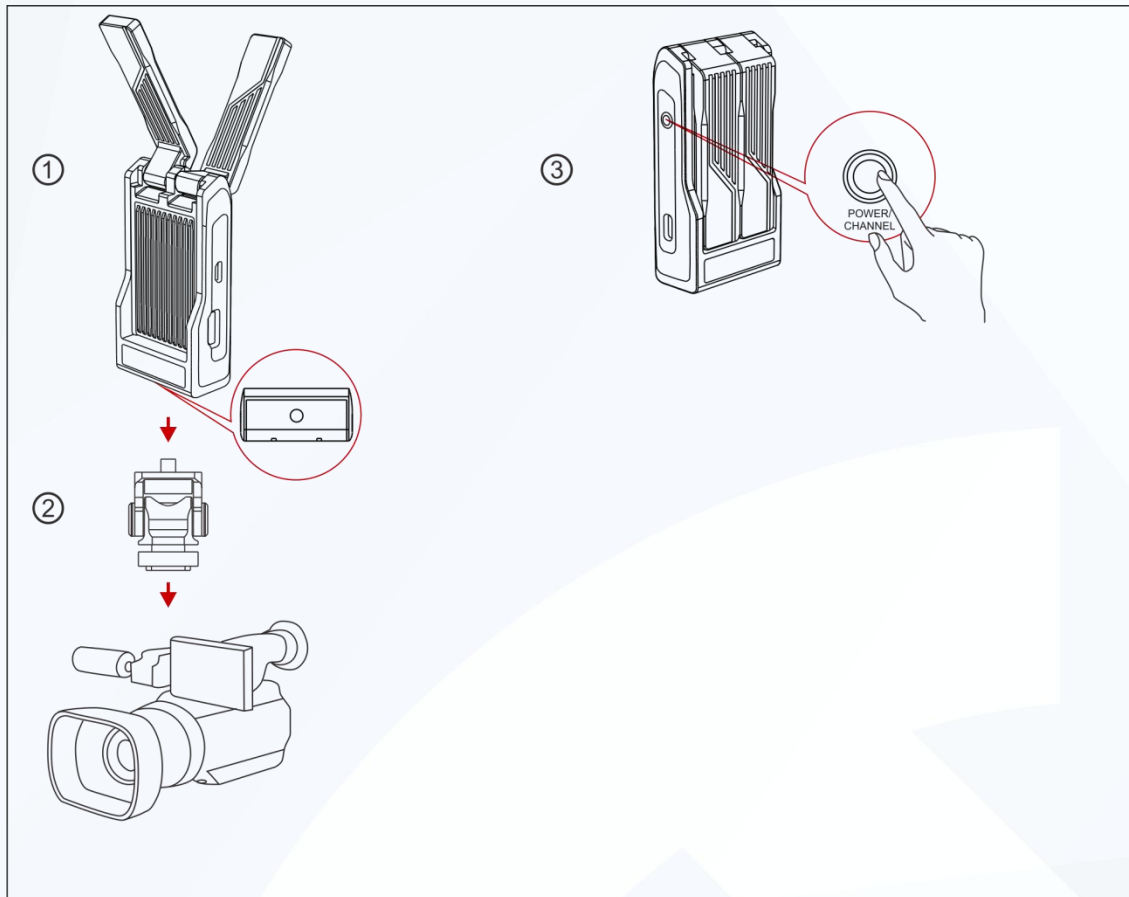
PRODUCT INTERFACES



TRANSMITTER

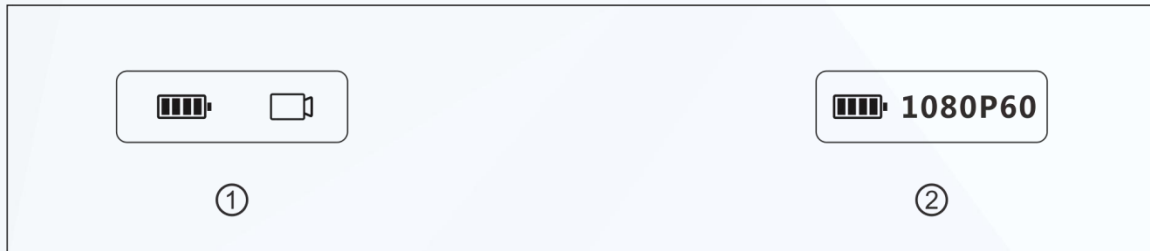
- ① Multi-Functional Button
- ② USB Type-C Charging Interface
- ③ Collapsible Antenna
- ④ OLED Display Screen
- ⑤ Micro USB Interface
- ⑥ HDMI Input
- ⑦ QR Code & Serial Number
- ⑧ 1/4 Screw Hole
- ⑨ 1/4 Screw Hole

DEVICE INSTALLATION



- ① Adjust the antenna angle as demonstrated
- ② Mount the MARS X to the camera
- ③ Long press the multi-functional button for about 3 seconds to turn the system on

OLED DISPLAY INTERFACE



- ① No video input
- ② 1080P60 resolution video source input



- ③ Press the multi-functional button to change the resolution display to the current frequency channel. **Eight frequency channels from CH1~CH8.** In the frequency point interface, press the multi-function button again turn to next frequency point, select the point and stop press button, after 3S will choose frequency point automatically, then screen will back to resolution format interface.
- ④ OLED display resolution format interface, double press multi-function, OLED will display device WIFI password.

DEVICE UPGRADE

1. Copy the upgrade firmware to the root directory of a USB flash.
2. Insert the USB flash into the USB type-A to Mirco USB adapter and connect it to the Micro USB upgrade interface on the transmitter.
3. Long press the multi-functional button to turn the device on. The OLED screen displays the USB icon. The USB icon disappears after 3S, then the device automatically enters the upgrade interface. During the upgrade, the screen will display the upgrade progress.
4. Once the upgrade is complete, it will display with "Upgrade OK", and the device will automatically restart.
5. Caution: the USB flash should be at FAT32 or exFAT format.

IOS & ANDROID APP MONITORING

- Android OS Installation and Use
 1. The application name is "HollyView". It is available on Hollyland's official website and Android APP store.
 2. Use methods,

Method No.1

Scan the QR code on the back of the transmitter then the APP will be automatically connected to the device. Enter the main interface and you would be able to monitor the video shot on the camera.

Method No.2

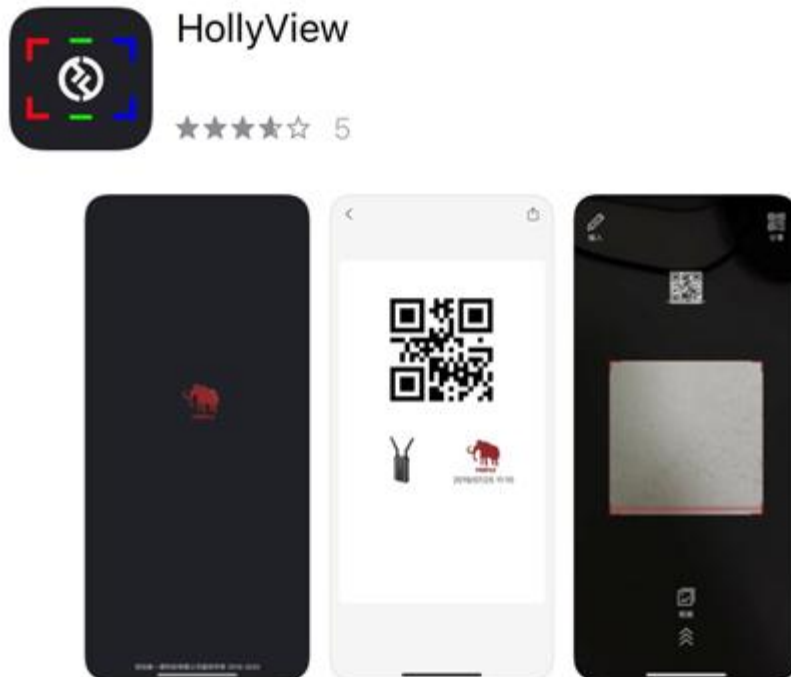
Input the device ID number and manually connect the device. Enter the main interface then you would be able to monitor the video shot on the camera.

Method No.3

Connect your mobile device to the system Wi-Fi directly. The Wi-Fi name is comprised of HLD and device ID. Input the WiFi password to connect your mobile device to the system. After they are connected, you may be able to enter the APP to monitor the camera feed.

● IOS Installation and Use

1. The application name is "HollyView". It is available in the APP store.
2. The use methods are the same as described above for Android systems.



PARAMETERS

	Transmitter
Interface	HDMI Input (Type A Female) USB Type-C Power Interface Micro USB Upgrade CCU Control Interface
Power Consumption	<4W
Work temperature	-10~+60℃
Display size	0.69' '
Net Weight	130g
Support device connection qty	3 Device
Dimension	(L x W x H) : 50*90*18mm
Input Video Format	HDMI: 480p60 576p50 720p50/59.94/60 1080i50/59.94/60 1080p23.98/24/25/29.9/30/50/59.94/60
Frequency	5GHz
Modulation Mode	OFDM
Transmission distance	>100m
Transmission power	Maximum 20dBm
Transmission Latency	60ms
Bandwidth	20MHz
Inside battery capacity	>1 Hour

FAQ

● Connection Issues

1. Check and make sure that the power supply functions well on the transmitter. If the display is off, long-press the multi-functional button for 3 seconds to turn the device on.
2. Check if the battery is too low. Charge the system if that is the case.
3. Try to change to another channel and to connect the devices again for there might be interference on the current channel.
4. When powering the device by the Type-C interface, make sure the power is above 4W, otherwise, the system won't be able to operate normally.

● Display Issues

1. Check if the video source is connected to the HDMI IN interface correctly.
2. Check if the MARS X OLED displays the video format. If not, check if the HDMI cable connected to the transmitter is correctly connected with the camera and if the camera has a video output.
3. Check if the format of the camera output interface is HDMI.
4. Check if the format of the camera output is HDMI.

● Image Low-Quality Issues

1. Check if the HDMI IN cable is correctly connected.
2. Make sure the MARS X is installed at least 1.5m above the ground.
3. Check if the antenna is damaged.

● APP Connection Issues

1. Check the number of connected APP devices. The system can connect up to 3 APP monitoring devices;
2. If the video monitoring is interrupted, check the WLAN setting on your mobile device if the device ID is still connected. Some devices will choose the Wi-Fi with a stronger signal which causes the interruption.
3. If the mobile device is not able to connect with the APP, check the mobile device setting to see if the system ID shows up in the setting. If it did not show up, restart the system.

FCC Requirement

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.

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.