2.4GHZ Digital Wireless Reversing Camera Kit

I. Safety precautions for the product
The receiving host is installed on the console of the car securely. Do not impact the LCD screen of the receiving host. The transmitting host is installed in the rear of the car or in the trunk and shall be fixed in an appropriate location, and the CMOS camera shall be kept clean so as to provide reliable information to the driver.

II. List of components of the product (Only basic packaging is contained)

<table>
<thead>
<tr>
<th>No.</th>
<th>Name of component</th>
<th>Picture of component</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Receiving host</td>
<td><img src="image1.png" alt="Picture" /></td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Transmitter host</td>
<td><img src="image2.png" alt="Picture" /></td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Holder of receiving host</td>
<td><img src="image3.png" alt="Picture" /></td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Power cord of receiving host</td>
<td><img src="image4.png" alt="Picture" /></td>
<td>1</td>
</tr>
</tbody>
</table>

III. Operation and signal instructions of the product
1. Operation of receiver:
   2.1 Power supply:
   Power of the receiver is supplied with socket of car-borne cigarette lighter 12V or DC24V DC
   2.2 Indicator description
   After power is on, the blue indicator is on and the receiver enters working state automatically. If there is no signal, LCD of the receiver turns off automatically, and blue LED indicator flashes; when there is any signal, the image is displayed, and the LED is on.
   2.3 Description of receiver buttons
   The buttons include Menu/Return, Up/Channel Selection, Power/Confirm, Down, and Guideline, as shown in the figure below:
2.4 OSD operation

2.4.1 Pairing

After work for the first time or pairing is cleared, the camera screen can only be displayed after pairing. Each channel only pairs with one camera. The camera information will be automatically saved after pairing, and it will work automatically after powering on next time.

Press MENU button to enter main menu, press Up or Down button to select SETUP, and press Confirm key to enter pairing interface.

Select SETUP to enter pairing selection screen:
Press Up or Down button, select Channel 1 or Channel 2 for pairing, press Confirm key to enter pairing state, when

PAIRING appears, power of camera transmitter is on; press and hold Pair button for about 2 seconds, After pairing is successful, there will be OK on the button,

If there is no operation in 30S or pairing fails, it will return to the previous state (paired camera or no pairing)

2.4.2 Master camera selection
Channel 1 and Channel 2 can be defined into master camera freely. After master camera is set, it will be display on the power-on screen.
Master camera selection method:
In SETUP menu, select icon of MASTER

and press Confirm key to enter camera selection.
Press Up key or Down key to select Camera 1 or Camera 2, and press Confirm key till  

appears, which indicates Camera 2 has been defined as master camera.

2.4.3 Clear pairing:
If only one camera is used, but two channels have been paired before, the pairing can be cleared and another channel can be paired for use.

Exit OSD state, press and hold Down key for 5S to clear the paired channel. Be cautious of using this feature, for the paired channels will be cleared and another pairing is required.

2.4.4 Mirror/Rotate
Mirror / Rotate is to mirror or rotate display screen to adapt to installation direction of the camera; each channel allows Mirror/Rotate separately, in main menu, select icon press Confirm key to select the camera to Mirror/Rotate, select CAM1 or CAM2, press Confirm key to enter the Mirror / Rotate state, and when the icon of displays on the screen, press Confirm key to select an appropriate display direction.

2.4.5 Screen display settings
The display screen can be adjusted if the environment is too bright or too dark, and the camera of each channel can be adjusted separately. In main OSD, select icon of PICTURE press Confirm key to enter, and select the camera to adjust,
Press Up or Down key to select CAM1 or CAM2, and press Confirm key to enter brightness, contrast and color selection.

A. Brightness setting, select icon of brightness, press Confirm key to enter, and press Up or Down key to select an appropriate display effect.

B. Contrast setting, select icon of contrast, press Confirm key to enter, and press Up or Down key to select an appropriate display effect.

C. Color settings, select icon of color, press Confirm key to enter, press Up or Down key to select an appropriate display effect.

2.4.6 VERSION software version query
In main OSD, select icon of , press Confirm key to enter and view software version information of the receiver and transmitter.

2.4.7 Screen instructions
a. The blue letter "C1" or "C2" on top of the screen indicates the currently displayed screen is CAM1 or CAM2.

b.  

c.  

d. The following icon flashing in the screen indicates that the current signal is too weak or 2.4G signal is disconnected.

2. Camera transmitter operation:

3.1 The camera transmitter is installed in the rear side of the car; when it is used for backing, please connect to power supply of taillights; if it is installed in the car for door monitoring, it can be connected to power supply of interior lights, or other 8V-30V DC power supply systems. When it is connected to power cord in parallel, be cautious that red wire is +, and black wire is -. Prevent from short circuit and take insulation measures, for electrical short circuit may result in fire or other serious consequences. Camera transmitter features anti-reversing connection, and the device won’t be damaged in the event of reverse connection.

3.2 When it is used for the first time, be sure to pair with the receiver. Select CAM1 or CAM2 channel for the receiver, press Confirm key to enter pairing mode, and then press PAIR key within 30S, wait for pairing to be completed, ensure that wireless signal isn’t interfered with in the pairing process, and icon of PAIROK will be displayed on the receiver after pairing is successful.

If the pairing isn’t completed in time, it will return to the previous state. For an installed device, the pairing requires two persons for operation.

3.3 One camera transmitter can only be paired with one channel. The receiver has two channels, which can be paired with one camera transmitter separately or with two camera transmitters simultaneously to form dual channel and meet different monitoring requirements.

3.4 The paired camera transmitter can trigger the receiver to work automatically after power is on, display the screen, and delay of the screen is less than 1 second.

3.5 The camera transmitter has function of infrared night view. If it is too dark at night, the infrared LED is automatically turned on to supplement light.

Caution: The LED light will emit faint red light when it is turned on.

V. Installation:

1. The holder is mounted on the receiving host, as shown below:
2. The receiver and holder assembly are installed on the car console or windshield, as shown below:

3. Connect one end of power cord of the receiver to the host and plug the other end directly into the socket of cigarette lighter car socket, as shown below:
4. The transmitter can be mounted on rear of the car for car backing monitoring, or in the car where it can be fixed securely.

VI. Specifications

A. Receiver:
1. Working voltage: DC8-30V
2. Working current: ≤180mA
3. Standby current: ≤5mA
4. Wireless communication distance: ≥100M (open area outdoors)
5. Working frequency: 2.4G
6. Size of LCD display: 4.3’
7. Effective pixels of LCD: 480*272
8. Sensitivity of receiver: -87±3dBm
9. Working temperature: -10/+50°C

B. Transmitter:
1. Working voltage: DC8-30V
2. Working current: ≤220mA
3. Transmitting distance: ≥100M (open area outdoors)
4. Size of image sensor 1/4 inch Color CMOS VGA
5. Quality of image: Max.25frame/sec @ QVGA (frame rate adjusts dynamically according to the image)
6. Specification of camera: Focal length f1.7mm, aperture F2.0, IR filter 850nm
7. IR emission wavelength: 850nm
8. IR view distance: ≥1.5M
9. IR LED lit condition: Brightness ≤2Lux
10. Working temperature: -10/+50°C