

# User manual

## AutoRing A2 driving recorder

### ➤ Features

1. MediaTek's latest MT8665NV, 4-core 1.5GHz LTE automotive chip
2. Multi-sensor monitoring
3. Double wide angle camera
4. ADAS driving assistance

### Device parameters

|  |   |
|--|---|
| Communication chip                     | MT8665NV 4 core 1.5GHz  |
| RAM                                    | EMMC: 16GB    DDR3: 2GB   |
| Extended memory                        | Support for external 2TB hard drives                              |
| Main camera                            | HD night vision<br>Video: 1080P/25 frames    Photo: 2 million     |
| Car camera                             | Black and white<br>Video: 720P/25 frames    Photo: 1.3 million    |
| High precision GPS differential module | Support for external differential GPS module                      |
| RF wireless system                     | FDD LTE ,    TDD LTE ,    BT 4.0 ,    Wi-Fi 2.4G ,    GPS         |
| Operating Voltage                      | Vehicle voltage 24V   |
| Temperature range                      | Operating temperature: -20℃—70℃<br>Storage temperature : -30℃—85℃ |

➤ Appearance



1. Machine installation method:

- (1) Remove the protective paper of 3M adhesive and attach the device to the back of the rear view mirror of the car and the front windshield.:



(2) AHD CAMERA installation direction as shown below (note the direction of the line):



Note: Note that the outgoing direction is on the left side; if you put the outgoing direction on the right side, there will be a mirroring problem.

## ➤ Device function definition

### 1. Working mode :

Equipment and car connection mode: connect the BMW line into the CAN box;

The device has the following working mode:

- (1) Power-on mode: When the vehicle voltage is greater than 22V, the device starts from the shutdown state and enters the

boot process;

- (2) Working mode: After the device is started, the self-test process is normal and the ignition switch is turned on (ACC ON);
- (3) Standby mode: The device is in normal working condition, after the ignition engine is turned off (ACC OFF), the system enters standby mode after 10 seconds;
- (4) Shutdown mode: When the vehicle voltage is less than 22V, the device automatically cuts off the power supply and enters the shutdown state.
- (5) Data communication mode: Insert a valid SIM card and use the data network to upload/download after normal booting.

## 2. Power button :

Press and hold the Power button for 8 seconds to restart the system.

## 3. Volume button

Press and hold the volume + button to adjust the volume to the maximum; press and hold the volume - button to adjust the volume to the minimum;

At the minimum volume, press the volume + button for 5 times and the volume is maximum.;

At the maximum volume, press the Volume - button for 5 times and the volume is at a minimum.

## 4. Tricolor lamp

This product supports three color lights;

The light does not light: the 24V power supply is abnormal, or enters the standby state (ACC OFF) or the device does not start.;

Blinking red: indicates that the device is starting up;

Steady red: The SIM card is not recognized;

Steady yellow: The SIM card has been identified, but the data network is not working properly;

Steady green light: indicates that the SIM card is recognized and the data network can be used normally;

When the mode is installed, the three-color lamp is displayed in blue.

## 5. Extended memory card

The extended memory card is used to store the recording and photographing data of the front and rear cameras, and the storage time is set according to the application scene.

## 6. Speaker and Micphone

The device has a speaker and a Micphone.

## 7. Car camera working mode

The camera infrared fill light in the car is always on.

### **FCC RF Exposure Requirements**

This device complies with FCC RF radiation exposure limits set forth for an uncontrolled environment.

The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter and must be installed to provide a separation distance of at least 20cm from all persons.

### **FCC Regulations**

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.

This device 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.