

AUTO·VOX

User Manual

Digital Wireless Backup Camera Kit

AUTO-VOX User Manual

Thank you for choosing AUTO-VOX digital wireless backup camera kit, this user manual is designed to introduce the installation, functions and features. In order to install and operate the product properly, please read the manual carefully, thank you.

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If you have doubts or problems, please contact us by email: service@auto-vox.com, we will reply as soon as possible.

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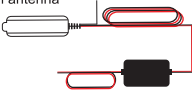




1/ Installation Guide

1.1 Introduction

Thank you for purchasing digital wireless backup camera kit.

For maximum reducing distortion in the reversing and avoid interference, we apply the digital wireless technology to this product. You can enjoy stable and clear video without running the difficult video cable.

1.2 Box Contents

<p>1. LCD-Monitor 5"(12.4cm) with antenna and connector cable</p> 	<p>4. Power box with antenna</p> 
<p>2. Mount holder with suction cup</p> 	<p>5. Camera with connector cable</p> 
<p>3. Car charger with connector cable</p> 	<p>6. Instructions for use</p> 

1.3 Key Features

- Wireless 2.4 GHz radio transmission
- Wide angle of view (110 degree)
- Night vision function
- IP68 waterproof camera
- User-friendly menu
- Simple and quick installation
- Six different sizes of parking line
- Mirror/original image (Optional)

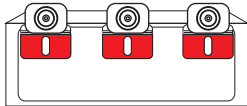
1.4 Installation

1.4.1 Installing the backup camera

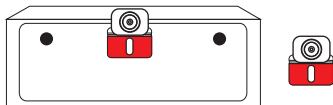
Step1 : Remove license plate.



Step2 : Mark the location where the backup camera will be fixed on (Left, Middle or Right).



Step3: Tear off the 3M VHB tape on the back of the camera bracket, and stick the camera on the marked location.

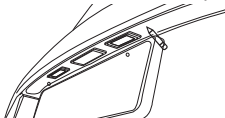


Step4: Tear off the 3M VHB tape on the front of the camera bracket to let the license plate stick on the camera bracket. And then tighten up the screws to fix the license plate.



Step5: Hole for camera cable

Now look for an opening / drill hole near the license plate opening into the interior of the vehicle , to thread the connector cable plug of the camera into the interior of the vehicle. For added visibility and easy installation, remove the interior trim near the license plate.

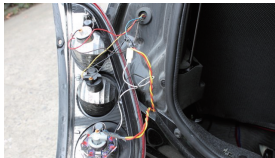


Step6: Connect the camera cable

Now run the camera cable to connect to the power box in the vehicle's interior / cavity. Be sure the cables aren't pinched or knotted. Connect the plug of the camera cable to the 4-Pin socket of the power box.

Step7: Connect the power box wire

●Open the inner plastic panel and remove it from the hatch or tailgate. (The panels are usually attached on the tailgate by clips. This may take a bit longer time to avoid clip damages. Once this panel is removed, the work will be done easily.)



●How to find reverse light(Positive)?

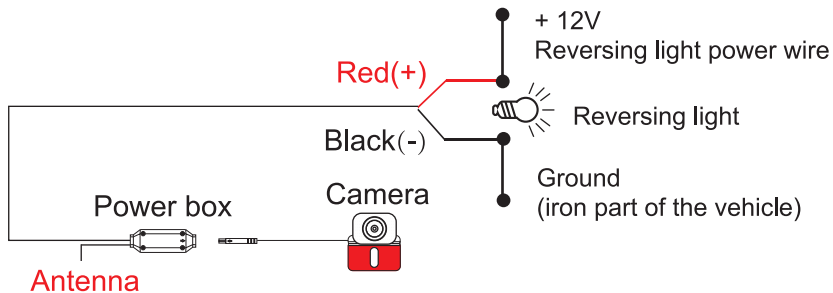
a. Please switch the key to ACC position, then shift your car into R-gear.

b. Prepare a car test light, connect its clip or clamp to a known ground source, then use the pointed end pierces the plastic insulation on a wire.If the bulb lights up, it means the wire may be the potential reversing light's positive power source.

c. Please shift your car into another gear, then use a test light to test all the wires which used to light up the bulb again, if there is one wire that doesn't light up the bulb, it's the reversing light's positive power source.

d. Carefully peel the skin of the red wire, then find the reverse light power wires and connect the red wire of the video cable to the positive of reverse wire.

●Find the power wire(positive) of reversing light and connect it to the red wire of the power box.Then connect the black wire of the power box to the ground(iron part of the vehicle).



Note:

- 1.To make better use of the product , we recommend that the antenna is vertically positioned and not in an airtight environment.
- 2.If the display is clear when turning the ignition to ON, but the screen flickers when the engine is running, then a power adapter filter would be needed to eliminate flickers. Especially for some German cars and Dodge's cars.

Step8: Running the power box cable

Secure the rear camera cable and power box cable with cable ties in the rear carriage. Be sure there are no electrical loads or metal between the monitor and antenna to avoid impairing the transmission. The cables run may not interfere with the vehicle functionality!

Step9: Check the connection of the power box

First engage the hand brake and be sure the vehicle is not shifted into gear.

Vehicles with automatic transmission must be in "P" for parking lock. Turn the ignition to (II) but do not start the engine!

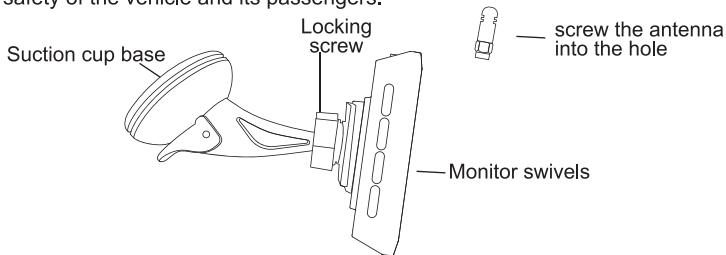
Put the car charger into the vehicle's cigarette lighter to power on the monitor. If the power box correctly connected, a signal will be transmitted to the monitor when putting the car into reverse and the monitor displays the camera's viewing range.

Caution!

Due to differences in technical and design-related vehicle types, these instructions for use do not apply to all vehicle models.

1.4.2 Installing the monitor

- Please connect antenna to the wireless monitor.
- Open the locking screw and adjust the monitor to desired viewing angle. Now tighten the locking screw to secure the monitor.
- Clean the area of the windshield or dashboard where you would like to attach the suction cup base. Now press the suction cup base onto the windshield or dashboard and move the locking lever toward the suction cup base.
- Connect the monitor cable with the car charger cable.
- Now plug the car charger into the vehicle's outlet (12V). Place the monitor cable so as not to impact or jeopardize the safety of the vehicle and its passengers.



Caution!

The location of the monitor may not impair the visibility of the driver! Further, do not impair the functionality and operation of equipment, control units and systems inside the vehicle. Follow applicable laws and safety regulations for vehicles!

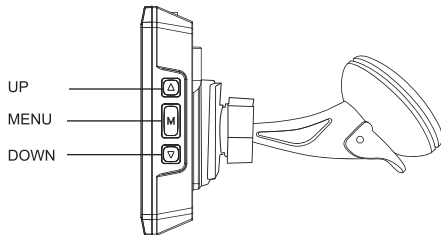
2/ Operating Instructions

2.1 Monitor operation

M : Menu/Return/Confirm.

▲ : Forward/increase button

▼ : Back/decrease button



2.2 Monitor menu settings

- Press the (M) button to access menu mode. The display will show the menu settings for approx 5 seconds.
- Use the buttons(▲)and (▼) to increase, decrease or advance the following menu items:
 - Pair:** pair the monitor with a new backup camera
 - B/C Control:** adjust the monitor brightness and contrast
 - Mirror/Normal:** switch between the mirror image and normal image
 - Guide Line:** can be activated or deactivated
 - Reset:** return to factory settings
- To leave the menu, please wait for about 5 seconds till it disappears.

2.3 Basic operations

2.3.1 Turn on the monitor

Power on the monitor simply by starting your car after plugging the car charger into 12V outlet of the vehicle. Boot logo will appear on the screen and the indicator light up in red after the monitor successfully turned on.

2.3.2 Pair

Note:

- Normally, monitor has been paired with the backup camera that you will find in the same package, before they leave the factory. The purpose of this mode is only for pairing with a new backup camera when the old one need to be replaced due to malfunction or damage.
- Please make sure the backup camera powers on within 30 seconds after turning on the monitor. Because when the backup camera powers on, it will search for the pairing signal which be transmitted from the monitor. If it fails to find the pairing signal in 6 seconds, the camera will not pair with the monitor and you need to pair it again.

Step 1: Press the (M) button and select "Pair", the monitor will enter into "Pairing Mode", the indicator light flashes quickly and a loop icon displays on the screen.

Step 2: Let the backup camera get powered and it will automatically accomplish the pairing with the monitor, which is already in the "Pairing Mode". The real-time footage will display on the screen and the indicator light will stop flashing after accomplishing pairing.

2.3.3 Reversing

After the backup camera is correctly connected to reverse light, it will turn itself on when you put your vehicle into reverse. In this mode the guideline will appear on the display to assist with reversing.

2.3.4 Choose the sizes of guideline

Step1: Put the vehicle into reverse.

Setp2: After the transmitted camera images are displayed on the monitor :

Press (M) button for about 3 seconds you will be able to choose 6 different sizes of guideline.

Press "▲" button and "▼" button to chose a narrow or wide guideline. Press "M" button to confirm your option.

Turn off the monitor

When car is not in reversing, the monitor will be on standby (LED turns red) and nothing shows on the display. The monitor will automatically turn off when car is off.

3/ Maintenance and Care

3.1 Cleaning, maintenance and storage

3.1.1 Caution! Power off the monitor and unplug the car charge before cleaning the monitor.

3.1.2 Clean the backup camera kit with a dry cloth. Do not use liquids or harsh cleaners as these may cause discoloration and damage to the surface of the equipment and the backup camera kit may be damaged! Do not allow liquids to enter the equipment! Never immerse the equipment in liquids! Only operate the backup camera system when dry.

3.1.3 Always keep / store the backup camera kit in a dry environment! Moisture may damage the electronics of the backup camera kit!

3.1.4 Do not store the backup camera kit under extreme temperature fluctuations! Condensation generated under these conditions could damage the electronics!

3.1.5 If the camera joint loosens over time you may readjust it.

4/ Technical Specifications

Device designation	Backup camera kit
Operating temperature	-20°C to +65°C
Storage temperature	-30°C to +80°C
Transmission range	max. 100 meters in open range

Monitor:

Diagonal screen size	5.0"/12.4 cm
Resolution	480 x 272 pixel
Dimensions	approx. 120x80x20 mm(l * w *h mm)
Technology	LCD color display
Power supply	12V(volt) direct current

Camera:

Resolution	480 x 272 pixel
View angle	110°
Color sensor	1/3 inch color Cmos Sensor , 5 glass lens
Exposure	automatic
White fader	automatic
Camera tilt	Variable adjustment angle to approx. 30°
Power supply	12V(Volt)direct current
IP Class(Protection type)	IP68, waterproof
Minimum illumination	0.1Lux

5/Troubleshooting

Error / malfunction	Possible causes	Solutions,repair
The vehicle ignition and the monitor are not powered on. The red LED doesn't light up.	The 12 V monitor cable plug is not plugged into the vehicle's cigarette lighter or a 12 V outlet.	Plug the 12 V monitor cable into the cigarette lighter or a 12 V vehicle outlet.
	The fuse for the vehicle's cigarette lighter or the 12 V outlet is burned out and must be replaced.	Replace the defective fuse for the cigarette lighter or the 12 V outlet inside the vehicle's fuse box.
	The monitor is damaged.	Contact the seller to require a new monitor.
The ignition is switched on with R-gear, but the monitor display is blank.	There is no connection between the camera and the monitor. The camera cables may not be correctly connected or are loose.	Check if the camera cable is correctly and securely connected to the reversing light cable.

Error / malfunction	Possible causes	Solutions,repair
The image on the monitor shows interference.	Other wireless appliances (e.g. mobile phone) are interfering with the signal between monitor and camera.	Switch off all other wireless appliances(e.g. mobile phone).
	The wireless connection between monitor and camera is too weak, thus interfering with data transmission.	Position the power box closer to the monitor or adjust the position of the monitor.
	The camera lens may be dirty.	Carefully clean the camera lens.
The monitor image is not displayed clearly.	Bright light is hitting the camera lens.	The image quality will improve once you move out of the area of the interfering light.

6/**Warranty and Service**

You (as the end user) receive a 12-month guarantee from the date of purchase.

Please contact the point of sale or qualified specialists for damage, repairs or other issues with the product during the guarantee period.

The general warranty terms apply to defects in production and materials. Please return defective products to the point of sale.

For speedy processing of your warranty claim you will need:

- Copy of the receipt showing the purchase date.
- Reason for the claim (description of defect).

Customer support can be found at **www.autovoxclub.com**

Alternatively, send an e-mail to a service representative at **service@auto-vox.com**



www.autovoxclub.com
Email: service@auto-vox.com



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