BOYO VTC1743M Vehicle Backup Camera System User Manual

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VTC1743M Vehicle Backup Camera System User Manual

4.3″Rear View Mirror Monitor and IR Camera Combo Kit

Contents

Introduction

Thank you for purchasing a Rear View Camera Kit from BOYO.

BOYO Camera & Monitor Kits are designed to improve safety by providing high-quality images to improve vehicle maneuvering capabilities by displaying blind spots or areas not normally visible to the driver.
Please ensure you read and understand all aspects of this manual before fitting or using your BOYO product.

Box Contents

- Rearview camera
- License Plate Camera
- 4.3″Mirror Monitor
- Wiring Harness
- Fitting Accessories
- User Manual

Key Features

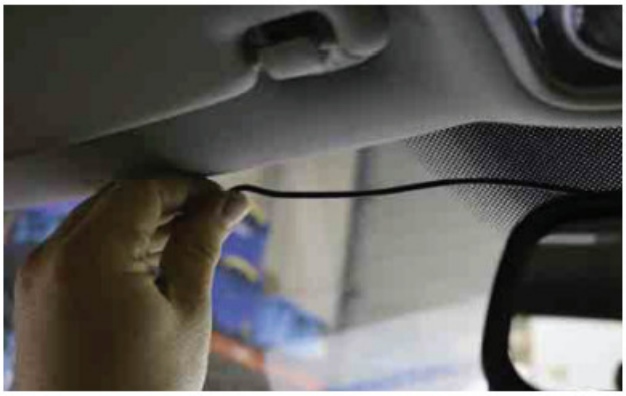
- **170° Camera Viewing Angle**
  Helps to eliminate blind spots when reversing.
- **1P67 Water-Proof Rated Camera Housing**
  Built to withstand all weather conditions
- **Choice of Mounting Options**
  Can be mounted on the license plate or stuck with a universal bracket.
- **Clip-On Mirror Monitor**
  Easily Clips Over the Exiting rear view monitor
- **4.3″ TFT/LCD**
  Display Provides a crystal clear view of the camera image

Installing the Mirror

Step 1

Mount the mirror to the existing rearview mirror in your vehicle using the rubber straps provided. Please ensure that the mirror is mounted tightly and cannot come loose.

Step 2
Route the wiring from the back of the mirror into the vehicle headlining and run it towards the passenger side of the vehicle.



Step 3
Continue running while the harness is down the A-pillar of the vehicle while taking care not to obstruct or impede any vehicle airbags. The wiring harness should always be routed behind the airbag rather than in front of it.

Step 4
Once the harness is routed into the kick panel you will either need to use the cigarette lighter adaptor and route this up to the 12V socket or alternatively, you can use the hardwire adaptor and connect this to a suitable ignition live and earth.

PLEASE NOTE

If your cigarette lighter is powered permanently and does not turn off when the ignition is turned off then you will

need to use the hard wire adaptor and find a suitable 12V wire that is only live when the vehicle ignition is turned on and the engine is running. Should you not want to use the hard wire kit then you will need to remember to unplug the cigarette lighter adaptor each time the vehicle is turned off. Failure to do this could result in your vehicle draining the battery.

Installing the Camera & Bracket

Step 1

Remove the vehicle license plate.
If the existing plate is stuck onto the vehicle you will need to remove the existing sticky tape to allow for proper adhesion when the new tape is used.

Step 1
up the supplied license plate bracket so that it is centered on the vehicle.

 **PLEASE NOTE**
The camera can be fitted either way up on the license plate or the stick above the license plate (like other universal backup cameras)

Step 3
Align the bracket so that 2 of the holes on the bracket line up with the existing holes on the vehicle. If this is not possible then you will need to drill new mounting holes for the bracket with a suitable drill bit.

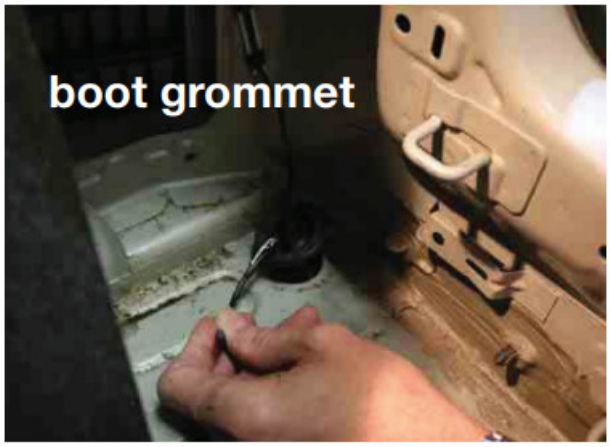
 **CAUTION**
Before drilling ensure that there are no obstructions (wiring, motors, etc) behind the panel.

Step 4
If new mounting holes are required and the mounting area is metal then be sure to protect them with a suitable brush or spray-on rust inhibitor or paint.

Step 5
Once the bracket is aligned and the mounting holes are drilled (if necessary), loosely mount the bracket on the vehicle.
Step 6
PLEASE NOTE: The 2 holes in two sides of the bracket. These are the same length as the License for clicking on the bracket. Choose whichever hole is suitable and ensure there is enough space behind the panel for the cable to enter.
Step 7
Drill a pilot hole for the cable entry with a 2.5mm drill bit and remove the bracket.
Step 8
Enlarge the hole to 10mm and again protect the hole with a suitable brush or spray on rust inhibitor or paint. Install the grommet provided in the kit.

Step 9
Next, run the cable through into the area behind the license plate and then mount the bracket tightly.

Step 10
If mounted to a rear bumper you will need to find a suitable grommet on the car to run the cable up to the reverse light where the connections will be made. This can often be found on the boot floor of the car. If your license plate is tailgate mounted then you will need to route the cable through the existing grommet which carries the current wiring from the tailgate to the boot.



Step 11
In some vehicles, you can access the reverse wire at the front of the vehicle (see wiring diagram on page 9). It is the wire that switches 12v+ when the reverse gear is engaged.

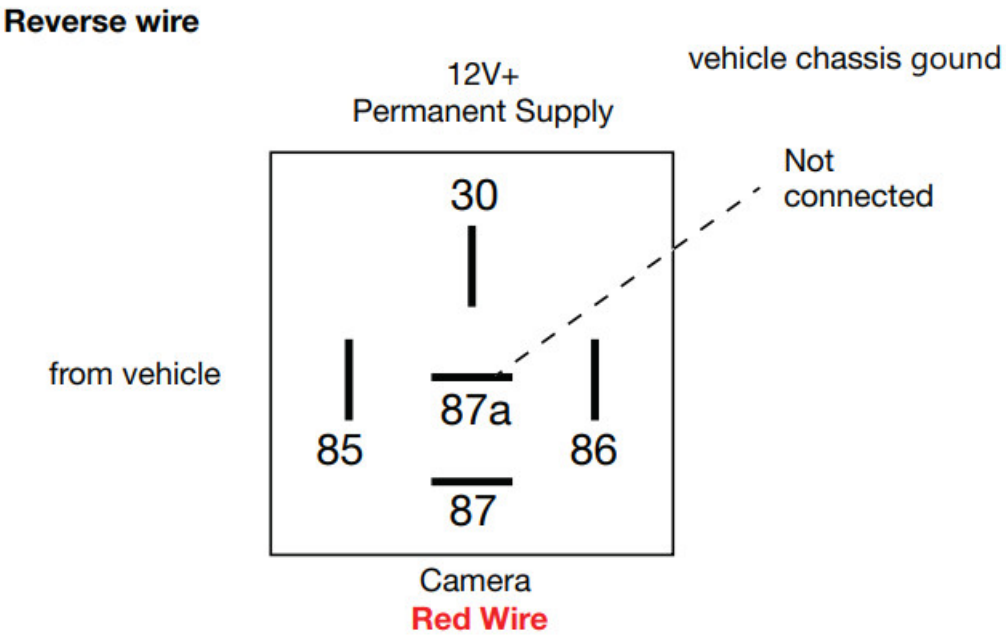
PLEASE NOTE
Please ensure when routing the cabling that it is secured where necessary with the included cable ties.

Once the cable is routed to the rear light you will need to make the following wiring connections for the camera.
Connect the RED WIRE from the Camera to the REVERSE LIGHT This wire will show 12V+ on a multimeter only when the vehicle is in reverse. Connect this wire with the supplied blue butt connector.
Connect the BLACK WIRE from the Camera to the VEHICLE CHASSIS GROUND OR EXISTING GROUND POINT Connect using the supplied ring terminals. Connect the L.. LLOW VIDEO RCA CONNECTOR to the corresponding YELLOW VIDEO RCA CONNECTCr'- on the Mirror Monitor Harness.
This should be run down the passenger side of the vehicle to connect up to the mirror harness previously installed.

Please note:
Many modern vehicles will have a bulb warning system that can cause this camera system to function incorrectly. If this is the case you will need a 12volt changeover relay

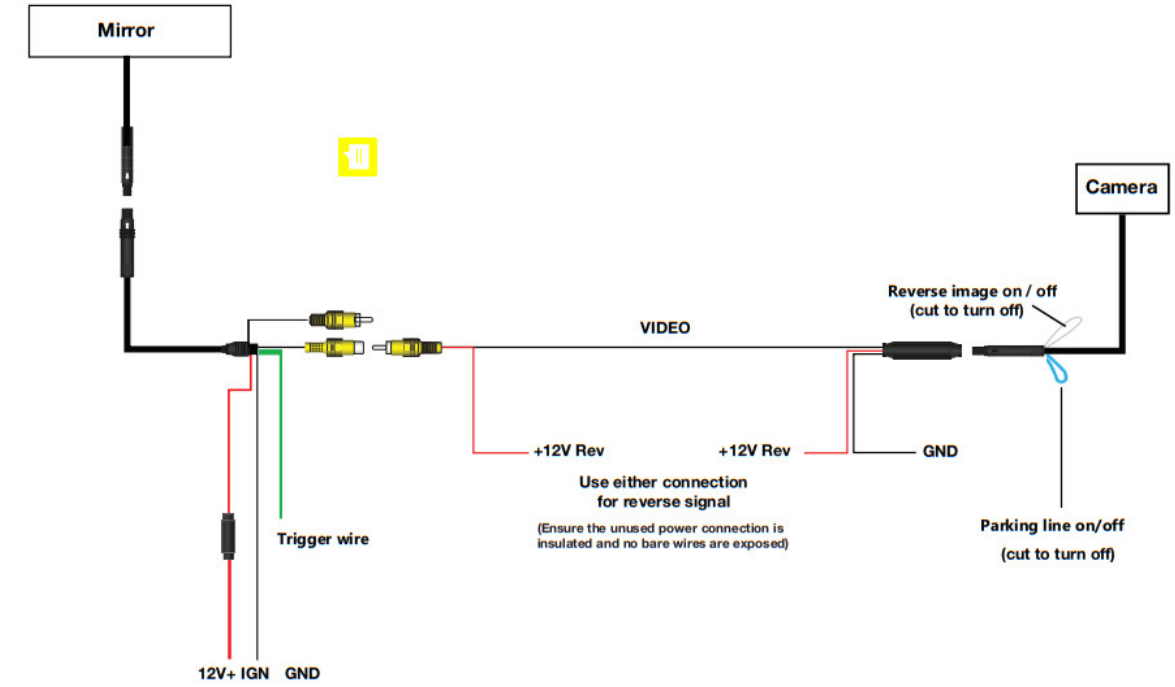
You will need to configure the wiring as per the drawing (opposite) to prevent any false warning or poor operation of this system.

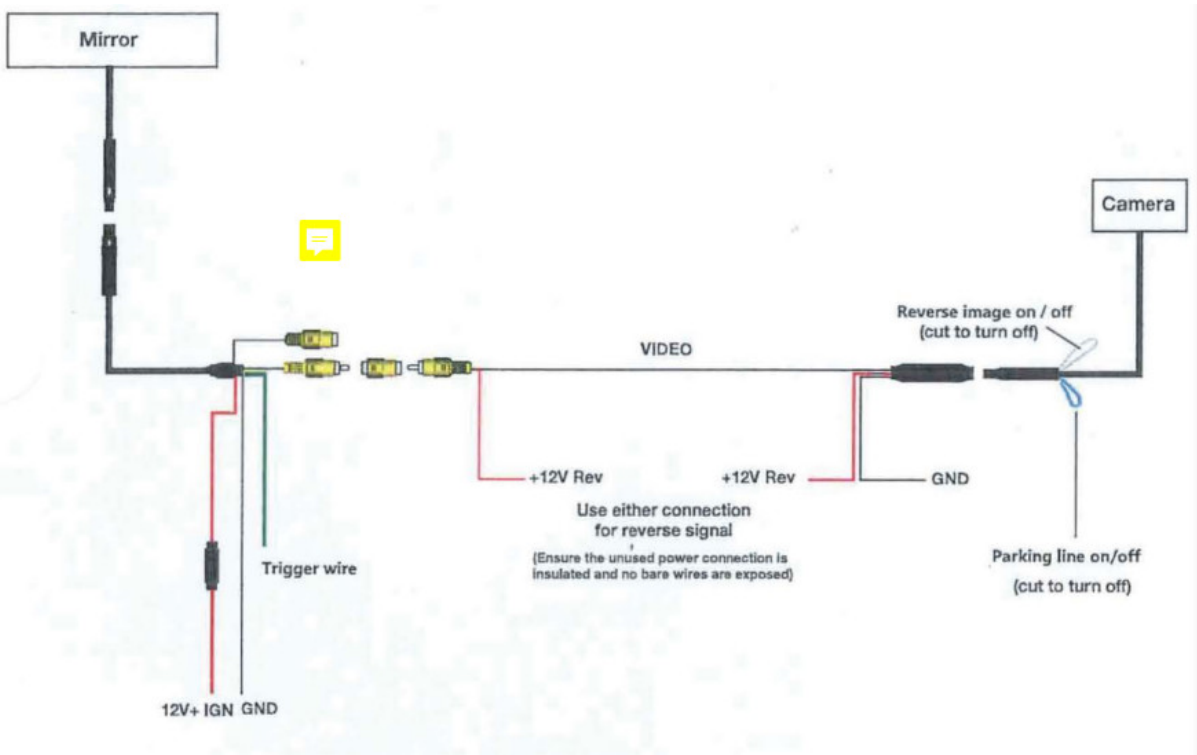
In some vehicles, you will not be able to find a 12V switched reverse wire. In this case, you will need to use a CAN-bus adaptor (available separately) to generate a reverse trigger for the camera.



Step 12
Refit the license plate either using the existing screw holes or with the 3M tape supplied.

Wiring Diagram





Camera & Mirror Monitor User Guide

If installed correctly, the Mirror Monitor will display a GREEN light (next to the button) when it is powered up. When reverse gear is engaged the Mirror Monitor will automatically turn on and an image will be displayed on the screen. When the reverse gear is disengaged or the ignition turned off the monitor will automatically switch off.
The mirror has an Auto-Dimming feature. It will dim the camera image when the ambient light levels are low. When the ambient light increases the display will brighten. If you want to turn the monitor OFF press and hold the button for 3 seconds. Press and hold the button for 3 seconds to turn the monitor back ON.

PLEASE NOTE

The mirror glass will NOT dim when headlights are present in the rearview mirror.

If you have the Camera Kit with the Dynamic Parking Lines feature

they will be displayed on the screen whenever reverse gear is selected.
These parking lines serve as a guide to the trajectory of the vehicle when moving.

The lines will also move dynamically as the vehicle changes direction.
We recommend adjusting the camera so that the red parking line is level with the rear bumper of the vehicle.

The parking lines are shown in 3 colors: **GREEN**, **YELLOW** & **RED.**

We recommend stopping the vehicle when the red parking line touches an obstacle at the rear of the vehicle. If the camera is adjusted correctly, the vehicle will be approx 12-18″ away from the obstruction.

Specifications

Camera

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Sensor	1/3” CMOS
TV system	Ed^C
Parking Lines	Dynamic
Resolution	720 x 480
IP rating	IP67
Definition	700 TV Lines
Viewing Angle	120-170 degrees
Illumination	0.1LUX
Video Output	1.0vp / 75 Ohm-p
White Balance	Automatic
Power Supply	9-16V DC
Working Temperature	-20°C – 70°C

Monitor

Panel	TFT/LCD Digital
Screen Size	4.3”
Resolution	480×272
Aspect Ratio	16:9
Power Supply	DC 12V
Brightness	1000cd/m2
Power Consumption	350mA (working) / 125mA (standby)
TV System	PAL/NTSC (AVUP TXJUDIJOH)

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1-YEAR LIMITED WARRANTY

This limited warranty is given to the end-user or the retail purchaser (referred to this warranty as “Original Purchaser”) that it will be free from defects in material and workmanship for a period of one year from the date of the purchase of the new product (excluding accessory items such as power cords, cradle, memory card, adaptor, and cables). A copy of the original proof of purchase and this warranty card with the RMA number given by Vision Tech America, Inc . is required to receive warranty service. In the unlikely event that the new product should fail due to a defect in material or workmanship, Vision Tech America, Inc. will repair or replace it with a new or refurbished product, where each party will be responsible for one-way shipping for the lower 48 states customers only For International and U.S customers residing in Hawaii, Alaska and Puerto Rico, the customer is responsible for freight charges incurred both ways.

This limited warranty does not cover any physical damage to this product, damage caused by improper installation; improper use; misuse; neglect; repair of cracked, scratched, broken, or modified cosmetics; or parts that have been altered or removed; damages done by another device used with this product resulting from use of non-BOYO'~'- brand parts. This warranty is VOID if you purchased this product as used, floor model sample, or refurbished; if the product has been altered or modified in any way (including but not limited to attempted repair without authoriza on from BOYO•- Vision Tech America, Inc. and/or alteration/removal of the serial number). This limited warranty does not cover the vehicle of any damages or liabilities in which this product is installed or being installed. This product does not guarantee avoidance of vehicle collisions or accidents,

If you are having trouble with the product, please contact our technical support at 888-941 -300G or email: **info@visiontechamerica.com** with your questions or comments, If your product is eligible to receive a warranty, request for warranty service on 1 I ne by visiting **https://visiontechamerica.com/pages/get-warranty**

This warranty is invalid if the factory-applied serial number has been altered or removed from the Product.

IMPORTANT: TO SEND A DEFECTIVE PRODUCT FOR WARRANTY SERVICE, YOU MUST RECEIVE RMA (RETURN MATERIAL AUTHORIZATION) AND INCLUDE ORIGINAL PROOF OF PURCHASE AND THIS WARRANTY CARD WITH THE SHIPMENT.

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Product Registration

Name_____
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Phone_____
Email:_____
Model No._____
Serial No._____
Purchased Date_____
Store Name_____
City/State of Store_____

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Documents / Resources

	**BOYO VTC1743M Vehicle Backup Camera System** [pdf] User Manual VTC1743M, Vehicle Backup Camera System, Backup Camera System, Vehicle Camera System, VTC1743M, Camera System

References

- Backup Camera and Monitor | Rear View Cameras
- Get Warranty