

GATER 

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Model: ARV50T

5" TFT LCD REAR VIEW SYSTEM

Dual Camera+Trailer HIT



PARTS INCLUDED

Thank you for purchasing the GATOR Driver Asist ARV50T Reverse View Camera and Trailer Kit.



NOTE

We suggest that this system be installed by a professional installer or a person with a fair level of mechanical and electrical knowledge

USER NOTICE

- Please pay particular attention when mounting the various components
- If unsure please use a professional tradesperson
- Disconnect the battery before starting the installation
- Although this system aids car reversing, it is mandatory that the rear view mirror should not be removed from the vehicle
- Please check the system thoroughly before driving vehicle.

SPECIFICATIONS:

5 inch Colour TFT-LCD Monitor
 3xVideo inputs
 Display Resolution: 640RGB(H) X 480(V)
 Wide view angle(CR>10):(up/ down): 50/70 (left/right): 70/70
 Brightness (cd/m²): 300
 Contrast ratio: 500:1
 Color system: PAL/NTSC
 Response time less than 2" when reversing
 3 image switch automatically, shift time 0-30"
 Auto mirror image video when reversing
 Operating temperature: -20° to +70°
 Storage temperature: -30° to +80°
 Power consumption: DC11~32V
 External dimensions: LxWxH(110X77X23)mm

CAM1:
 1/3"Colour CCD Bracket mount
 High colour and definition
 Minimum illumination: 0 Lux with IR On (F:1.2)
 Viewing angle : 120 Degrees
 S/N Ratio: More than 48dB
 Power Consumption: 2W
 Water Resistance: IP66

CAM2:
 1/3"Colour CMOS Butterfly Bracket mount
 High colour and definition
 Minimum illumination: 3Lux (F:1.2)
 Viewing angle : 120 Degrees
 S/N Ratio: More than 48dB
 Power Consumption: 0.5W
 Water Resistance: IP66



WARRANTY DETAILS

This product is warranted for 1 year from the date of purchase under the following conditions

1. That it is not damaged by accident
2. That it was not disassembled by any unauthorised repairer
3. That the unit was correctly installed
4. That the owner presents proof of purchase at the time of requesting warranty repairs
5. If any of the above conditions are not met, then the repair may incur a repair charge

This warranty is limited to the product and its accessories only.
 This warranty does not extend to any third-party loss or damages.
 the warranty does not cover labour costs associated with the products installation or removal for warranty service.

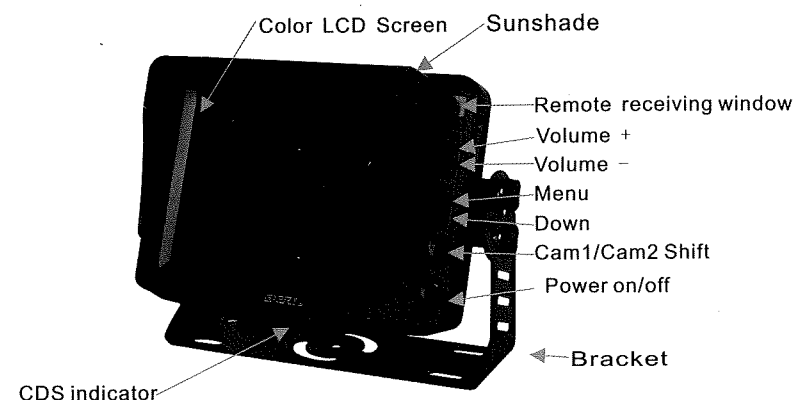
TESTING THE SYSTEM

TESTING THE REVERSE CAMERA SYSTEM

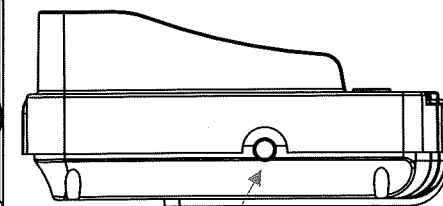
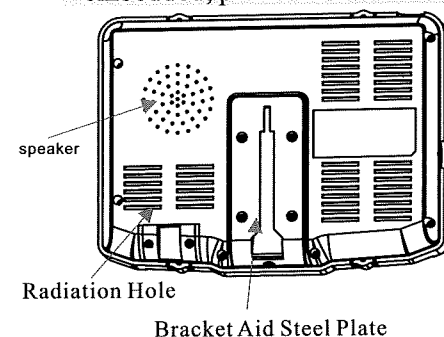
1. Engage the park brake and turn the ignition key to the ON position. DO NOT start the vehicle.
2. Select the reverse gear with the gear shift. The camera should be broadcasting the image of the view behind the vehicle.
3. To test both cameras, take the vehicle out of reverse gear. Press the POWER ON button, then press the CA SET button. The image will cycle from Camera 1 (CAM1) to Camera 2 (CAM2) each time the button is pressed.
4. Using the supplied Remote control you can set the rear view priority camera. This means that you can set Camera 1 or Camera 2 to automatically turn on when the vehicle is in reverse mode.

NOTE: The monitor will always revert to the rear view camera whenever the car is put into reverse gear.

MONITOR DETAILS

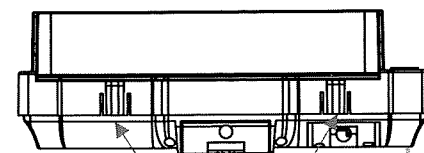


Brightness inductive component is embedded, please do not block the hole.

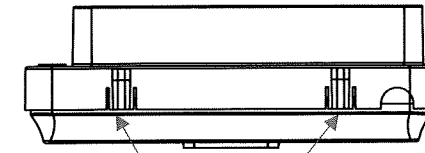


Audio/video signal output

Insert the AV connector into the output jack, the video will be transferred to the other monitor, and at this moment the monitor has no audio input.

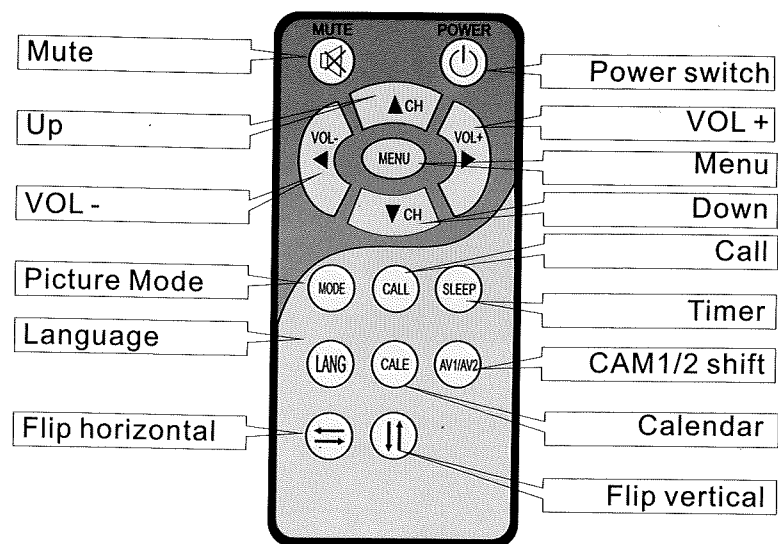


Bottom Clip-buckle



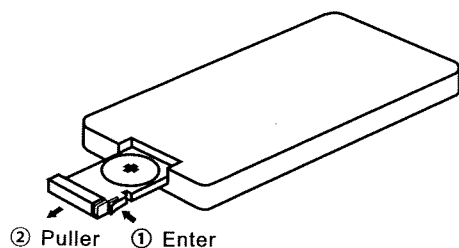
Top Clip-buckle

REMOTE CONTROL DETAILS



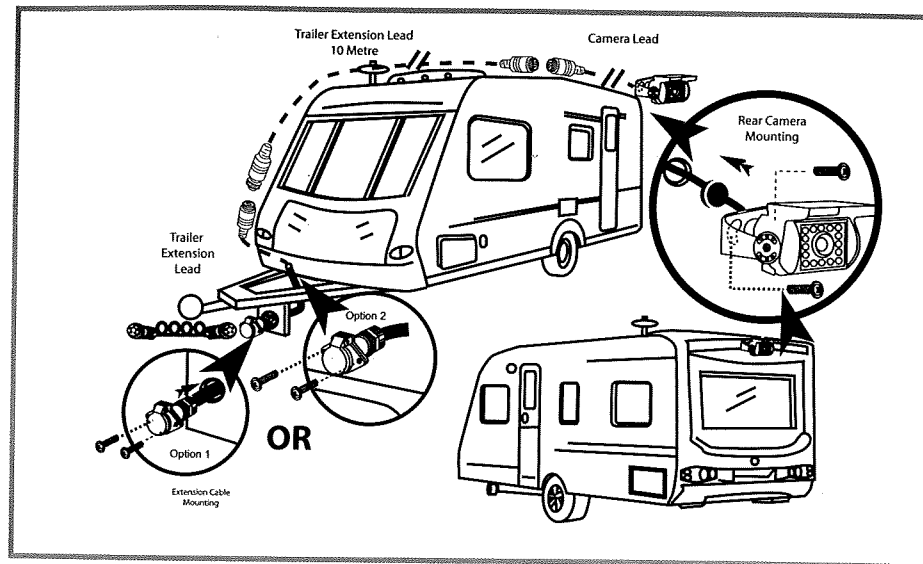
Battery of the Remote Controller

Please change the battery as the following picture showing:



Using the push button (CR2025)

INSTALLATION GUIDE



Step 4

Installing the camera and trailer adapter cable in the trailed vehicle

INSTALLING THE TRAILER ADAPTER

- 1) Install the trailer adapter cable in either of the positions as shown in the diagram
- 2) For option 1 drill a 23mm hole with a hole saw close to the yoke of the towed vehicle. Through this hole pass the 4 pin plug of the trailer extension cable into the trailed vehicle and secure the large 5 pin plug to the front wall of the trailer with two metal self tapping screws as shown.
- 3) For option 2 mount the 5 pin trailer adapter plug and pass the smaller 4 pin plug into the trailer/caravan via a 15mm hole and suitable sized rubber grommet.

INSTALLING THE CAMERA

- 1) At the top of the trailer select a suitable place and mount the rear view camera as shown
2. Drill a 15 mm hole as close as possible behind the camera and pass the camera lead and 4 pin plug into the caravan/trailer via a suitable sized rubber grommet
3. Now connect the 10 metre extension lead between the camera and trailer extension lead. Your trailer is now ready to be hitched to the main driving vehicle.
4. After hitching the trailer use the spiral trailer coupling lead to connect both vehicles.

Step 2. INSTALLING THE TOW VEHICLE CAMERA

The camera is best mounted above the vehicles license plate. In some instances this may not always be possible and you may have to mount the camera in another location as in Fig. 4 (below the license plate) or as shown in position in Fig. 3 (attached to the under side of the bumper bar just above the license plate). When mounting the camera make sure that the camera does not cover any part of the license plate. When selecting a suitable mounting location, make sure you choose a position that does not impede the access / operation of the vehicle's boot or tailgate latch.

1. When mounting the camera above or below the license place, you must first remove the rear license plate from the vehicle by undoing the bolts / screws.
2. If possible, mount the camera slightly above or below where the licence plate is located so that the winged mounting bracket holes are below the edge of the plate and fasten it with two metal self tapping screws. With the licence plate off, check if there are pre-existing holes through which the cables from the camera can be passed into the boot of the vehicle.
3. If there are no pre-existing holes drill a hole of sufficient diameter to allow the cables to be passed into the interior of the vehicle through a rubber grommet and seal the hole with silicone to avoid water leakage. Run the cable as close as possible to the location of the tail light wiring system.

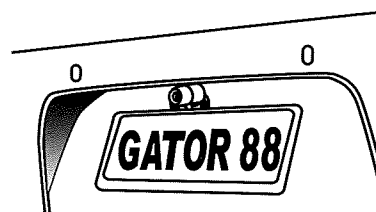
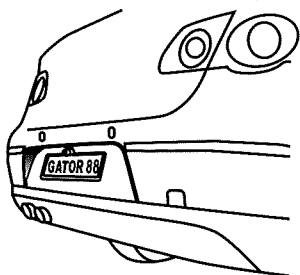


Fig.2



Fig.3



Fig.4

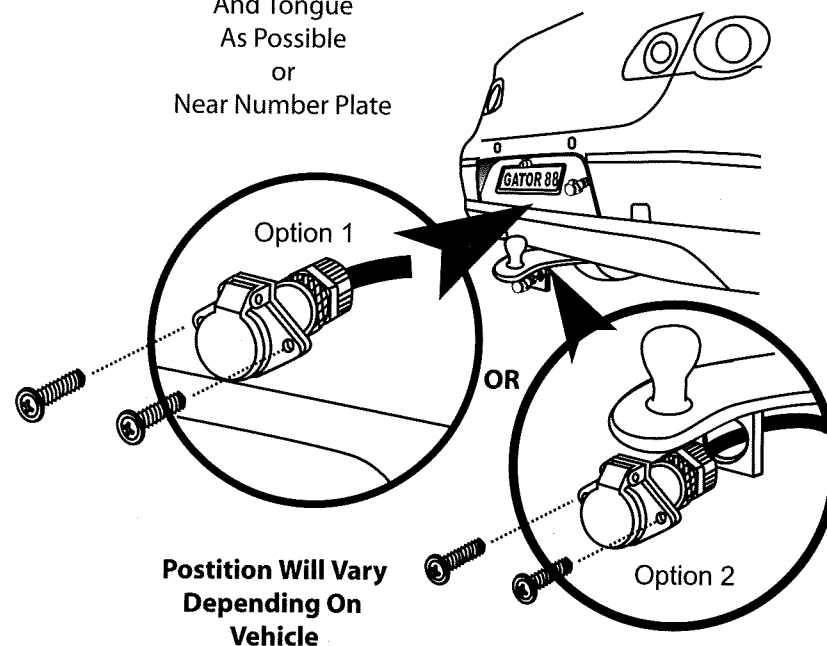
INSTALLATION GUIDE

INSTALLING THE TRAILER EXTENSION CABLE

The trailer extension cable will now have to be installed at the rear of the vehicle to allow for easy connection to the trailed vehicle preferably in the locations shown in the diagram below. The other end of the trailer extension plug needs to pass through into the interior of the vehicle via 15 mm hole and a suitable sized rubber grommet if the trailer adapter is mounted on the tow bar (option 2)

REAR EXTENSION MOUNTING

Mounting Position:
As Close To The Ball
And Tongue
As Possible
or
Near Number Plate



INSTALLATION GUIDE

Step 3.

INSTALLING THE MAIN WIRING HARNESS

Note: Before you connect power to the monitor harness. For electrical safety, make sure that the harness is unplugged from the monitor whilst you connect up the power wiring. After you have connected the power wires you can then re-connect the harness to the Monitor.

- 1) Neatly run the monitor harness (main wiring harness) from the monitor's mounting position to the area under the driver side dash panel, or to the driver's sidekick trim panel area. (this area is usually the most likely place to find the fuse box or a suitable accessory power wire that you will need). The monitor end is the one with a single connector.
- 2) About 1 Meter from the start of the cable is a RED Power wire and a BLACK Earth wire. The RED wire must be connected to a power source that is energised only when the accessory power is on (not constant power). This ensures that the system does not operate when the vehicle is off (which would drain the car's battery). You can find an accessory power wire from the fuse box if it is located near by. Alternatively you can use a test light to find an accessory wire leading to the key barrel and splice in.
- 3) The BLACK wire should be connected to earth. To attach the earth wire, first find a metal panel somewhere near, or on the metal plate behind the kick trim that is clear of electronics and wires behind the panel. Drill a small 1/8th Hole in the panel, attach an "O" ring terminal to the end of the Black wire, then secure the wire to the chassis using a suitable self-tapping screw (for a better earth connection you may wish to scrape away/remove the paint around the hole before attaching the earth).
- 4) Continue running the cable all the way to the rear of the vehicle to where the camera's harness is located. For cab chassis vehicles, you'll need to thread the harness out of the cab area somewhere behind the driver's seat. When doing so, ensure that you use a suitable grommet and seal any holes with sealant to avoid any water leakage. For passenger vehicles the best route is to run the cable down the driver's side of the vehicle tucked under the sides of the interior carpet. To do this, you will need to remove the front and rear door scuff plates and any other trim panels that obstruct access to the edge of the carpet, such as pinch weld rubbers etc. Once the harness is run to the back seat area you may need to remove the back seat, including the backrest, to run the cables from the passenger area to the boot area of the vehicle (removal of back seat is dependent on vehicle type and design of the vehicle).

INSTALLATION GUIDE

These installation instructions do not apply to all vehicles. They are meant only as a general guide due to the large number of variation amongst all vehicle makes and models. For vehicle specific questions, contact your vehicle's manufacturer.

Step 1.

Positioning and Installing the Monitor

When choosing a location to mount the monitor, make sure the monitor is mounted in an area that will not obstruct your vision while driving or interfere with the safe operation of your vehicle. Be sure to mount the system well away from Airbags including the area in which they are likely to inflate in the event of an accident.

Option 1

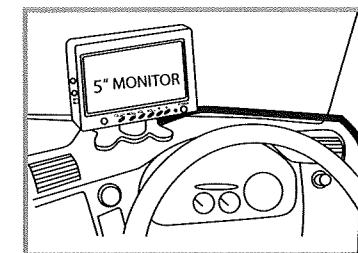
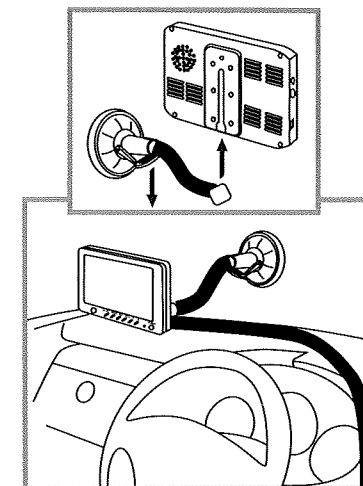
Using the suction mounting bracket

- * Slide the flat end of the suction bracket into the slot behind the monitor as shown in the diagram on the right.
- * Choose a location to the right or left of your windscreen just above your dash where you can view the monitor but at the same time not obscure your forward view of the road.
- * Press the suction pad hard against the windscreen and press down the lever to lock it in place.
- * Adjust the flexible gooseneck so that the monitor is in a good viewing position and that the bottom of the monitor rests on the dash.

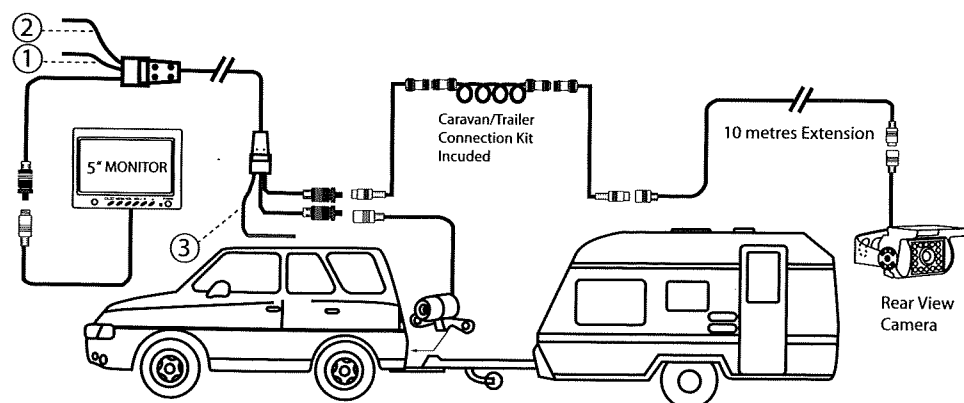
Option 2

In the event that you need additional security, the base of the mount can be fixed to a surface using self-tapping screws. However, before going for this option, first establish whether the surface is suitable for this type of fixing. If the dash is made of foam for instance, it may not be suitable. A dash made of plastic or sheet metal on the other hand is more than likely OK.

The monitor does not necessarily need to be mounted in the location as indicated in the illustration. It can be mounted in a location that best suits the user as long as the safety precautions are observed.



SYSTEM CONNECTION



**FOUR WHEEL DRIVE & CARAVAN INSTALLTION
(INCLUDES ANY KIND OF HITCHED TRAILER)**

1. 12~24V+ ACCESSORY WIRE
2. CHASSIS GROUND
3. TO REVERSE LIGHT+ OF VEHICLE

INSTALLATION GUIDE

5) Once the cable is in the boot area, run it to the location where the camera and the trailer harness is located near the tail light wiring. You will more than likely need to remove boot trims, so that the wires can be neatly concealed behind these panels. However in some cases you can bend these panels at the sides after removing pinch weld rubbers etc., and simply tuck them behind the panels without removing them completely.

6) For longer vehicles the cable can be extended using an optional ProLink extension cable according to the length that is needed (PLC3-3 metres, PLC7-7 metres and PLC12-12 metres). If you choose this option you will also need to extend the GREEN wire the same gauge. When using the extension cable connect it to the CAM2 connector at the end of the main wiring harness.

7) Now that the power is connected to the main wiring harness connect it to the monitor cable.

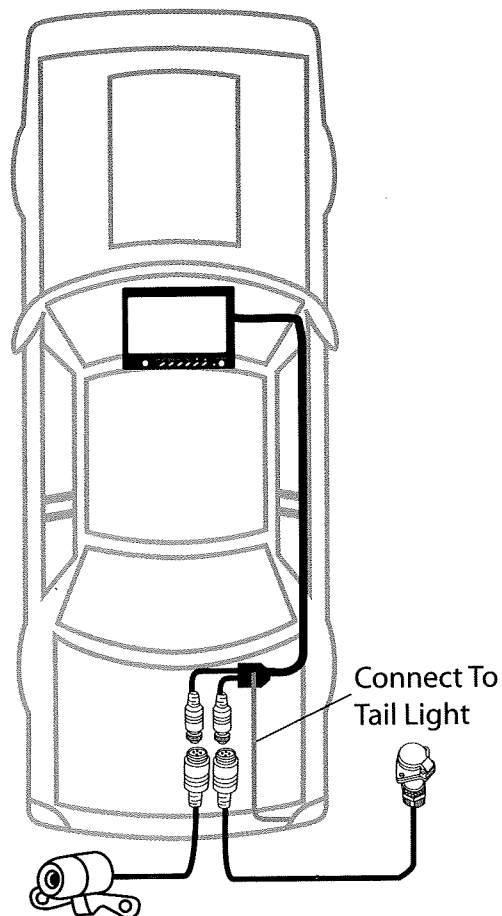
8) At the back of the vehicle, where the reverse light wiring is located, connect the GREEN wire to (+) Back up power (the wire that supplies power to the reversing light globe and is energised only when the car is put into reverse). Use a suitable splicing/crimp connector (Scotch Lock type) or strip back the insulation and solder the connection. Ensure that you insulate the connection with insulation tape or heat shrink tube after you have finished to avoid short circuits.

The GREEN wire is used to tell the system that the vehicle is in reverse so that it can auto switch to the reversing image. However, if the vehicle is not in reverse, the operator can switch this image on manually if desired.

9) Connect the camera cable from the camera to the CAM2 connector at the end of the main wiring harness. In the event you are using the extension cable, this will be the end of the extension cable. Make sure you connect the camera harness to CAM2 (CAM2 is the auto switch channel that engages when the vehicle is put into reverse. CAM1 only operates manually).

NOTE: Make sure that you do not drill holes in panels that have an opposite face that is visible outside of the car eg. guard panels. In fact, whenever drilling holes in the bodywork of a vehicle, always see what's on the other side.

INSTALLATION GUIDE



SYSTEM CONNECTION

The ARV50T is supplied with 2 cameras, extension cables and trailer adapter. This allows the user to have a complete rear reversing system for any hitched vehicles such as boat trailers, caravans, horse floats, handyman trailers etc.

