

7 INCH GPS
NAVIGATION SYSTEM
WITH REVERSING
CAMERA













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HELP AVOID ACCIDENTS & INJURIES

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#### PARTS INCLUDED

Thank you for purchasing this GATOR driver assist GPS unit with rear view camera kit.

Please examine the contents of your package and identify the included accessories.











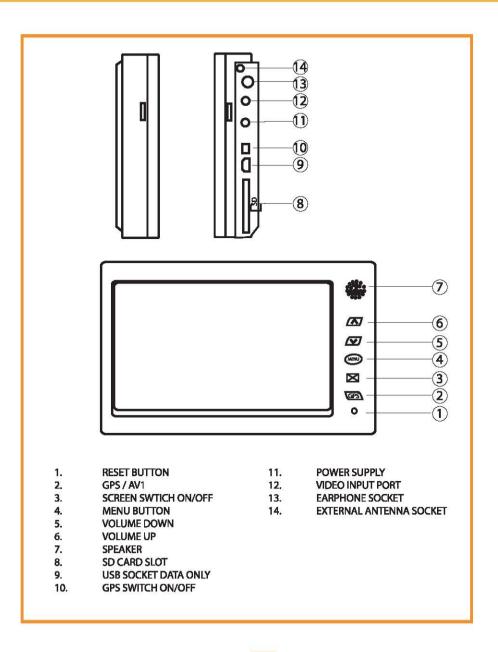


#### NOTE

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

Consult your local motor vehicle office if you are unsure as to the legal usage of this product in your state or territory.

# **GPS MONITOR DETAILS**

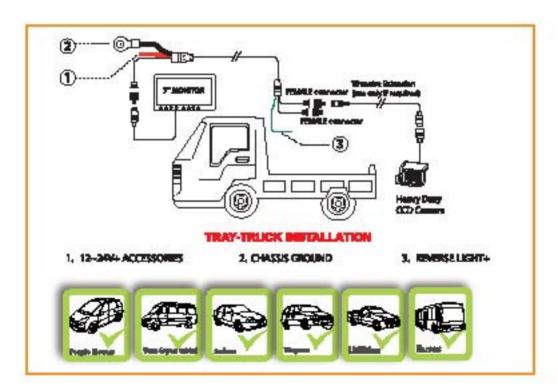


## SYSTEM CONNECTION

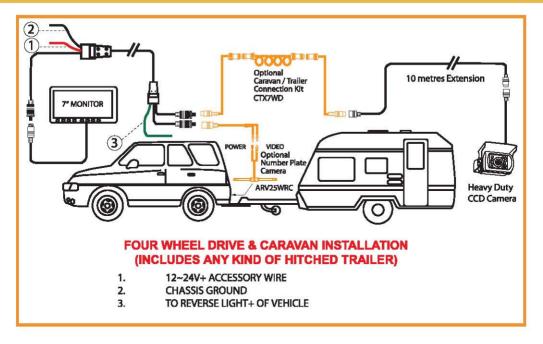
#### SYSTEM CHIMESTAN INCOME

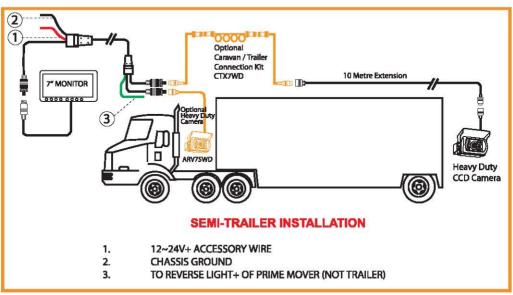
This Professional GPS Navigation - Reversing Camera system uses an expendable camera cable system that allows additional options (if needed) to be added to the system, such as our quick disconnect trailer expander kit (sold separately) Cable length extenders. (10 Meter extension cable included) and an additional (second) camera - (nameplate type and gimble mount are available).

For more details on system expansion, please refer to the diagrams on the following page and contact the store from which you purchased this item for further assistance.



# SYSTEM CONNECTION





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

The GPS monitor is mounted using an adhesive based mounting bracket (refer to diagrams below).

When choosing a location to mount the monitor, and its antenna, make sure the location chosen is 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.

Before adhering the mount to the dash of the vehicle, check to see that the mounting surface you choose is free of dust and or greasy material. You may need to clean the surface prior to fixing the mount in place. You may need to clean the surface a number of times before it is ready for adhesion. In the event that it does not stick, you may need to replace the double sided tape before attempting the adhesion for the second time. You can find suitable tape at most hardware stores.

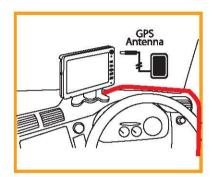
In the event that you need additional security, the base of the mount can be fixed to a surface using self-tapping screws for this option, first establish wether the surface is suitable for this type of fixing. If the dash is made of foam for instance, it may not be suitable. A

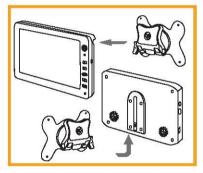
dash made of plastic or sheet metal on the other hand is more than likely OK.

# 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.

Plug the GPS Antenna into the side of the monitor, position the antenna somewhere on the dashboard or windscreen where it has a clear unobstructed view of the sky to ensure it receives a clear satellite signal.

#### **Mounting the Monitor**





#### Step 2. Installing the Camera

When selecting a suitable mounting location, make sure you choose a position that does not impede the access / operation of the vehicle's boot, rear doors/tailgate, tail gate latches and Hydraulic lifts etc..

The included camera uses a gimble mount that allows the camera a large amount of vertical angle adjustment. This allows a great deal of flexibility in the height of the mounting location.

Think about the application that is most important to you before deciding on your camera location. Different viewing positions can serve very different purposes. For eg. A high location with the camera pointed down is useful for Hitching up trailers but does not see very far behind the vehicle. A low position is good for avoiding obstacle's and longer distances behind the vehicle. You may want to temporarily hook the system up and try out a few different options before you finalise the location.

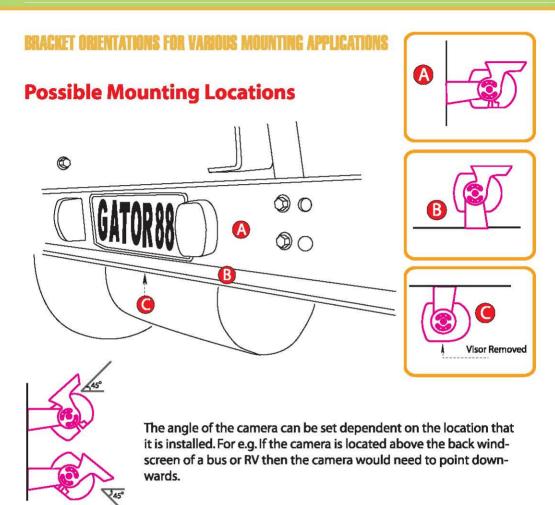
What is less flexible than the height is the horizontal position. Whilst the camera has a very wide viewing angle, your installation location should locate the camera as centred as possible. A central position makes it easier for the driver to interpret what he or she is seeing in relation to the vehicles actual position.

Some Installation such as buses usually mount the camera above the rear wind screen.



Utility vehicles and tray type trucks usually mount the camera below the tail gate.

Most passenger vehicles and four wheel drives have the camera mounted on the rear bumper bar (above or below the number plate if the number plate is centrally mounted).



# For Passenger Type Vehicles

Check if there are pre-existing holes through which the cables from the camera can be passed into the boot of the vehicle. 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 to the location of the tail light wiring system.

#### 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.

- 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. If you are installing into a truck or bus, go directly to step 6 now.
  - 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).

- 5) Once the cable is in the boot area, run it to the location where the camera harness is located. You will more than likely need to remove boot trims, so that the wires are 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 in behind the panels without completely removing them.
- 6) For longer vehicles the video cable can be extended using the supplied 10m extension cable. If you choose to use this option, you'll also need to extend the GREEN wire using a wire of the same size or larger. When using the extension cable, connect it to the AV2 connector at the end of the main wiring harness.
- Now 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 is energised only when the car is put into reverse > The wire that supplies power to the reversing light globe). Use a suitable splicing/crimp connector (Scotch Lock type)or strip back the sheath of the wire and solder the connection. Ensure that you insulate the connection with electrical tape or heat shrink tube after you have finished avoiding 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 AV2 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 AV2 ( AV2 is the auto switch channel that engages when the vehicle is put into reverse. AV1 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.

Important Note: When Plugging and Unplugging the AV/Power feed to the GPS monitor ALWAYS make sure the power switch is in the OFF position first to avoid possible damage to the unit.

## **TESTING THE SYSTEM**

#### **TESTING THE REVERSE CAMERA SYSTEM**

- Engage the park brake and turn the ignition key to the on position. DO NOT start the
  vehicle.
  - Switch the unit on. (you do not need to switch the unit on/off manually each time. If you have connected the unit to accessory power, the unit will switch on/off with your other accessories within the vehicle just like your radio).
- Select reverse gear with the gear shift. The camera should start broadcasting
  the image of the view behind the vehicle. If it does not switch over directly to AV2
  Check to see if the GREEN wire is receiving a positive signal when the car is put into
  reverse.
  - NOTE: If the GPS system was off it may take up to 15 Seconds to start up (this is called cold boot). The reversing camera will start operating after the initial boot up of the system is complete. However, after this, the reversing system activates almost immediately upon placing the vehicle in reverse.
- To access the GPS system take the car out of reverse gear and press the GPS Icon on the touch screen.
  - NOTE: The monitor will always revert to the rear view camera whenever the car is put into reverse gear.
- 4. To test both camera inputs, take the vehicle out of reverse gear. Press the GPS button. The image will cycle from Camera 1 (AV1) to Camera 2 (AV2) to the GPS/ Menu Screen each time you press this button. If you find that your camera is only operating on AV1 it is connected to the wrong AV input at the end of the main harness. It will not operate automatically if connected to this channel.
  - If the camera operates on AV2 but does not switch on automatically when the car is put into reverse, then the GREEN wire is not receiving power when the car is being placed into reverse.

# **SPECIFICATIONS**

#### **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:

Display Size: 7 Inch (AR 16:9)

Mapping Vendor / Version: Q2 08
Navigation Engine / Version: 8

Camera Connection Method/s: Dual Tech

Cameraype: CCD

Viewing Angle Range: 120/60

Mount Type: U Bracket
Power Voltage: 11~30V

Camera IP Rating: IP67

Monitor Resolution: 480 x 234

Operating Temperature Range:  $-20 \sim 60 \text{ Deg C}$ 

Accessories Included: Wiring Harness 7M+10M Camera Extension Cable,

Mounting Bracket.

#### **WARRANTY DETAILS**

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

- 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 product installation or removal for warranty service.

