

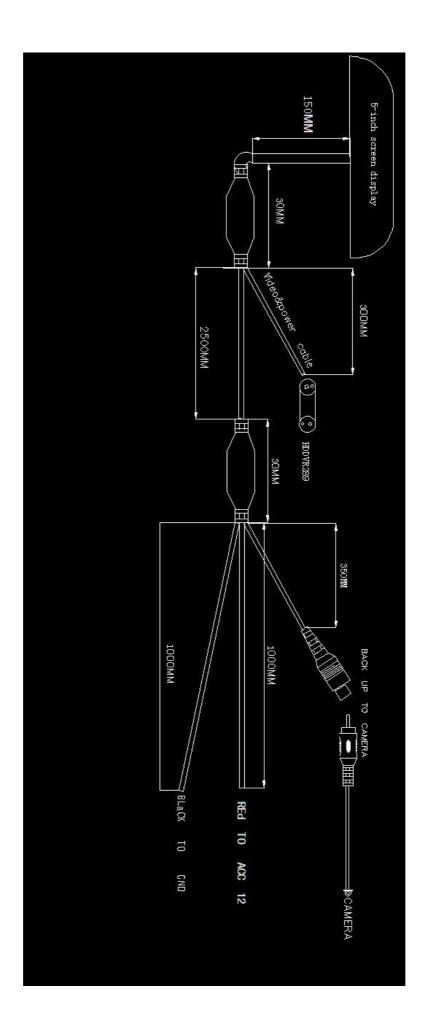
DVR50M Instruction Manual

PLEASE NOTE:

CHARGE THE DVR FOR 4 HOURS BEFORE INSTALLING INTO THE CAR

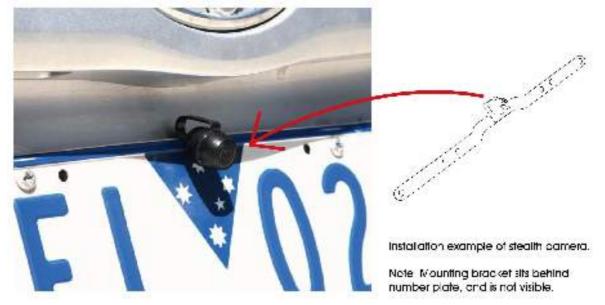
The video signal is transferred from the camera to the monitor via an RCA cable that will need to be run from the boot through the passenger compartment to the monitors wired loom run under the dash. From there, the power and video signals are sent directly to the monitor. At the rear of the car the camera is powered directly from the reversing tail light.

Wiring diagram below:



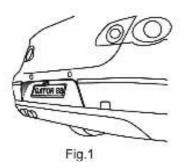
INSTALLING THE CAMERA

In most instances, the camera is best mounted above the vehicles license plate as shown here.



Where this is not possible there are other camera combinations that will suit your individual application. When mounting the camera, make sure that the camera does not cover any part of the license plate. Choose a position that does not impede the access/operation of the boot release or tailgate latch.

- 1. Remove the rear license plate from the vehicle by undoing the bolts / screws.
- 2. Remove the wax paper from the adhesive strip on the back of the camera mounting bracket to expose the adhesive surface. Carefully align the brackets arm so that the top edge of the arms align to the top edge of where the license plate would sit and stick it in place making sure that 2 holes in the mounting bracket align with the mounting holes of the license plate.
- 3. With the license plate off, check if there are pre_existing holes through which the cables from the camera can be passed through to the boot of the vehicle as in Fig. 2. If there are no pre_ existing holes carefully 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.
- 4. Refit the license plate over the camera bracket using the original bolts/screws.



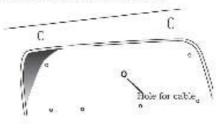


Fig.2

Rear Camera and monitor:

- 1. Connect the RED wire of the Cameras Power Harness to the wire that supplies power to the reversing light globe (the wire that is energised only when the car is put into reverse). Before making the electrical connection, temporarily disconnect the camera from the power plug whilst making the connection to the back up light. Use a suitable splicing/crimp connector (Scotch lock type) or strip connector. This connection can also be soldered, making sure to insulate the joint with electrical insulation when done. The camera has only one wire to connect (positive(+). There is no need to hook up a ground wire as the camera gets its earth through the RCA lead. Hooking up the earth may cause a ground loop. In this case Horizontal lines will appear in the image.
- 2. After you have insulated the join you can connect the power harness to the camera. NOTE:

Some cars that Run LED or Computer controlled lighting systems may not deliver enough voltage to run the camera. If the voltage at the reversing wire light is less than +12 volts it may be necessary to use a relay to supply power to the transmitter harness from the wiring in the front of the car. In this case the reversing light only needs to trigger the relay.

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

- 3. Connect one end of the Supplied RCA Video lead to the RCA lead coming from the camera then run the RCA lead to the front under side of the driver side dash board (This is were the monitors loom will be located). To do this you will need to remove the rear seat to pass the cable into the cabin area and you will need to remove the door scuff plates to run the wire along the side of the vehicle. The RCA cable will be hidden when you replace the scuff plates. When the cable is at the front of the vehicle the RCA cable needs to be run from the scuff plate area to the under side of the dash behind the kick trim (Remove to run cable)
- 4. The Mirror mount monitor has two power wires to be connected. Connect the Red wire (Accessories +12V) to a wire that is energized when the accessories position on the key is active (When the radio is on) and the black wire to a ground wire or you can connect the back wire to the body of the car using the steel of the cars body behind the kick trim as an earth. In this case drill a small 1/8th hole and connect the wire using a suitable O ring terminal. Scrape off the cars paint around the hole to ensure a good earth.
- 5. Connect the RCA lead to the RCA Connector from the Monitors loom.

DVR Information

Structure details Button Diagram



Button Instructions

1.Power button/fill light button : (two functions)

a : Power on/off function

Hold down for 3 seconds to turn on the device, DVR will automatically enter the video recording mode and read the Micro SD card. Hold down for 3 seconds again to turn off the DVR. The recorded file will be saved on the Micro SD card.

2.REC button/Enter button(Two function)

a : Start recording

Press recording button to enter into recording mode, press again to stop it.

b: In stand by/camera/playback mode ; short press the menu button to enter into the main menu. Short press [MIC] [Emergency lock] to go UP/DOWN, Press [REC] to choose and confirm (OK) $_{\circ}$

c : Play/Stop function

In file play mode, short press to stop/play the file.

3. Playback/Menu button

a : Play back function

With device switched on , hold down the playback button for 3 seconds to enter the playback mode. Short press the emergency lock button or mute button to choose the file need to be play back. Press again to play the file. Hold down the playback button for 3 seconds to exit the mode.

b : Menu button

In stand by mode, press menu button to enter into main menu, press twice to change the menu page, [MIC] / [Emergency lock] to go UP/DOWN, REC button to confirm setting. Press Menu button to quit the menu setting function after set up. (Menu setting method are all same in REC, CAMERA, PLAYBACK mode.

4.Mute button/Page-up button:

a : turn off audio recording function

In recording mode, pressing the mute button can turn off the audio recording function. Press again to activate audio recording.

b : Page-up function.

In menu setting and playback mode as for page-up button.

5.Emergency lock

a : Lock function

In recording mode, if your car is involved in an accident, press the recording lock button for 3 seconds, a video for 10 seconds before and 20 seconds after the accident will be saved and this video will not be overwritten.

6.Reset button

Press to reactivate the camera when its crashes

LED Instructions :	
Indicator light type	Indicator light introduction
REC Button LED is REC indicator button	It flashes when it's recording, it stays on while power on.
MIC Button LED is MIC indicator light	It's off in the mute mode,It flashes while recording audio.
Emergency lock LED is G-SENSOR indicator light	It flashes while it's on, stays constant while it's off.
Power Button LED is Power indicator light	It keeps on while device is on

Operation Introduction

The installation of DVR

Please follow wiring diagram for easy instructions of how you connect the DVR to your mirror.

1. Automatic recording function

The recorder will automatically start recording when the car is started.

Start the car engine and the DVR powers on and starts to record.

Working indicator lights up, recording indicator flashes. When you shut off the car, the DVR will save the recorded file automatically and turn off. The recorded file saves on the MicroSD card with separate folders. When the MicroSD card is full the DVR will begin recording over the oldest files.

[Notices] a.Recording time can be set up in the menu, the range are 1/2/5 Mins for choose.

2. Motion Detection Function:

If the sensor detects any movement, the DVR will start recording. If not, the DVR will stop recording automatically after 5 seconds.

Notes: Motion detection will be closed automatically when the DVR was turned off, you need to turn on the motion detection next time if you want to record.

3.G-sensor Function

a. Built-in G-sensor: If the car is involved in a serious collision, press the lock button, a video for ten seconds before and 20 seconds after the accident will be saved automatically and this video won't be overwritten.

b. The G - sensor support sensitivity adjustment, according to the actual need to change the Settings in the Settings menu.

4. One Key Lock Function

The DVR has one key lock function. The files that need to be saved won't be overwritten. In the video mode, short press Lock button, a video for ten seconds before and 20 seconds after the accident will be saved automatically and this video won't be overwritten.

5.Date And Time Setting Function

In the standby mode, press the menu button entering into system setting menu. Short press page up/down button move cursor to date and time setting options. Short press OK button to enter into menu setting.

[Notes] In order to effectively record the date and time of the accident, please set the correct time before using this machine.

6. One key Mute Function

In the working mode, short press MUTE button , the microphone will be closed , the DVR will only record images after that. Short press the mute button again to go back to record function.

The DVR will automatically save the setting, you don't have to set mute function again .

7. Shooting File Playback

In the working mode, pressing the menu button about 3 seconds, the screen will automatically Switch to the playback mode. Short press page up/down button to find the file that you want to playback, pressing the record button to play the file. If you want to exit the playback mode, press the menu button about three seconds again.

8. Automatic Filling Light Function

In the standby mode, the fill lights will be controlled based on the brightness and darkness detected by the lens.

DVR Specification:

Processor Type	SQ680S
Built-in Image Sensor	130W
Lens Angle	120 Degrees
Resolution	VGA640X390 HD1280x720 (720p
	30f/s)
Screen	Non screen
Night vision	support
GPS Trajectory	support
Loop video	support
G-SENSOR	support
Motion Detection	support
Video format	AVI
Storage Temperature	-30°C~70°C
Operating Temperature	0°~50°
Operation humidity	15-65%RH
TF card capacity	Up to 32GB
Standard current	DC12V