



GRV93MKT

USER MANUAL



For more information
on the Gator range
go to our website

gatordriverassist.com 

INCLUSIONS:

Mirror Monitor, Rear Camera, In-Cabin Camera, Camera Splitter, Reverse Camera Lead With Trigger Wire, 12/24V DC Wiring Harness (Hardwired Regulator), 64GB Micro SD Card & Mounting Hardware

Introduction

Thank you for purchasing the Gator GRV93MKT Mirror Monitor. This product is a convenient and durable travelling video and data recorder. Please ensure that you have read the product manual and instructions in full, prior to installation and use. Failure to do so may result in product failure/damage or incorrect operation and therefore impact the product performance.

ATTENTION: The Mirror Monitor must be connected to power when in use. The internal super capacitor only holds date and time settings.

Product features

- 9.35" High-resolution LCD touch screen mirror monitor
- Front camera FHD video recording 1920*1080 @ 30 FPS
- Rear/Cabin camera HD video recording 1920*1080 @ 25 FPS
- Front camera 120 Degree wide angle lens
- Cabin camera 105 Degree wide angle lens
- Rear camera 110 Degree wide angle lens
- Rear camera with mirror image function
- Reverse camera functionality with trigger wire
- Parking guide lines
- Live streaming functionality
- G-Sensor, Loop recording
- Capacitor battery
- Seamless cycle loop recording
- Rubber clip-on mount
- 64GB Micro SD
- Supports Micro SD card class10 up to 128GB
- 12/24V DC Wiring Harness (Hardwired Regulator) (3.4M length)
- Camera lead (8.5M length with camera)
- Dimensions 72mm(H) x 260mm(L) x 28mm(D)

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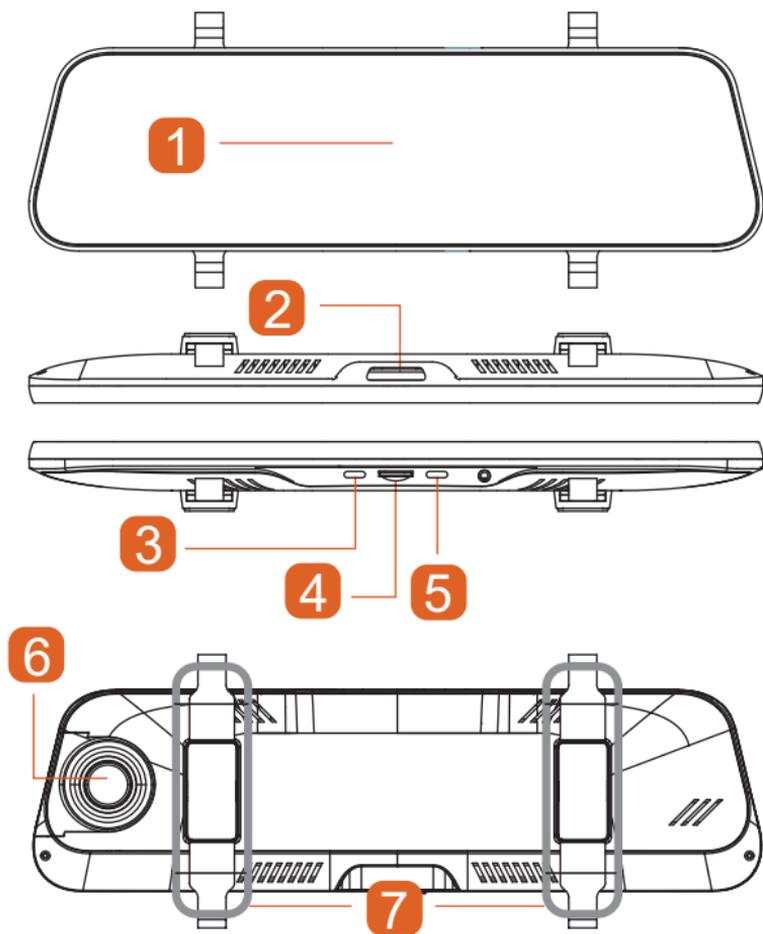
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Package components



Mounting screws & 3M adhesive
for butterfly camera

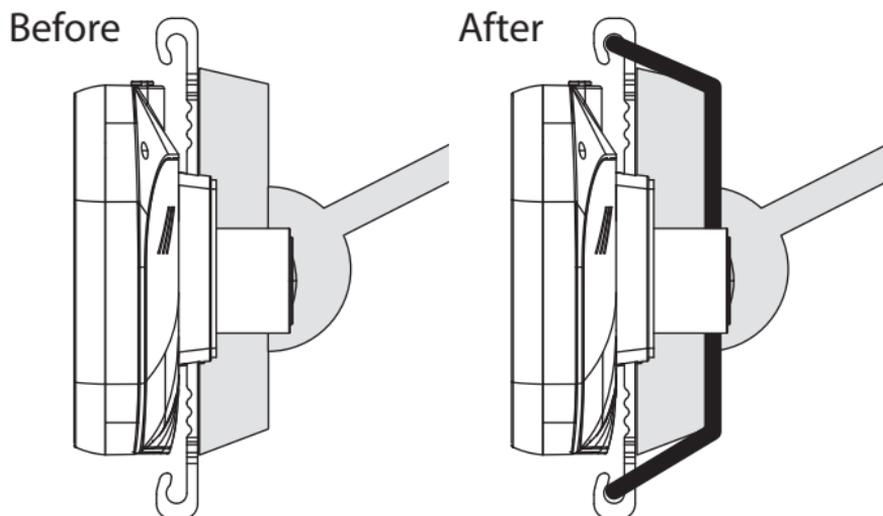
Product structure



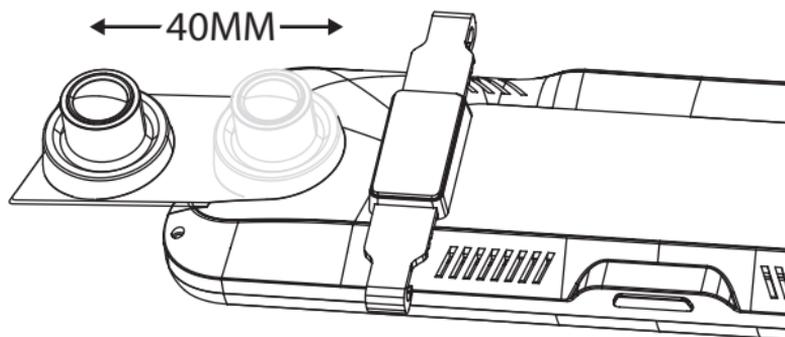
- 1) LCD touch screen
- 2) Power button
- 3) Power Input
- 4) Micro SD card slot

- 5) Camera Input
- 6) Forward recording camera
- 7) Mounting clip-on system

Installation of the Mirror Monitor



Flexible bands go behind the existing vehicles mirror and attach to the plastic hooks on Gator Mirror Monitor.



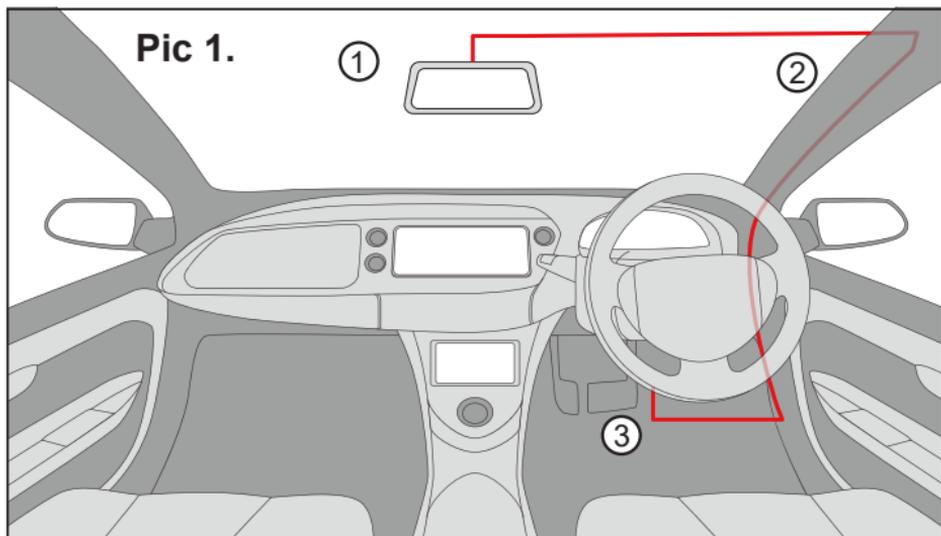
The forward facing cameras mounting arm can be extended outwards as well as the camera lens angled up and down.

Installation of the Mirror Monitor

1. Insert Micro SD card into the Mirror Monitor. Once the device powered it will ask you to format the SD card.
2. Clip on mirror design securely mounts on the existing rear view mirror in the vehicle by stretching the bands at the back. There are two positions based on thickness of existing mirror.
3. Insert the power cable (12/24V DC Wiring Harness **Pic1**) into the camera input (USB Type C) of the Mirror Monitor. The power cable will then need to be routed towards the direction of the fuse box by concealing the cable along the side of the vehicles A pillar. Always refer to the vehicle's owner's manual to avoid fuse slots that could pertain to certain safety features within your vehicle. The red fuse wire goes to the ACC/ignition-switched fuse, the yellow fuse wire to a constant fuse and the C-shaped wire (black) is the ground wire. Locate earth terminal/bolt or any vehicle bolt accessible that is mounted to the chassis of the vehicle or any metal part of the vehicle - located near the vehicle fuse box and secure ground wire to this. Test the Mirror Monitor is working before fixing the cable along the ceiling or A-pillar where it can be safely hidden. Any excess output cable length can be wrapped and held together with a cable tie when it reaches the fuse box. Tuck away any excess output cable behind the fuse box.
(Note: The regulator is not a low level battery protection module, meaning that it may drain the vehicles battery if left for a long period of time without use).
4. Connect the camera splitter cable to the power input (USB Type C) on the mirror. Connect the reverse camera lead to the 4 pin connector of the camera splitter cable. Connect the rear camera via the 4 pin connector to the reverse camera lead. Test the camera is working correctly and orientation before fixing the cable and securing the camera mount on your vehicle. Mirror orientation can also be changed on the touch screen.
5. Attach the red trigger wire to the reverse light of your vehicle to engage parking guide lines when vehicle is put into reverse gear.

Installation of the Mirror Monitor

6. Connect the In-Cabin camera to the camera splitter cable. Test the camera is working correctly and orientation before fixing the cable and securing the camera mount on your vehicle. Mirror orientation can also be changed on the touch screen .
7. Turn vehicles ignition on, and the Mirror Monitor will automatically start recording.
8. When recording the recording indicator LED will flash red and a timer will start.
9. For the Mirror Monitor to work it must receive power from the hardwired regulator. Once power is removed or turned off the Mirror Monitor will save the current file and turn off.
10. Manually adjust the viewing angle on the Mirror Monitor by extending the forward facing camera arm and or moving the lens up or down. Electronically scroll Up/Down on the touch screen to also change viewing area display.

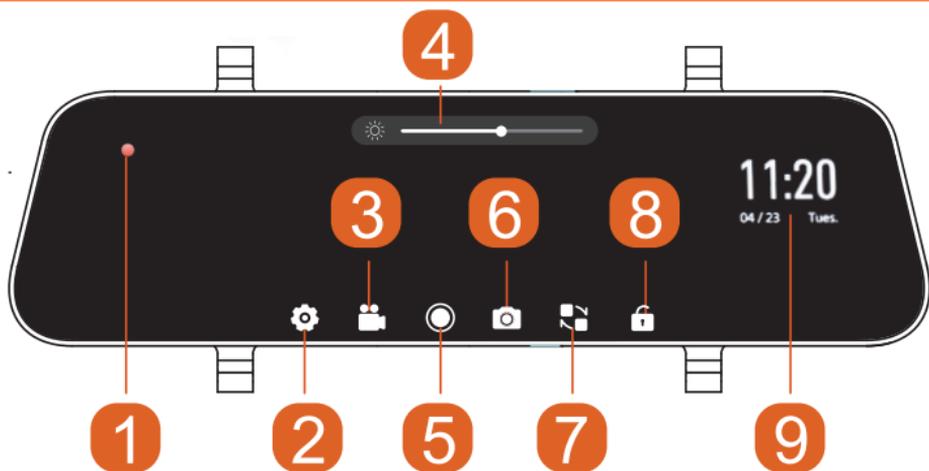


① Mirror Position

② A-pillar

③ Fuse box position

Touch screen functions



- | | |
|---------------------------|---------------------------------|
| 1) Recording indicator | 6) Take still image |
| 2) Settings | 7) Switch between camera views |
| 3) Playback | 8) Lock / Unlock recorded files |
| 4) Brightness adjustment | 9) Date / Time |
| 5) Stop / Start recording | |

Long press the power button to turn the Mirror Monitor ON, short press to turn the Mirror Monitor OFF. Short press the power button whilst recording to turn the display off, recording will continue. The recording indicator will start flashing RED when recording has started and a timer will display. To stop and start recording, simply touch the screen and icons will appear. Touch the stop/start recording icon on the touch screen. When recording press the lock icon to lock the recorded video (1 minute). The recording indicator LED will flash YELLOW as well as the timer. When in recording mode touch the camera icon to take a picture. When not in recording mode touch the screen to display Settings, Playback and Brightness icons. In live-view & reversing mode touch the screen and swipe Up/Down to change viewing area display. Swipe left and right to change between camera views. Note this does not effect recording, for visual display purposes only.

Settings - Common Settings

When not in recording mode, touch the screen to display icons.

Select Settings icon to enter video settings.

Select Common Settings icon.

Select function and then select setting to make changes.

Select arrow icon to exit the function.

Select Home icon to exit settings. Will automatically start recording.

Function	Description
Movie Mode	1080P / 720P
Movie Clip Time	1 / 2 / 3 Min
LCD Power Save	Off / 5 Sec / 10 Sec / 1 Min
Clock Settings	Date/Time
Microphone Mute	Mute Off / Mute On
Flicker	50 / 60 Hz
EV	-2 to 2
Language	Chinese / English
G-sensor	Off / High / Medium / Low
Volume Setting	0 to 10
Format SD-Card	Yes / No (All data will be deleted)
Reset Setup	Yes / No (All settings will be deleted)
Product Info	Firmware version

Settings - Driving Settings

When not in recording mode, touch the screen to display icons.

Select Settings icon to enter video settings.

Select Driving Settings icon.

Select function and then select setting to make changes.

Select arrow icon to exit the function.

Select Home icon to exit settings. Will automatically start recording.

Function	Description
Mirror Settings	L:Mirror / R:Mirror
Guideline Adjust	OK / Cancel
Reversing Screen	Side only / Back only / rear+side / Off
Parking Monitoring	Off / High / Middle / Low
Lapse Recording	Off / 8Hours / 12H / 24H

Settings - Time lapse recording

Time lapse mode will only work when in parkmode. It will display the message "will enter time lapse" on screen when active on startup. In Time lapse recording the Mirror Monitor switches to recording at a reduced frame rate and will record 1 frame a second rather than 25fps normal recording, allowing for more footage to take up less space on the SD Card. Upon playback everything appears to be rolling faster than the average speed. Recorded files will have a (P) in the file name when viewed on a computer.

eg: CH1-20230328-103559.TS (normal recorded file)

CH1-20230328-103578(P).TS (time lapse recorded file).

Note: Time lapse function will not work if the vehicles battery drops below 12.5 Volts.

Video playback mode

When not recording press the playback icon  to select recorded video footage. Touch the icons to view recorded files on screen.



Recorded files



Locked recorded files



Picture files



Camera specific recorded files

Select a recorded file for playback on screen. Touch the recording to pause and play. During playback press icons on screen to lock / unlock and delete files. For full screen display and more playback functions touch the enlarge display icon. Press the home icon to exit playback.

Connecting to a computer

You can remove the SD card from the Mirror Monitor and plug the card directly into your computer to access files. With the SD card inserted into a computer it will recognise the storage device as 93MKT. Three folders will appear within the storage device. Event (for locked files), Normal and Photo. Inside these folders will also be separate folders for front, rear and In-cabin recordings including time lapse recordings.

G-sensor sensitivity

This function activates in the case of a car accident by determining the gravitational acceleration ($1g = 9.8$ meters/second²). When this function activates the Mirror Monitor will automatically save a 20 second video file and save it to the Event folder on the SD card. In the recorded files name a (G) will display stating in parking mode and manually locked. When the file is manually locked with a G sensor recording a (PG) will be in the file name. We recommend Low Sensitivity to avoid false triggers.

G-sensor sensitivity cont....

Note: With this function turned on it may fill up the SD card with locked video files. Re-format the SD card to create space. The device does NOT guarantee video recording of all accidents as the built-in impact sensor may not be activated due to combination of user settings and the level of impact during the collision.

Reversing guide lines

When triggered, the reversing guide lines only assist a driver with backing into a parking space or aligning with an object behind the vehicle. They do not measure distance. You should always get out of the vehicle and visually check the distance to aid the driver when using guide lines.

Formatting SD card

SD cards need to be formatted in the Mirror Monitor to be recognised. You will be prompted on screen to format the SD card. If you have the setting G-sensor function on or create locked files, this will fill up the SD card causing it to stop recording any footage. We recommended that the user format the card regularly to clear locked files and clear up space on the SD card.

Infringement of copyright warning

Please note that this product is for personal use only, the method of use shall not violate the goods, or infringe on domestic or international copyright laws. Recorded images are for personal use only, please note that in some cases to use this product to record performances, exhibitions or business activities may infringe the copyright or other legal rights and interests of others.

Product specifications

Display	9.35" High-resolution LCD touch screen
Colour	Black
Video	TS
Resolution (Front)	1920*1080 @ 30FPS
Resolution (Rear) (Cabin)	1920*1080 @ 25FPS
Frequency	50HZ/60HZ
MCU processor	Mstar SSC8826Q
Front Camera	120 Degree wide angle lens
Rear Camera	Surface mount butterfly camera 110 Degree wide angle lens
In Cabin Camera	Surface mount camera 105 Degree wide angle lens
Functions	G-Sensor, Loop recording
OSD Language	English / Chinese
Audio	Built-in Microphone and speaker
Storage	Supports Micro SD Card Class 10, 128GB Max
Power	USB Type C DC5V 2.5A
Battery	Capacitor
Dimensions	72*28*260mm (H*W*L)

Troubleshooting guide

Problem: The Mirror mount will not stay attached to the existing mirror

Solution: • The rubber bands used to mount the Mirror Monitor can be tightened by using the different rungs for adjustment.

Problem: The Mirror Monitor will not power on

Solution: • Mirror Monitor Hardwired Regulator - Check the fuse in the tip of the cable, it may need to be replaced.

• Mirror Monitor - Connect the Mirror Monitor to a computer via the USB cable to see if it powers up.

Problem: The Mirror Monitor super capacitor only lasts for a few minutes when power is disconnected

Solution: • This is normal. The capacitor in the Mirror Monitor only holds enough power to safely shut down the Mirror Monitor, securely save the last file when power is disconnected and retain settings.

• The Mirror Monitor is designed to be connected to power at all times while being used.

Problem: The time & date settings reset every time the Mirror Monitor is powered on

Solution: • The time and date settings will reset when the Mirror Monitor's super capacitor does not receive power for a period of time.

Problem: The Micro SD card is not recognised by the Mirror Monitor

Solution: • Format the Micro SD card before using. Be sure the Micro SD card is compatible with the device, see "Stops automatically while recording" fault.

Troubleshooting guide

Problem: The Mirror Monitor settings cannot be accessed

Solution: • While the Mirror Monitor is recording the settings can not be accessed. Stop recording before pressing the settings button.

Problem: The Mirror Monitor screen turns off after a few minutes when the Mirror Monitor is powered on

Solution: • If you prefer the screen remain on, this can be changed in the Mirror Monitor Common Settings under “LCD Power Save”.

• Manually you can short press the Power Button on the Mirror Monitor to turn the display On / Off. Recording will continue in the background. (See page 5 of this manual)

Problem: Not recording in Time Lapse Mode when active

Solution: • The vehicles battery is required to be 12.5 Volts or above.

Problem: The Mirror Monitor stops automatically while recording

Solution: • Check to see whether there is enough space on the Micro SD card.

• Ensure correct Micro SD card is being used, 64Gb Class 10 or above Micro SDHC is recommended. Other types of Micro SD cards may not be suitable for use in Mirror Monitors.

• Micro SD cards have a limited lifespan and become corrupt after a period of time. This is due to the continuous loop recording function. If this has occurred, you will need to replace you Micro SD Card.

Troubleshooting guide

Problem: The Mirror Monitor will not record video or take pictures

Solution: • Check to see whether there is enough space on the Micro SD card. If not, the Micro SD card will need to be formatted.

Problem: Video files can not be played on a PC

Solution: • The video files from the Mirror Monitor are in .TS format and may not be compatible with your PC if suitable playback software is not installed.

Problem: My videos are blurry, dirty or discoloured

Solution: • Check to see if there are any finger prints or dirt present on the camera lens. If needed, clean with a soft dry cloth before recording.

• Also be sure to have removed the transparent lens cover during installation.

Problem: The Mirror Monitor is frozen or not responding

Solution: • Disconnect the power from the Mirror Monitor and reconnect after 20 seconds

• Reset the unit by entering Settings - Common Settings - Reset Setup and try again.

• Format Micro SD Card in a computer.

Problem: Unresolved issues

Solution: • Reset the unit by going into Settings - Common settings - Reset Setup

• Format Micro SD Card in a computer.

• Contact Gator Technical Department

Safety information & warnings

- Do not use the Mirror Monitor in damp working conditions; the Mirror Monitor is not waterproof.
- Do not try opening the shell or trying to repair the Mirror Monitor by yourself. If the accessories for the Mirror Monitor have any problems, please take it to an authorised repair agent for repair.
- Do not use a chemical substance, cleaning solvent or cleaner to clean the Mirror Monitor, please use a moist soft cloth if you would like to clean the Mirror Monitor.
- Do not use the Mirror Monitor under conditions where dust is present.
- Please pay attention to cleaning the lens surface, use a moist soft cloth to clean the lens before use, to avoid poor video footage.
- Gator is NOT responsible for the loss of any recorded video during operation.
- Although designed to withstand high impact of car collision, Gator does NOT guarantee recording of accidents where the impact may cause the device to be damaged.

Technical assistance

If you need assistance setting up or using your Gator product now or in the future, call Gator Support. Australia

TEL: 03 – 8587 8898

FAX: 03 – 8587 8866

Mon-Fri 9am – 5pm AEST

Please retain this user guide for future reference.

If you would like to download a digital copy of this manual, or other Gator manuals/software, please visit the gatordriverassist.com website and click on ‘Firmware & Manuals’ or search for the product model number for more information, accessories and products.

This manual is considered correct at time of printing but is subject to change. For latest manuals and updates refer to the website.

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