

# **Car Mount** Manual



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# Overview



## Camera Case

Camera with power cable data cable quick release 120 GB SSD



7 Ah Battery with battery cable

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Battery Monitor



Charger for 7Ah battery with plugs for USA, UK and Germany



## Navigation Device



Snap-in holder for Navigation Device



GNSS antenna



Programming cable for Navigation device



Remote Control Tablet with Cable and Charger



Mini SD card for tablet with adapter



SSD case



SSD to USB cable For copying the data in the office.

### Car Mount



Magnetic Mount Disassembled to fit into in the camera case.

2 spanners



OBD2 adapter cable



Set of six lens protectors



#### Quick release connector



# Spare parts

# **Additional Manuals**

This manual is for the **Car Mount** itself only.

App and Program Manuals

Please see the <u>Remote Control Manual</u> for how to operate the camera. Please see the <u>Creator Manual</u> for how to process footage recorded.

Camera and Mount Manuals

Camera Manual

Backpack Mount Manual Railway Mount Manual Ferry Mount Manual

# Programs of Interest

Privacy Keeper Visualizer Facades Instant Player

Photogram Android Player Railway Editor

# Safety

#### **Rigging the Car** and **Dismounting the Camera**

- Make sure to work at a save place.
  - E.g. not on a public road where traffic might endanger the rigger.
- If needed use a short stepladder to reach the camera comfortably.
- Apply the cars handbrake.
- Switch the cars motor off.

#### **Remote Control**

Operating the Remote Control while driving the car at the same time is not allowed by law in most countries. Always stop the car before operating the Remote Control.

# Accessories

# Camera

Depending on your workflow a few additional Samsung EVO 850 or 860 SSDs might be needed. Supported capacities: 120 GB, 250 GB, 500 GB 750 GB, 1 TB. Newly purchased SSDs must be formatted in-camera with the Remote Control before first usage: Settings -> Format.

Also before re-using a SSD format it in-camera to empty it: Settings -> Format.

#### Hint:

Never format or delete a SSD with a PC! If you accidentally did so, format it again in-camera.

## Tablet

A windscreen holder with a suction cup to mount the tablet with the Remote Control. The tablet should be mounted in portrait orientation.

A USB power supply for the cars cigarette lighter to extend the tablet's operating time.

## Car

The car should have air conditioning.

The optional OBD2 wheel sensor improves the positioning accuracy in demanding situations like urban canyons and overhanging trees. For this the car needs to have a OBD2 socket. Check the car's manual.

In some countries the law does not not consider magnets to be sufficient to secure a roof load. The base rack then is required for legal reasons. A base rack that fits your car secures the magnetic mount.

We recommend **Thule** base racks with a square profile. A base rack with locks helps to prevent theft.

A mount is needed for the snap-in holder for the black navigation device. It should be mounted between the two front seats in the middle of the car. A mount custom-made from a piece of wood will do fine. It not to move or vibrate.

# Workflow

# Helpful Hints

#### Plan

The day of the week when the dustbins are out for collection is not really ideal for recording beautiful footage for tourism.

Footage shot for tourism usually should show tourists.

Consider weekday vs weekend when recording e.g. a city center or an industrial area.

#### Height

With the camera mounted the height of the car increases by about 60 cm. Depending on the car's height without the camera the driver needs to consider low hanging tree branches, clothesline, electrical wires and the clearance of parking garages.

It is recommended to measure the total height of the vehicle after rigging the camera to it. Placing a note in the car to alert the driver to the increased height is recommended.

#### Windscreen Washer

Do not use the cars windscreen washer once the camera is mounted to the car. Waterdrops might reach the camera. Consider cleaning or washing the car before rigging it.

#### Rain

One cannot record streetviews when it is raining. Water drops on the lens protectors make the footage recorded unusable.

In case it starts raining: The car camera is splashproof, but not rainproof. If you feel the need to use the windscreen wipers it's time to dismount the camera.

All raindrops are dirty with dust. For best image quality always replace the lens protectors for clean ones even when catching just a few raindrops.

#### **Remote Control App**

Consider installing the Remote Control App to your Android mobile phone in addition to the tablet. In case something goes wrong with the tablet this way you still can operate the camera. Even with map tiles and recording areas etc. missing, it still works.

## Prepare

At least a day before the recording: Place a SSD into the camera. Pace a spare SSD in the blue SSD case of the camera case.

Charge the cameras battery. Charge the Remote Controls tablet.

Prepare map-tiles, recording areas (kml/kmz) and road overlays (MBTiles) for the Remote Control and copy them to the the tablet. All of these are optional and the remote control works fine without them.

Assemble the magnetic mount using the provided spanners. Make sure the 4 bolts are inserted from the bottom to the top.

#### WARNING

When inserting the four bolts wrongly from top to bottom the bolts might scratch or dent the cars rooftop. Always insert the bolts from the bottom to the top.

Usually the magnetic mount not to be disassembled between recordings. Most users leave the magnetic mount on the cars rooftop to reuse the same leveling adjustment settings with the Creator program.

# Rigging

Rigging the car needs about 5 minutes and can be done by a single person.

#### ONCE ONLY

Place the magnetic mount onto the cars rooftop. Usually it is placed between the front and rear doors, right in the center. Make sure the Magnetic Mount points straight forward. Mount the base rack to secure the magnetic mount to the car.

Make sure the front door does not pinch the data and power cables attached to the base rack.

Reposition if necessary.

Wrong:

Right:



#### Camera

Roll the cars right rear window 3 cm down. Open the cars front door. This way you can get closer to the car.

Optional: Place the stepladder at the open front door. As close as possible to the car.



Remove the two silver knurled nuts from the quick release of the camera. Lift the camera and the data and power cables.

The large black heatsink of the camera to point forward. Insert the two bolts of the camera into the Magnetic Mount. Secure the camera with the two silver knurled nuts. For tension relieve secure the two cables with a Velcro strap to the Magnetic Mount.



Uncoil the data and power cables.

Secure the cables with 2 Velcro straps to the base rack.



Insert the data cable and power cable through the right rear window into the car.

#### **GNSS** antenna

Place the magnetic GNSS antenna onto the cars rooftop. Right into the center, at least one meter behind and away from the camera.

Insert the antenna cable through the Window into the car. Keep the antenna cable separate from the data and power cable.



#### **Navigation device**

Rear

Mount the holder for the white snap-in holder for the navigation device to the car. Make sure the release of the white snap-in holder points backwards. Insert the navigation device with the two sockets pointing forward into the snap-in holder. Press the navigation device down until it snaps in. Do not use force.

Connect the antenna cable to the golden socket of the navigation device. Tighten by hand. Do not use force.

Last connect the power cable to the black socket of the navigation device



Front

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#### **OBD2** adapter cable (optional)

Plug the OBD2 adapter cable into the car's OBD2 socket.

See the cars manual where to find it. Usually the cars OBD2 socket is to be found on the driver site, below the instruments.



Connect the other end of the OBD2 adapter cable to the data cable. Secure it with the two thumbscrews.

Place the battery with the attached Battery Monitor Cable into the car. E.g. onto the floor. Secure the battery against movement.

Connect the cameras power cable to the Battery Monitor Cable to power on the camera. Start the car.

#### Remote Control

Place the tablet into the optional suction-cup holder at the windscreen. Connect the optional power supply by cigarette lighter.

Switch on the tablet.



The camera needs about one minute to power on and show up as a WiFi device on the tablet.

Connect to the device named: **camera** The WiFi password is: **wireless** 

Close all other Apps and the WiFi window.

# Record

Close all other Apps and Windows. Start the Remote Control App.

Please see the <u>Remote Control Manual</u> for how to operate the camera.

In case the optional OBD2 adaptor cable is shown missing on the Status tab, this might be because the car is still standing still. Check again after driving 20 meters.

# Dismount

Stop recording. Disconnect the cameras power cable from the Battery Monitor cable.

Disconnect the antenna cable and the data cable from the navigation device. Press down the white release of the snap-in holder and remove the navigation device. Place it in the black camera case.

Unplug the OBD2 adapter cable from the car. Unplug the OBD2 adapter cable from the data cable. Place it nearby the black camera case.

Grab the GNSS antenna by its housing, not the cable, and remove it from the cars rooftop. Carefully pull the cable out of the car. Place it in the black camera case.

Remove the two Velcro straps from the base rack.

Carefully pull the data cable out of the car. Coil it up and secure it with a Velcro strap.

Carefully pull the power cable out of the car. Coil it up and secure it with a Velcro strap.

Remove the tension-release Velcro strap from the magnetic Mount.

At the magnetic mount remove the two silver knurled nuts.

Take the camera off the Magnetic Mount. Remember to always lift the camera and the cables together.

Re-attach the two silver knurled nuts to the camera. This way they do not get lost and are at hand for the next recording.

Remove the SSD from the camera.

Optional: Place the replacement SSD from the blue SSD case into the camera.

Close the cameras SSD compartment.

Place the camera in the black camera case.

Arrange the data cable beside the camera. Arrange the power cable beside the camera. Arrange the OBD2 adapter cable on top of the camera. Make sure the connectors are positioned away from the camera's lens protectors to not scratch them.

Don't forget to close the right rear window of the car.

#### Hint

The data cable and power cable stay connected to the camera all the time.

Power off the tablet. Dismount the tablet and put it into the camera case. The windscreen holder usually not to be removed daily.

Send the SSD to your office for processing.

#### Maintenance

#### Clean the camera

Clean the camera with a damp cloth and a bit of warm water. A nailbrush works well to clean the black front heatsink.

#### **Clean lens protectors**

Replace the six lens protectors with clean ones.

Clean the dirty lens protectors with warm water and soap. Dry them with a cloth like for glasses. Dry overnight. Place them in the black camera case the next day.

Charge the cameras battery and the tablet.

Remote Control: Back up the project and save it off the tablet for safekeeping.

Once in a while connect the tablet to the Internet to check for Android updates. How to check for Android updates:

Settings  $\rightarrow$  About Device $\rightarrow$  Software Update: Update now.

# Storage

Store the closed camera case and the batteries safe, dry and at room temperature until next usage.

Charge the batteries and the tablet every 3 months when not using.

# Support

Support is available in English language.

Helpdesk:support.applied-streetview.comE-Mail:support@applied-streetview.comSkype ID:applied-streetviewPhone:+49 (0)6103 - 37 27 494

# Consulting

We are available for hire for consulting.

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