

# User's Guide For **DASH CAMERA**

### SAFE DRIVE

Please read this manual carefully before using. This manual should be kept for future reference.

Warning:

The dash camera should be set up before driving.

Concentration should always be maintained on the task of driving. Let the dash camera record accidents caused by others not by yourself.

### SPECIFICATION

#### camera specification

Novatek NT96663 chipset with 2GB DDR3 front camera SONY IMX290/291 2MP CMOS image sensor front lens 145° diagonal view field F1.8 aperture rear camera SONY IMX322/323 2MP CMOS image sensor rear lens 135° diagonal view field F2.0 aperture 1.5inch TFT LCD panel screen dual channel recording 1080P30fps + 1080P30fps MAX signal channel recording 1080P60fps MAX H.264 coding MOV file format supports microSD storage card up to 128GB exFAT format supports Wide Dynamic Range boost supports GPS trace logging (with built-in GPS mount) supports G-sensor file protection supports one-key SOS manual file protection supports exclusive remote control for file protection or take photo supports movement detection supports temperature protection and real-time display supports parking quard (with exclusive parking quard hardwire kit) supports up-side-down mounting supports HDMI output to HDTV to playback support 160° vertical rotating and 6 degree horizontal offset supports magnetic Circular Polarizing Filter (CPL) built-in 5.4V 2.5F super capacitor back up battery

#### camera box content (standard GPS version)

dash camera body rear camera kit 6m length extend cable for rear camera built-in GPS sticker mount RE remote controller with VHB pad 2° and 4° angle mounting wedges wedge mounting KB1.4\*6mm screws 5V 2A cigar lighter charger microUSB-USB data cable cable clips VHB sticker pads VHB sticker removing cord lens cleaner manual optional: microSD card, 24mm CPL filter, Parking Guard hardwire kit, Parking Guard Power Kit, microSD-USB card reader, miniHDMI-HDMI cable

#### **PC System Requirements**

Windows XP or later operating system, MAC 10.1 or later Intel Pentium 4 2.8GHz CPU or above (recommended 3GHz) at least 2GB RAM or above (recommended 4GB) internet connection (for GPS log playback)

The manual may be different with the camera according version update.

- Do not expose the dash camera to dusty, dirty or sandy conditions, if these gets into the camera or on the lens it can damage the components.
- The normal operating temperature of the dash camera is -10°C to 60°C (14°Fto 140°F), it is environment temperature (air temperature in vehicle); and the storage temperature is -20°C to 80°C (-4°F to 176°F) environment.
   Please refer the temperature curve chart in XXX section.
- Do not expose the dash camera to high temperatures. High temperatures can shorten the life span of electronic device, and extremely high temperature will shorten the battery and/or degrade the plastic components. Please notice extreme temperatures can achieve 70°C (158°F) or even higher in parked vehicles under direct sunlight. Expose the dash camera in strong sunlight with Motion Detection mode or Parking Guard mode recording may cause the dash camera malfunction or damaged.

There is temperature protection in this camera which will shut the camera down when the camera temperature reach 90°C (194°F) but please notice that is just a auxiliary method.

Keep the camera recording in high temperature condition will be on yourself risk.

- Do not expose the dash camera to a cold environment.
   Extremely low temperatures can also damage the electronic components; if there is water moisture in cold environment, freezing water can cause damage, as can thawing.
- Do not try to dismantle or open the casing. Doing so may result in electrical shock and will most likely result in damaging the dash camera. Dismantle the camera will make it out of warranty.
- Do not mistreat the dash camera, dropping, sudden impact, and vibration can cause damage.
- Do not clean the dash camera with chemicals, cleaning solution or a high concentration detergent. Only a slightly damp cloth should be used.

### UPGRADING

Please download the latest firmware from <u>www.mini0906.com</u> to upgrade the camera for improved stability and extra functions.

Extract the FIRMWARE.BIN file to the root folder of your microSD card; insert the card into your dash camera and power on. The camera will auto examine the FIRMWARE.BIN file and start upgrading with the LED blinking but blank screen. then the camera will automatically reboot to recording after upgrading finished. Enjoy~

The FIRMWARE.BIN file will be automatically deleted after upgrading to avoid repeated upgrading when next boot up.

### APPEARANCE

1

dash camera body

- 1 mount receptacle
- 2 top cooling holes
- 3 speaker holes
- 4 CPL mounting bar
- 5 lens
- 6 front cooling holes 7 bottom cooling holes
- 8 side cooling holes
- 9 power indicator
- 10 recording indicator 11 GPS/MIC indicator





sticker mount (GPS logger inside)







### APPEARANCE









- 12 sticker area
- 13 microSD card slot
- 14 HDMI output
- 15 1.5" TFT screen
- 16 UP button
- 17 OK button
- 18 DOWN button
- 19 mounting contacts
- 20 MIC holes
- 21 microUSB port
- 22 rear camera receptacle
- 23 POWER button
- 24 mount receptcle
- 25 microUSB port
- 26 VHB pad
- 27 mounting contacts
- 28 reset button

### OPERATION

Read this chapter to know how to operate the camera.

#### TURN ON /OFF YOUR CAMERA

You may turn on the camera by pressing the power button.

You may turn off the camera by holding the power button for 2 seconds.

The camera is also pre-configured to auto turn on and start recording once it receives power, e.g. when the vehicle engine is started with a cigar charger to power the camera.

The camera is also pre-configured to auto stop recording and turn off once it loses power, e.g. when the vehicle engine is stopped.

The camera is also preconfigured to auto turn off if it is in standby mode for a long time without any button operation.

There is no lithium battery built in the camera so it can't be power on without external power supply. The built in super capacitor only help to finish the last file after power supply cut off; and the super capacitor need half hour to recharge.

#### STORAGE CARD PREPARATION

The camera supports single microSD card up to 128GB. It is recommended to use high speed microSD card (higher than Class 6, SDHC/SDXC compatible) to avoid storage problems.

Dash cameras write data to the microSD card in high speed so there will be file segments created; it is recommended to re-format the microSD card monthly to keep the file system tidy.

Please be noticed the camera was pre-set to high bit rate recording so the lower speed storage card will cause many recording problems.

#### **RECORDING A VIDEO**

When the camera is standby (standby means the camera is power on but not recording, waiting for operation), press the OK button to start video recording. When the camera is recording, press the OK button to stop and enter standby. The camera is pre-configured to auto start recording once it receives power, i.e. when the vehicle engine is started.

#### TAKING A PHOTO

When the camera is in recording mode, hold the OK button for 2 seconds to take a photo.

#### PLAYBACK ON CAMERA

When the camera is in standby mode, hold the DOWN button to enter playback mode. When the camera is in playback mode, hold the DOWN button to back to standby mode.

When the camera is in playback mode, press the UP and DOWN buttons to highlight the video or photo you want to review, then press OK button to play/view. When the camera is playing/viewing a video or photo, hold the UP button to active the sub menu then choose DELETE, PROTECT, PLAYBACK mode; press UP and DOWN buttons to highlight and then OK button to perform the action.

#### PLAYBACK ON TV

If you want to playback the videos or photos on big screen TV, a HDMI cable (optional accessory) is need for connection.

When HDMI connected, the operation will be same as when playback on camera screen.

### OPERATION

#### PLAYBACK ON COMPUTER

If you want to playback the videos or photos on computer, a microSD card reader (optional accessory) is needed.

The GPS PLAYER program download link is placed in the PLAYER.TXT in the root folder of microSD card, which can playback the recorded videos with GPS traces. You can also use a compatible media player to playback the video files directly without GPS trace. (You may need a codec for the media playback to decoding the MOV videos, K-lite Codec Pack is recommended.)

If you don't have a microSD card reader on hand, you can connect the camera with your computer with the supplied microUSB-USB cable; the dash camera will be recognized as a mass storage device on computer.

#### **RECORDING MUTE VIDEO**

When the camera is in either standby or recording, you can press the UP button to mute the microphone inside camera any time. Press the UP button again to cancel mute status.

#### SOS MANUAL PROTECT VIDEO

The camera support automatic loop recording which means the oldest video will be over-written by new video when the card is almost full, unless the video is protected (read-only file attribute) then the next file will be over-written.

The camera can auto protect videos if the G-sensor data exceeds the configured threshold, a small lock icon will show on screen when file protected; the icon will disappear when a new file was created.

You can also manually protect the video by pressing the DOWN button; a small lock icon will show on screen when file protected. Hold the DOWN button to cancel protected status, the lock icon will disappear.

#### REMOTE CONTROL

When the camera is in standby or recording mode, press the button on remote control to take a photo, hold the button for 1 second to protect current video.

There is a small blue LED on the remote control for working status indicating. You can replace the CR2032 battery in the remote control if the blue LED is dark or the remote control function not working, which means the battery was drain.

#### SETTING UP THE CAMERA

The camera is pre-configured to provide you a simple plug and play experience - the default setting are the most popular options.

If you are not satisfied with the default setting, you can customize your own favorites. When the camera is in standby, hold the UP button to enter the setting menu.

Use the UP and DOWN buttons to highlight the subjects you want to configure, press OK button to select; then press UP and DOWN buttons to choose the option you want, press OK button to confirm and exit.

Hold UP button to quit SETTING.

Please review the SETTING section to learn about setting subjects.

TIPS

PRESS operation means press the button down then release quickly; HOLD operation means press the button down and wait around 1 second for related operation.

This works for all the operation in this manual.

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If you are not satisfied with the default setting, you can customize your own favorites. Please read this section to help to customize the camera setting, when you require a slightly different experience.

#### PARKING GUARD

options:

Parking Guard function is used to monitor the vehicle outside for safety after vehicle parked, with a Parking Guard Hardwire Kit (optional accessory) as power source. When the vehicle engine turned off, the Parking Guard Hardwire Kit will send a signal to the dash camera; the camera will switch to Parking Guard mode and record setup Parking Guard video according the setup recording mode.

When the vehicle engine started, the Parking Guard Hardwire Kit will send a signal to the dash camera; the dash camera will switch to normal recording mode.

if there is no Parking Guard Hardwire Kit connected, the function can't be activated. The air temperature in vehicle may get too high in summer, so the built-in temperature protection will help to keep the camera safe on Parking Guard mode. The camera will automatically turn off when the mainboard temperature go up to 95°C (200°F) and automatically turn on when the mainboard cooling to 75°C(167°F).

|   | Auto Switch Lapse | <ul> <li>the camera will record low frame 720P 2fps lapse video<br/>while parking, but if there is motion detected it will auto<br/>switch to 720P 30fps for 15seconds recording then auto<br/>switch back to 720P 2fps lapse video after image still.<br/>Please notice there will be videos gap between the<br/>resolution switching.</li> </ul> |
|---|-------------------|--|
| Always Time Lapse- the camera will record low frame 720P 2fps lapse video |                   |  |
|   | S i i             | all the time while parking.  |
|   | Motion Detection  | - the camera will auto switch on Motion Detection  |
|   | <b>*</b>          | function while parking. Motion detection is used to  |
|   |                   | reduce the amount of storage space used.   |
|   |                   | If there is obvious motion detected the camera will start  |
|   |                   | recording and continue until 15 seconds after the  |
|   |                   | motion stops, then switch to standby.  |
|   |                   | When the camera quit Parking Guard mode, the motion detection function will be auto switch off.  |
|   | Normal Recording  | - the camera will continue record normal video even after  |
|   |                   | vehicle parked and ignore the Parking Guard signal. It   |
|   |                   | will be a huge storage consume and the old files will be   |
|   |                   | over written.  |

In Parking Guard recording, if there is G-sensor triggering by vehicle vibration, the current recorded video will be protected to avoid over-writing.

#### FORMAT CARD

Here you can format the microSD card in camera.

Please be noticed all files will be lost once you start the formatting process. it is recommended to re-format the microSD card every month to remove the file segments and keep the file system tidy.

options: NO

YES

#### VIDEO RESOLUTION

Here you can choose the video resolution you want to use; higher resolution videos will take more storage space.

options: 1080P30+1080P30 1080P30+720P30 720P30+720P30 1920x1080P60 1920x1080P60 1920x1080P 30 1280x720P 60 1280x720P 30

dual channel camera mode

single channel camera mode

#### VIDEO QUALITY

Here you can adjust the video quality; the quality will affect video grain, sharpness, contrast and so on. Better quality videos will result in higher bit rate and take more storage space.

options: Super Fine

Fine Normal

#### AUTO EXPOSURE METERING

Here you can set the measuring area for Auto Exposure; this setting will affect the video brightness and quality.

CENTER is recommended if there is no special requirement.

options: CENTER

AVERAGE SPOT

#### FRONT EXPOSURE COMPENSATION

Here you can manually adjust the front camera Exposure Values to improve the image brightness. An unsuitable setting will make the image too bright or too dark. options: -2.0

-1.6 -1.3 -1.0 -0.6 -0.3 **0.0** +0.3 +0.6 +1.0 +1.3 +1.6 +2.0

#### TIPS

When you hold the UP button to quit SETTING, the setting will be saved. If you haven't hold UP button to quit but use POWER button to power off or use RESET button to re-boot the camera, the setting may not be stored. Please take care the correct operation process.

#### REAR EXPOSURE COMPENSATION

Here you can manually adjust the rear camera Exposure Values to improve the image brightness. An unsuitable setting will make the image too bright or too dark. ontions: -2.0

-2.0 -1.6 -1.3 -1.0 -0.6 -0.3 **0.0** +0.3 +0.6 +1.0 +1.3 +1.6 +2.0

#### WHITE BALANCE

Here you can set the image white balance mode to improve the colour balance in video/image in different weather and lighting conditions. AUTO is recommended to fit most conditions.

options: AUTO

DAYLIGHT CLOUDY TUNGSTEN FLUORESCENT

#### FLICKER

Here you can set the image sensor flicker frequency to fit your AC power frequency and reduce the effect of flickering lamps. Otherwise the traffic light or road lamp maybe flickering all the time.

if you are not sure about the AC frequency in your country please research the article "List of Worldwide AC Voltages and Frequencies" to find out then set the flicker here. options: SOH2

60Hz

#### **ROTATE IMAGE 180°**

When you want to mount the camera up-side-down, this setting will help to rotate the screen and recorded image 180° so the video appears the correct way up when you playback on computer or TV. The button functions will be reversed at the same time so that the UP button is still at the top after the camera rotated.

options: OFF ON

#### REAR CAMERA FLIP

This setting help to flip the rear camera image up-side-down to fit your fixup location & direction of the rear camera.

options: OFF

ON

SETTING

#### LOOP RECORDING

The camera supports automatically loop recording when the card is full. Here you can set the segment length according your requirement. (please be noticed the maximum file size limit on FAT32 card is 4GB)

options: 1 MINUTE 3 MINUTES

5 MINUTES 10 MINUTES

#### BEEP SOUND

Here you can switch the boot sound and button sound according your requirement. Please check the camera status sometimes to make sure the camera works fine, if you turn the sound off.

options: ON

OFF

#### GREEN INDICATOR

Here you can define the indicating function of the Green Indicator.

options: GPS STATUS MIC STATUS

#### **G-SENSOR SENSITIVITY**

The G-sensor is used to detect the 3-axis impacting forces (vibration acceleration). If any impact over the threshold value is detected, the current recording file will be locked (protected) to avoid being over-writen. Here you can define the sensitivity threshold value.

options: OFF LOW **MEDIUM** HIGH

#### POWER OFF DELAY

If there is no button action when the camera is on standby mode, the camera will auto power off to save power (unless the camera is on Motion Detection mode). Here you can define the delay time.

options: 1 MINUTE

3 MINUTES 5 MINUTES OFF

#### SCREEN OFF DELAY

If there is no button action when the camera is on standby or recording mode, the camera will auto turn off the screen to save power.

You can press the POWER button to turn off/on screen at any time.

Here you can define the delay time.

options: 15 SECONDS

30 SECONDS 1 MINUTE OFF

#### LOGO STAMPING

Here you can define whether you want to show the camera brand logo on recorded video (bottom left corner).

options: OFF ON

#### GPS STAMPING

The dash camera can record your driving trace and stamp the GPS data on video. Please notice there maybe electronic interference on GPS signal from camera, radar detector, wireless transmitter, or something else; which will delay the GPS connecting or mistake the GPS data.

Here you can define the GPS data stamping method.

options: OFF

LOG ONLY STAMP ON

#### SPEED STAMPING

The dash camera can record your driving speed and stamping the speed data on video. Here you can define the speed data stamping method.

Please set the GPS STAMPING to LOG ONLY or ON first if you need speed stamping. options: **OFF** 

KM/H KPH

#### DRIVER NUMBER STAMPING

The dash camera can stamp your driver number or customized phrase on video. Please define the driver number or phrase in next title. Here is the switch.

options: OFF

#### DRIVER NUMBER

Here you can define the driver number or customized phrase to stamp on the vide. Total 9 characters or numbers.

000000000

#### DATE STAMPING

Here you can define the date stamping format on video.

options: OFF

YYMMDD MMDDYY DDMMYY

#### TIME STAMPING

Here you can define the time stamping format on video.

options: OFF

12 HOURS 24 HOURS

#### DATE TIME SETTING

Here you can set the system date and time manually. The date & time information will be automatically updated once GPS connected.

> +00:00 2017/05/30 13:14 time zone date time

The time zone should be set before GPS can correctly update the time. You may need to manually add or minus time zone for daylight saving time.

#### **TEMPERATURE STAMPING**

Here you can define whether you want to show the camera main board temperature on camera screen (top right corner) and recorded videos (bottom right corner). ootions: OFF

> Fahrenheit °F Celsius °C

#### LANGUAGE

Here you can set the system language you prefer. options: **ENGLISH** 

РУССКИЙ

#### RESTORE DEFAULTS

Here you can restore all the settings to the factory default settings.

options: NO YES

#### FIRMWARE VERSION

Here you can find the version information of the current firmware in your camera. You may need this information when you are trying to upgrade the camera to a later firmware.

The firmware version is sorted by release date, the suffix number means the sequence on that date.

0906FW 20170530 V1

TIPS

The REMOTE CONTROLLER unit can be stuck to somewhere for easy operating with the round VHB sticker provided; but please be noticed that should not effect the driving. The button of remote controller is big enough for blind operating so please keep your eyes on traffic.

### UI



VIDEO RECORDING MODE WHITE BALANCE EXPOSURE COMPENSATION LOOP RECORDING FILE LOCKED MICPHONE ON MAINBOARD TEMPERATURE GPS CONNECTING MOTION DETECTION PARKING GUARD WDR BOOST POWER CHARGING

CARD STATUS

RECORDING

PLAYER



hold the OK button and power on to active GPS TESTER



G-SENSOR This image maybe different with the real one according to version update.

### TEMPERATURE

#### **TEMPERATURE IN VEHICLE**

When a vehicle parked in direct sunlight, the vehicle inside temperature will dramatic increase in the first 10 minutes and then stable after 25 minutes baking. Please refer the figure below to find out the temperature difference between inside and out side of the vehicle.

The temperature can achieve 70°C (158°F) or even higher in parked vehicles under direct sunlight in summer, it is dangerous for all consumer electronics.

Expose a dash camera in strong sunlight with Motion Detection mode or Parking Guard mode recording may cause the dash camera malfunction or damaged.

#### **TEMPERATURE PROTECTION**

The temperature protection function in this camera which shut the camera down when the camera temperature reach  $90^{\circ}C(194^{\circ}F)$  will help to reduce the risk and still protect your vehicle all the time even under sunlight, with Parking Guard or Motion Detection function.

Please be noticed the temperature protection is just a auxiliary method, keep the camera recording in high temperature condition will be on yourself risk.



please notice this is a reference figure, the curves will be different in different condition.

### MOUNTING

The dash camera is designed for easy& guick mounting to your windshield with VHB sticker pad.

1st, insert the camera to the sticker mount with power cable plugged into either the mount or camera body:

2nd, simulate the unit on your windshield with the camera powered on, rotate the camera vertically to find the best mounting location:

3rd, you may need to fit the wedge(s) if you want to mount at an offset location from the top center of the windshield; just screw the wedge(s) to the mount bracket or use the VHB pads in the accessory bag. (screws KB1.4\*6mm also in the accessory bag); 4th, clean the stick surface on both GPS mount and windshield with organic solvent such as alcohol or other, make sure there is no water or grease on the surfaces: 5th, stick the VHB sticker pad to the mount bracket or wedges, and attach to your windshield, hold the mount for a few seconds to ensure good adhesion: 6th, power on the camera and check the camera display again.

when you want to demount the camera, just slide the camera out from the mounting bracket: no need to take the sticker mount down from windshield.

When you want to remove the sticker mount from your windshield, please use the thin cord (in accessory bag) with a sawing action to cut between the VHB sticker and your windshield and pull the cord to break the mount off from your windshield; then remove the sticker residual with WD-40 spray.

Please don't break off the sticker mount with a rigid crowbar, which may damage the sticker mount or your windshield.

If you have to place the camera offset from top center of windshield, you need to use the wedges to adjust the camera view direction. There are two wedges attached in accessory bag, one is 2° angle and another is 4° angle. With those you can mount the dash camera at a 2°. 4° or with both together 6° offset location.

(you can use the attached VHB pads or KB1.4\*6mm screws to mount the wedges to the sticker mount

sticker mount with 2° wedge



sticker mount with 4° wedge



sticker mount with 2° + 4° wedges



TIPS

If your VHB pads are run out, you can purchase 1.1 inch width 3M VHB heavy duty mounting tape from local or internet and cut it to 1.45 inch long to instead the original mounting pads.

It is recommended to be 0.06 inch thickness and black color.

### POWER SOURCE



The dash camera can be powered by cigar lighter charger (standard accessory) or hardwire kit (optional accessory).

Cigar lighter charger is a easy & fast connecting method for cameras, the only thing you need to do is plug the charger into the cigar lighter socket in your vehicle. The camera will be powered once the vehicle engine started.

The disadvantage is cigar lighter charger is it will engage your cigar lighter socket, and maybe alignment difficulty for the long cable.

Hardwire kit is used to solve the problem above. The 12V/24V leads are connected the car fuse or car battery and the 5V lead is connected to your camera. The output power from Parking Guard Hardwire Kit can be constant to support the Parking Guard function of your camera. There is Battery Drain Protection in Parking Guard Hardwire Kit to protect the vehicle battery from drain.

You may need some professional skill to install the Parking Guard Hardwire Kit.



Please take care of the un-qualified cigar lighter chargers and hardwire kits on market. The accessories without EMC compatible may bring interference to radio receiver or GPS antenna. The hardwire kits may drain your vehicle battery to 11.5V even if the vehicle is a 24V accumulator.

### ACCESSORIES

All the accessories listed in this page are optional.

#### **CPL** filter

Reduce the reflection from shiny surface like vegetation, sweaty skin, water surface, glass, road, and let the natural color come through at the same time.

Some of the light coming from the sky is also polarized to give a more dramatic sky and high contrast clouds, rendering outdoor scenes crisper with deeper color tones.

Align the white line on CPL with the dot on camera and rotate for best reflection reducing effect.



CPL filter is highly recommended for mini0906 camera.

#### Parking Guard Hardwire Kit

The Parking Guard Hardwire Kit can be used on mini0906 and other cameras which support Parking Guard function, to protect your vehicle when it parked.

It also can be used as a high quality common hardwire kit on no Parking Guard function cameras, to power the camera and protect your battery from drain.



#### Parking Guard Power Kit

The Parking Guard Power Kit can be used on mini0906 and other cameras which support Parking Guard function or other cameras without Parking Guard function, to power the camera and protect your vehicle while vehicle parking.

The Parking Guard Power Kit will incept the DC12V/24V power from cigar charger, convert to 5V to power cameras and re-charge attached power packs (support CC2.0 and QC3.0) at the same time; when the vehicle parked, the Power Kit will shift to incept power from power packs to power camera and provide parking signal.

There is cut off delay function which can be set to hours or continuous to power pack drain. The Parking Guard Power Kit support dual output to cameras or portable devices and support dual power packs to maximize the protection, with a most simplified installation.



#### Can't record a video or take photo?

Please check if there is enough storage space on the microSD card, or if all the files are protected (read-only attribute).

#### Camera stop record and turn off?

Please use a high speed microSD card class6 at least, because the data stream (bit rate) of high definition video is huge, it is a big challenge for low quality card.

#### "File Error" prompt while playback a video?

The camera use a super capacitor as backup battery to save the last video when engine stop, it can only power the camera for seconds; the capacitor need half hour to recharge to full. If you power on & off the camera frequently there is not enough power in capacitor so the last file will be corrupted. The File Error problem may happen after continual short driving.

#### Image is blurred?

Please check if there is dust, fingerprint or something else on the lens; use the lens cleaner to clean the lens before using.

Please remember to remove the lens protecting film before first using.

And please notice the definition will be effect by extreme temperature, there will be definition decrease when the camera inside temperature reach  $70^{\circ}C(158^{\circ}F)$  at the meantime the vehicle air temperature is  $40^{\circ}C(104^{\circ}F)$ . Please refer the temperature cure chart.

#### Horizontal stripes on image?

Please adjust the setting of FLICKER depends on the local power supply frequency with 50Hz or 60Hz.

#### Recording not stop?

That is the MOTION DETECTION working, please cover the lens to black then press OK button to stop, then you can get into SETTING or PLAYBACK mode.

When the MOTION DETECTION is ON, the camera will auto start recording when a moving object appears in the range of camera view; when the motion ceases the recording will stop automatically until next motion appears. It is not easy to turn Motion Detection function off with the camera in hand unless cover the lens.

#### Camera automatically re-boot?

Please check the power supply in advance. It is recommended to use the attached cigar charger in packaging box which provide enough power. The temperature protecting function will auto shut down the camera if the mainboard is too hot and auto boot up when it is cooling down. And the drain protecting of Parking Guard hardwire kit will cut off power supply also, when it detected the which battery voltage is lower than setting value, you may set the protecting voltage lower.

#### Camera can't power on?

Please check the power supply in advance. It is recommended to use the attached cigar charger in packaging box which provide enough power. And you may check if it can power on without rear camera. Please make sure the reset button is not presskhold which will block the camera power.

#### Any maintenance should be performed?

The camera record videos in high bit rate so there will be file segments created on microSD card after long time recording & overwrite; Please re-format the microSD card monthly to keep the file system tidy. Please remember to backup the important files to computer before format operating.

#### Occasional not responding?

Please use the top RESET button to reset the camera temporarily, then submit the working condition and related files to <u>service@mini0906.com</u> so we can find out what happened then maybe debug the firmware.

It is recommend to do a RESTORE DEFAULT settings to check out again.

#### More questions?

Please feedback on www.mini0906.com or mail to service@mini0906.com



### MINI DASH CAMERA

#### **MORE THAN A DASH CAMERA**

## mini**0906**