

Manual design by The Leonardo Communication Consultancy a Starling May International Company Shenzhen, China www.stmax.com.cn



Please read this manual carefully before using your camera, and keep it for future reference.

IMPORTANT: Please register your camera to receive firmware updates: www.amacam.net For technical support please contact us at support@amacam.net



OFF, ON AND STANDBY

To turn on manually press the power switch. To turn off manually press the power switch for 2 seconds.

The camera also:

- turns on automatically and starts recording when it first receives power, such as when the car engine is started,
- stops recording and turns off when it loses a source of
- power, such as when the car engine is stopped, stops recording and turns off when the internal battery becomes discharged if there is no external power supply.

Standby: The camera is in Standby mode when it is on but not recording



RECORDING

RECORDING VIDEO

The camera auto-starts recording when it receives power, such as when the car engine is started.

It auto-stops recording when it loses power, such as when the

When the camera is in Standby mode, press the OK button to

When the camera is recording, press the OK button to stop $% \left(1\right) =\left(1\right) \left(1\right) \left($

Mute recording: When the camera is in Standby or Recording modes, press the UP button to mute the microphone. Press the UP button again to cancel the mute status.

TAKING A STILL PHOTO

When the camera is in Standby mode or recording, press the OK button for two seconds to take a photo.

MANUAL PROTECT OF VIDEO

The camera will over-write the oldest video with new recording when the card is almost full, unless the video is protected. You can manually protect the video by pressing the DOWN button. Hold the DOWN button to cancel protected status.



STANDBY AND RECORDING SCREEN

PLAYBACK OPTIONS

CAMERA PLAYBACK

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

When the camera is in Playback mode, hold the DOWN button to return to Standby mode.

When the camera is in Playback mode you can select a photo or a section of video that you want to view by:

- pressing the UP and DOWN buttons,
- then press OK to view,
- · hold the UP button to activate the menu:

FILE PROTECT OPERATION **AUTO PLAY DELETE FILE**

And then press UP and DOWN buttons to choose and press OK to perform the action.

TV PLAYBACK, STANDARD OPTION (HDMI)

When the camera is connected to a TV with a HDMI cable the camera screen will automatically turn off and transfer the display to the TV.

A customized AV-out cable is available as an optional accessory and may be plugged in to the micro $\dot{\text{USB}}$ port on the camera.



PLAYBACK SCREEN

COMPUTER PLAYBACK

USB connection: You can connect the camera to a computer with the supplied USB lead. The computer will recognise the camera as an external mass storage device.

microSD card reader: A microSD card will allow view of .mov files.

IN-CAR PLAYBACK

A customized AV-out cable is available as an optional extra for Playback on the car DVD/navigation display.

CUSTOMIZING THE CAMERA SETTINGS



You can leave the camera in its default settings or you can customize the settings. When the camera is in STANDBY mode, hold the UP button to enter the settings menu.

Use UP and DOWN buttons to scroll through the menu and press OK to select.

Then press UP and DOWN buttons to choose the setting. Press OK to confirm and exit.

Hold the UP button at any time to cancel.

Here you can manually adjust image brightness, using a scale from -2.0 to +2.0.
AUTO, SUNNY, CLOUDY, TUNGSTEN, FLUORESCENT This improves color balance to match different lighting conditions.
AUTO, 60HZ, 50HZ You can set the flicker frequency to match your local AC power frequency and reduce the effect of flickering lamps. You can set to AUTO if you do not know the frequency.
ON, OFF You can mount the camera upside-down in your car, and this setting will rotate the image so that it appears the right way up during playback.
5MIN, 3MIN, 1MIN, OFF The camera will automatically 'loop' - that is, it will record over previous recording when the card is full. It will divide video into segments, and you can choose segment length. If you require continuous video without segments then please set this to OFF, but be aware that the maximum video file size is 4GB.
ON, OFF The camera will provide a warning when it detects lane departure, including planned lane changes. Here you can define the speed above which the LDWS system becomes active.
This optimizes the LDWS system. Use the UP and DOWN buttons to move the top line to the height of the horizon and the bottom line to the height of the front of your car.
Motion Detection reduces memory storage requirements. The camera auto switches to STANDBY when no motion is detected. It remains in STANDBY until motion above a selected threshold is detected. It then records until 15 seconds after the motion stops. Here you can set the threshold.
ON, OFF
GPS STATUS, MIC STATUS, OFF
4.5G, 4.0G, 3.5G, 3.0G, 2.5G, 2.0G OFF Here you can set the impact detection sensitivity.
SMIN, 3MIN, 1MIN, OFF
5MIN, 3MIN, 1MIN, 30SEC, 15SEC. OFF

GPS STAMPING	ON, OFF, LOG ONLY Records GPS data.
SPEED STAMPING	MPH, KM/H, OFF Records driving speed and shows this on video playback. (GPS STAMPING should be set to ON or LOG ONLY to allow this.
DRIVER NUMBER STAMPING	ON, OFF Records driver identity and shows this on video playback.
DRIVER NUMBER	UP: ENTER AND CHANGE A NUMBER DOWN: ENTER AND CHANGE A LETTER Allows driver identity to be entered.
DATE STAMPING	YYMMDD, MMDDYY, DDMMYY, OFF Records date and shows this on video playback.
TIME STAMPING	12 HOUR CLOCK, 24 HOUR CLOCK, OFF Records time and shows this on video playback
DATE AND TIME	USE OK TO MOVE THROUGH THE DATE AND TIME AND UP OR DOWN TO MAKE CHANGES. When receiving data from GPS satellites date and time are automatically updated. You can override this with manual setting Display: Oltime zone) 2018 / 11 / 11 (date) 12:12(time) The time zone, corrected for daylight saving time, should be set so that the GPS signal can correctly update the time.
LANGUAGE	ENGLISH, PYCCKUM

FORMAT CARD	YES, NO
RESTORE DEFAULTS	YES, NO
FIRMWARE VERSION	DISPLAY CURRENT INSTALLED FIRMWARE
VIDEO RESOLUTION	1920X1080 30FPS 16:9, HDR 1920X1080 30FPS 16:9, 1280X720 60FPS 16:9, 1280X720 30FPS 16:9, 2560X1080 30FPS 21:9 (cinema mode), 2304X1295 30FPS 16:9, 1920X1080 45FPS 16:9 Note that using higher resolution requires more memory storage.
VIDEO QUALITY	SUPERFINE, FINE, NORMAL This affects factors including grain, sharpness and contrast. Note that using higher quality requires more memory storage
PHOTO RESOLUTION	4M (2588X151216:9), 9M (4000X2250 16:9), 13M (4800X2700 16:9)
PHOTO QUALITY	SUPERFINE, FINE, NORMAL This affects factors including grain, sharpness and contrast. Note that using higher quality requires more memory storage
AUTO EXPOSURE METERING	CENTER, AVERAGE, SPOT This affects factors video brightness. CENTER is recommended if there is no special requirement.

MOUNTING and CONNECTIONS

The camera is designed for quick and easy mounting to your windshield using a sticker pad

- 1 Fit the camera in the mounting bracket with the power cable connected to either the mounting bracket or the camera itself.
- 2 Simulate use of the camera on your windshield to find the best mounting location. We recommend placing it at the center of the windshield, just behind the mirror. That is the most discrete location, and will not interfere with driving vision
- You may need to fit wedges (supplied) if you want to mount other than at the center of the windshield. Screw the wedges to the mounting bracket or use the VHB pads. The two wedges supplied offer angles of 2° and 4°, and can be used singly or together to create a total angle of 6°.





- 4 Stick the sticker pad to the mounting bracket or wedges, and attach to your windscreen. Hold in place for a few seconds to ensure good adhesion.
- 5 Turn on the camera and check its display again

When you want to demount the camera just slide it out of the mounting bracket. There is no need to take the mounting bracket

When you want to remove the mounting bracket from your windshield use a thin cord with a sawing motion to cut between the sticker pad and the windshield. You can remove adhesive residue with 'WD-40' spray. Please don't use a rigid crowbar or similar since this may damage the mounting bracket or the windshield.

VHB sticker pads microSD card slot HDMI socket pads for installation of power cable cooling holes microUSB port microUSB port mount mounting contacts microphone holes Reset button

POWER CONNECTION, standard option

The camera must be operated with an external power supply, which is provided by the car during normal recording.

Use the supplied lead for connection to a cigar lighter socket. This is the simplest method of connection, but means that the cigar lighter socket is not available for other purposes.



POWER CONNECTION, accessory option

You can buy a Hardwire Kit as an optional accessory. This allows direct connection to the car fuse console, and provides the most convenient and fixed method of stowage of the cable itself. We advise that the Hardwire Kit should only be fitted by a professional



BOX CONTENTS

- · dash camera
- · GPS logging mounting bracket
- 2° and 4° angle mounting wedges wedge mounting screws
- power lead for cigar lighter socket
- USB cable
- cable clips
- sticker pads

SYSTEM REQUIREMENTS

- · Windows XP or later or MAC OS10.1 or later
- Intel Pentium 4, 2.8 GHz CPU or above (recommended
- at least 2GB RAM (recommended 4GB)

UPDATING

• internet connection (for GPS log playback)

SPECIFICATION

- 4MP CMOS image sensor
- · 135° angle view field, F2.0 aperture
- 1.5 TFT LCD screen
- cinema mode recording 2560 x 1080px; screen size ratio 21:9; 30 frames per second
- super HD recording 2304 x 1296px; screen size ratio 16:9, 30 frames per second • full HD recording 1920 x 1080px; screen size ratio 16:9; 45
- frames per second
- · HD recording 1280 x 720px; screen size ratio 16:9; 60 frames
- H.264 coding MOV file recording
- · built in 3.7 V, 200 mAh Li-polymer battery

The camera supports:

- microSD card 128GB high dynamic range boost
- GPS route logging
- G-sensor file protectionSOS manual file protection
- parking guard (with parking guard mounting bracket) movement detection
- · lane departure warning system forward collision warning system
- · upside-down mounting • HDMI output to TV and optional AV-out
- circular polarizing filters
- 160° rotation and 6° offset

PRECAUTIONS

To update the camera to the latest operating system (firmware) go to: www.amacam.net

Extract the FIRMWARE.BIN file to the root folder of your microSD card.

Insert your card into the camera and power ON. The camera will auto-examine the FIRMWARE.BIN file and popup a confirmation dialog box.

Press the UP or DOWN button to choose YES and press OK

The camera will auto shut down when updating is complete.

Do not expose the camera to:

· dust or sand. These can damage the lens and the camera components.

 high or low temperatures. Normal operating temperature is 0°C to 40°C (32°F to 104°F).* • strong sunlight (especially when using Motion Detection)*

- · damp and cold. Freezing, and thawing, of water can cause damage.
- impacts such as from dropping the camera excessive vibration
- strong cleaners (including cleaning solution and high concentration detergent) and chemicals. Use only a slightly damp cloth for cleaning.

*Note that extreme temperatures can be achieved in parked cars in direct sunlight.

Do not dismantle or open the casing. This may result in electric shock as well as damage to the camer

TROUBLESHOOTING

Can't record video or take picture?

Check that there is enough storage space on the microSD card, or if you have Loop T Recording switched on that the files are not

Camera stops recording occasionally?

The data stream of HD video is huge, so please use a high-speed Class x or Class 10 microSD card that is compatible with SDHC.

• 'File Error' message when you want to play back?

Please use the FORMAT CARD Menu to format the microSD card. (Please use a computer to format the card to FAT32 if it is bigger than 32GB.)

• No image display on TV/DVD screen?

Please check that the AV, HDMI cable is connected correctly, and the TV/DVD is set to the correct AV, HDMI mode.

The image is blurred?

Maybe the lens or windshield is dirty. Use lens cleaner for the lens. Please remember to remove the lens protecting film before first

• Power indicator doesn't work?

If the power supply is less than 600mA current then the camera can't be charged and the power indicator won't work.

• Image has interference with horizontal stripes?

This is due to the wrong setting of FLICKER. Use the SETTINGS menu to reset to match your power supply frequency.

Camera doesn't auto start recording when the car engine is started? Auto start will not work when LOOP RECORDING is OFF. Use the SETTINGS menu to switch to 1/3/5 minutes. Also, please check whether

• The camera continues automatic recording and won't stop?

Maybe the camera is in MOTION DETECTION mode. When MOTION DETECTION is on the camera starts recording when there is a moving object within its range. When the motion stops, the camera will automatically stop recording until it detects new motion. Note that it is difficult to turn MOTION DETECTION off with the camera held in your hands.

• AUTO POWER OFF setting doesn't work?

Please ensure that MOTION DETECTION is turned off. If it is on then the camera remains in STANDBY mode and will start recording when a moving object is detected. It will not auto shut down until the power goes off.

• The camera has locked and does not respond to button presses? Remove the camera from the mount or turn off the power. Hold the power button for 20 seconds. The camera will auto reset.

More questions?

Please get help from www.amacam.net You can also email us at: support@amacam.net