



GV-LPR CAM V2.0 Installation Guide

Before attempting to connect or operate this product, please read these instructions carefully and save this manual for future use.

Models

The GV-LPR CAM gives a 570TVL high-contrast license plate recognition video to the GV-LPR software that identifies license plates. The camera features 24 high-efficient LEDs for an illumination range of 30 meters. The camera also features a weather-sealed IP66-compliant housing with the heater and blower inside. This installation guide will take you through the functionality and use of the GV-LPR CAM.

List of Models

Model	IR Optimal Distance	Video Format
GV-LPR CAM 20M EIA DC12V	20 m / 65.61 ft	NTSC
GV-LPR CAM 20M CCIR DC12V	20 m / 65.61 ft	PAL

Packing List

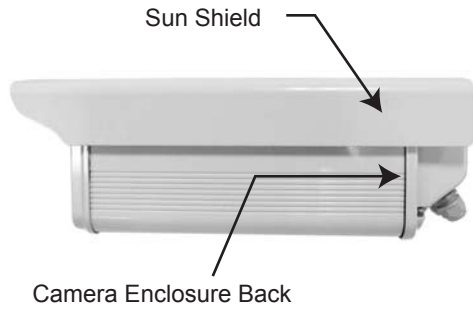
- AC Power Cable (110-125V, 10A) x 1
- Power Adapter (100-240V, 12V/5A) x 1
- Outdoor Mounting Bracket x 1

Specifications

Model	GV-LPR CAM 20M EIA DC12V	GV-LPR CAM 20M CCIR DC12V
Sensor	1/3" B/W EXview CCD	
Heater	≤ 5°C (ON) , > 5°C (OFF) ; 20W	
Resolution	570 TVL	
Construction	Robust aluminum with weatherproof sun-shield	
Protection classification	IP 66	
Temperature	Operation: -30°C ~ 50°C / -22°F ~ 122°F Storage: -30°C ~ 70°C / -22°F ~ 158°F	
LED Quantity	24 high-efficient LEDs	
IR Distance	30 m / 98.43 ft 20 ± 5 m / 65.62 ± 16.4 ft (optimal)	
Illumination View Angle	30°	
Illuminator Life	25,000 hrs	
Power Supply	DC 12V	
Power Consumption	30W (normal), 50W (heater on)	

Installing Camera Module

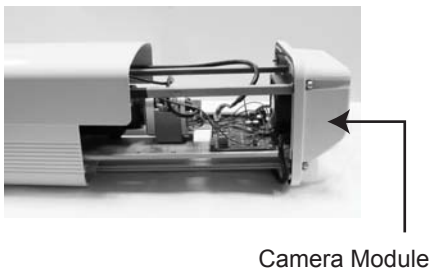
1. Push the sun shield forward to align with the back of camera enclosure.



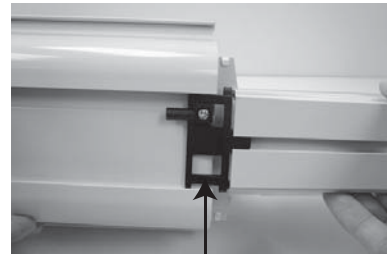
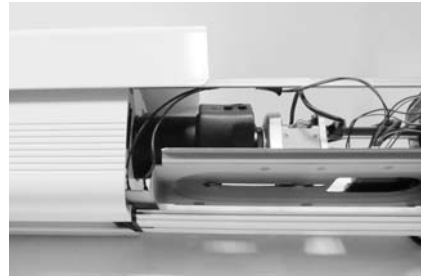
2. Loosen the set screws on the back of the camera enclosure.



3. Pull out the camera module.



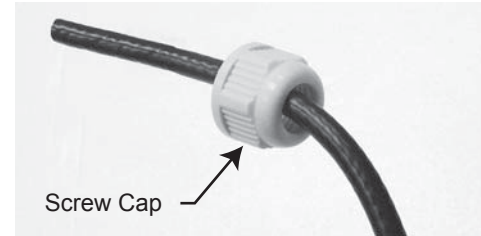
4. Slightly lift the camera module and slide it out completely.



5. Loosen the screw cap on the left.



6. Insert the video cable through the screw cap.



7. Attach the video cable to the BNC connector and plug it into the "VIDEO OUT" jack.



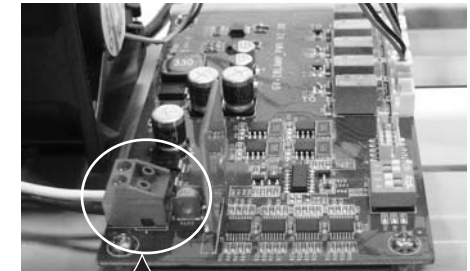
8. Adjust the length of the video cable and then tightly screw the cap.



9. Loosen the screw cap on the right, insert the power cable through the screw cap.



10. Remove the terminal block. Plug black and white wires of the power cable to the terminal block. Reinsert the terminal block onto the camera. The white wire is required to connect to the positive pin (+) on the camera and the black wire to the negative pin (-).



11. Adjust the length of the cable and then tightly screw the cap (see Steps 8 for the pictures).

Adjusting Camera Settings

Overview



No	Function
1	Auto Iris lens connector
2	Video out
3	Power Terminal (It is already connected. Follow Steps 11 to 12 in <i>Installing Camera Module</i> to insert the Power Cable.)
4	Moves down the OSD menu.
5	Moves the focus rightward to select menu options.
6	Power LED
7	Moves up the OSD menu.
8	Enters the OSD menu option and confirms the selection
9	Moves the focus leftward to select menu options.

Shutter Speed

See the lists below for shutter speed settings.

Distance between the object and the camera is 550 cm (18.04 ft).

165 SEC
182 SEC
183 (*) SEC
184 SEC
185 SEC
225 SEC

Distance between the object and the camera is 1100 cm (36.08 ft).

145 SEC
150 SEC
155 SEC
170 SEC
180 SEC
200 SEC

Notes:

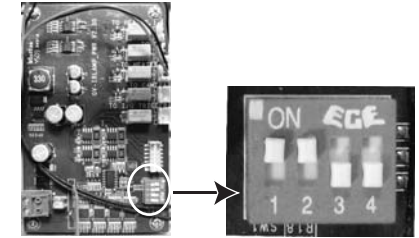
- The default settings are marked with (*).
- The gray areas in the charts are not recommended for use.

LED Brightness Settings

The GV-LPR CAM is designed with 24 high-efficient LEDs which you can adjust the brightness. You can push up (ON) and down (OFF) the switches of SW2, SW3 and SW4 for LED brightness settings. See the table below for 8 LED brightness setting values.

Note: The factory default setting of SW1 is ON. If you find the images of license plates captured in the day time or sufficient lights are unclear, check the SW1 and make sure it is switched to ON.

	SW2	SW3	SW4	LED Brightness (mA)
1	ON	ON	ON	470 (Default Setting)
2	ON	ON	OFF	400
3	ON	OFF	ON	350
4	ON	OFF	OFF	300
5	OFF	ON	ON	250
6	OFF	ON	OFF	200
7	OFF	OFF	ON	150
8	OFF	OFF	OFF	100



OSD Menu Options and Functions

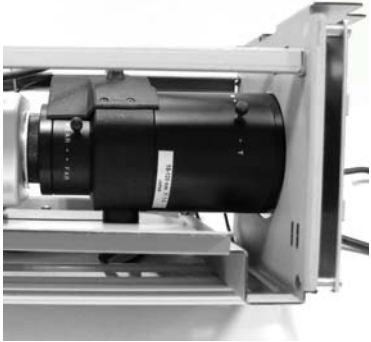
Main Menu	Sub Menu	Function	Default Setting
LENS	MANUAL	Manually adjust the camera lens.	✓
	DC	Press SET to adjust the lens brightness.	-
SHUTTER	FIXED	Includes these options: 1/60, 1/100, 1/250, 1/500, 1/2000, 1/5000, 1/10000, 1/100000.	1/500
	MANUAL	Press SET to manually adjust the shutter speed.	-
	AUTO	Not available when the LENS is set at DC.	Brightness: 70
BLC (Backlight Compensation)	OFF	Turn off BLC function.	✓
	ON	BLC AREA Press SET to configure the areas. BLC RATIO Press SET to adjust the sensitivity values.	- -
AGC (Automatic Gain Control)	OFF	Turn off AGC function.	✓
	ON	Press SET to adjust the AGC ratio values.	-
WHITE BAL. (White Balance)	ATW	Auto Tracking White Balance	✓
	AWB	Automatic White Balance	-
	FIXED	Press SET to select the mode from 1 to 4.	-
ADJUST	MANUAL	Press SET to adjust Red and Blue gain.	-
	CONTRAST	Adjust the Contrast from values 0 to 255.	87
	SHARPNESS	Adjust the Sharpness from values 0 to 255.	10
	CB_GAIN	Adjust CB_GAIN from values 0 to 255.	176
FUNCTION	CR_GAIN	Adjust CR_GAIN from values 0 to 255.	176
	CMAERA ID	Press SET to name the camera.	OFF
	MIRROR	Select ON to reverse the image.	OFF
	MOTION	Select ON and press SET to configure MOTION areas.	OFF
	PRIVACY	Select ON and press SET to configure PRIVACY areas.	OFF
RESET	GAMMA	Adjust the gamma values to control brightness. Higher gamma value shows darker images.	1
	LANGUAGE	Press SET to change the language setting of OSD menu options.	English
RESET	-	Press SET to restore to the factory defaults.	-
EXIT	-	Close the OSD menu.	-

Note: The factory default GAMMA value is set to be 1. It will be adjusted to 0.45 every time when you select RESET. For optimal image performance, it is recommended to adjust the GAMMA value to 1.

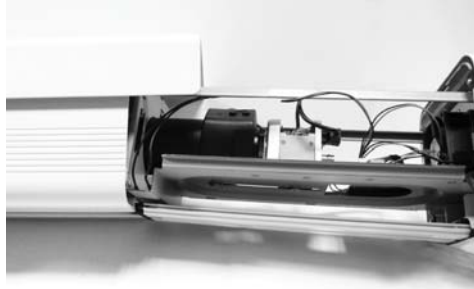
Installing Camera Enclosure

After the installation of camera module and settings adjustment, you are now ready to install the camera enclosure back.

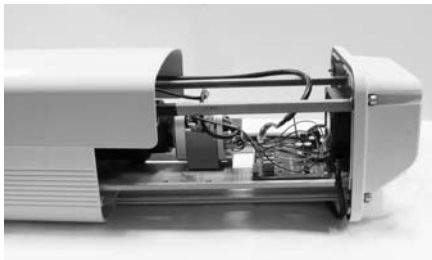
1. Adjust the lens focus.



2. Lift the camera module.



3. Align the camera module to the camera enclosure and slide it back.



4. Secure the camera enclosure with the screws on both sides.



5. Push the sun shield back.



9F, No. 246, Sec. 1, Neihu Rd.,
Neihu District, Taipei, Taiwan
Tel: +886-2-8797-8377
Fax: +886-2-8797-8335
sales@geovision.com.tw
<http://www.geovision.com.tw>