# Rooftop type 360° camera PLC220-12M-M

# **Quick Manual**

# **OPT** Corporation

# Magnet installation type



- 1. Operational Environment
  - OS: Windows 8.1 / Windows 10 /Windows 11
  - PC: to be performed with the above OS

Environment: Temperature :  $-20^{\circ}C_{+} + 50^{\circ}C_{1}$  Humidity :  $\sim 80^{\circ}Rh$ 

#### <Caution>

The magnet of this product has a strong adsorption force, so if you carelessly bring it close to an iron plate, it will stick. When doing so, be careful not to get your hands or fingers caught and injured. Also, when taking off the stuck magnet, use gloves to protect your fingers, then hold the dome housing of this product with both hands and take it off. The magnet of this product is a super-strong type, so it emits a strong magnetism. Keep away from objects affected by magnetism, such as watches and magnetic cards.

#### 2. Installation

- (1) Place the camera on a flat surface on the car.
- Please install the product on a flat place on the roof of the vehicle so that the product is horizontal.
- If you install this product on a curved surface, the magnet that secures this product may not be sufficiently attracted, which may cause the product to fall or be damaged.
- $\boldsymbol{\cdot}$  The orientation of the camera does not matter. Install in a direction that

does not bend the cable.

 $\,\,\%\,\,$  Orientation of the view can be adjusted by the application software.

- After installation, the camera does not move at all due to the force of the magnet. Please note that if you try to move it sideways forcibly, you may damage the vehicle body.
  - Hold the camera at the part where the cable comes out and the part on the opposite side of 180 degrees with both hands and align it with the mounting position.



② While releasing the hand holding the part on the opposite side of the cable

(2) in the photo on the right), slowly attach the end face of the magnet to the vehicle roof. At this time, the cable side is still holding. The camera is tilted. (Please refer to the photo on the right.)

③ Gradually let go of the hand holding the cable side and slowly attach the entire magnet to the roof of the vehicle.

Note: Please be careful not to get your hands or fingers caught between the magnet and the vehicle roof.

- When removing the camera, firmly hold the dome housing with both hands, and tilt the opposite side of the camera cable as a fulcrum to peel it off. Note: Please be careful not to pinch your fingers under the camera.
- (2) Pull the camera cable (USB cable) into the car.
- The camera cable (USB, 5m) serves as power supply and image transmission.
- Leave the camera cable inside the vehicle through the gap in the window or the gap in the door gasket. Do not get caught in the metal part of the door.
- It is recommended to simply fasten the camera cable on the roof with tape or clamps so that it does not flutter while driving.
- $\cdot\,$  Be careful not to bend the camera cable or damage the coating.
- The USB connector of the camera cable is not waterproof. Please be careful not to get it wet.
- $\cdot\,$  Connect the USB connector (Type-A) to the USB port of the PC in the car.

The following explains how to view images on a PC.

- 3. Live View (For details, refer to the PLCViewer instruction manual.)
- Open the camera viewer application software (PLCViewer). (1)
  - ① Copy the [PLCViewer.exe] execution file from the attached CD or the sales company's website to any folder on the PC. 0
  - ② Double-click the icon of the PLCViewer.exe.
  - ③ When started, the following main screen will be displayed.



# (2) Display the live view

① CAM: device – click the right  $\checkmark$  to select a camera from the pull-downmenu. As a rooftop camera, select "PLC220-12M".

Camera	Movie   Picture					
CAM : pevice						
RES : 0:PLC220-12M						
,						

② RES: resolution – click the right  $\checkmark$  to select a suitable resolution of the camera from the pull-down-menu.

Camera		Movie	Picture			
CAM :	0:PLC220-12M					•
RES :	Resolution				•	
	MJF	PG 4032	x3040			
	MJF	PG 2592	x1944			
	MJF	PG 1600	x1200			
l	MJF	PG 640x	480			

As an example, MJPEG 4032x3040 is selected in the right figure.

- ※ Resolutions will appear after the device was selected.
- ③ Click [LIVE] button starts indicating the live view and the button will be changed into [Stop].

For further operation, please refer to the PLCViewer instruction manual and use it correctly. Downloadable from our home page:

# http://www.optnagano.co.jp/EN/product/UM.html

(3) Recording

① Record the live movies (.AVI file)

If the [AVI Record] button is clicked and checked I during live video is displaying (i.e. shooting), the video will be recorded. While recording, "Recording" is displayed on the right side of the [Picture] tab.

To end the recording, click the [AVI record] button again (the check is removed) or click the [Stop] button to stop the video display.



- ② Recording the still images (.jpg or .BMP file)
  - When the  $[\Box]$  PG 1 shot] button is clicked while the image is being displayed, a Icheck will be entered, and one raw fisheye image will be saved as a still image, and the  $\Box$  check will be removed.
- If the [BMP] button is clicked while the image is being displayed, one displayed image will be saved as a still image.
- ③ The recorded video is saved in the working folder of PLCViewer.exe (usually the same folder with PLCViewer.exe) with "Year/Month/Day\_ Hour/Minute/Second millisecond.xxx".
- 4. Exit the shooting

To exit, click the [×] button on the main screen, or click [Save] or [Cancel]. Please refer to the instruction manual for each operation.