# **User Manual**



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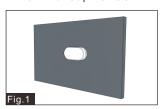




#### CA112 Camera

Ca112 Left Side/Right Side Camera Package Contents:

- 1. Manual
- 2. 3dBi 2.4G Antennas x 2PCS
- 3. 410 self-tapping self-drilling screws M4.2\*19mm (10PCS)
- 4. Terminal Cap x 8PCS



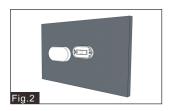


Figure 1/Figure 2 Remove Marker Light From vehicle



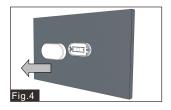
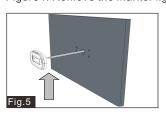


Figure 3: Unscrew the LED Marker Light Figure 4: Remove the marker light and pull out the cables



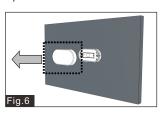
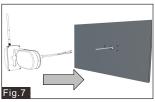
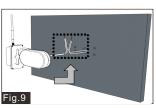
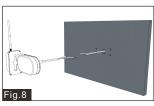


Figure 5: Cutting the cables by a plier

Figure 6: Stripping the cables to expose the conductive core







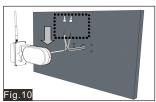
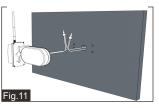


Figure7/Figure8/Figure9: Ensure correct polarity when wiring the cables. Red + Black -



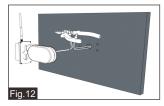
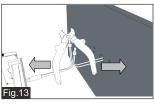
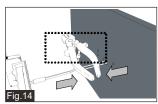


Figure 10/Figure 11: Wire connections and terminals must be sealed and waterproof.







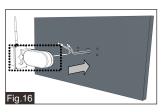
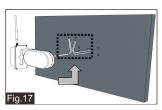
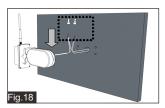
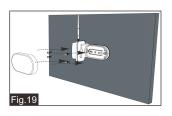


Figure12/Figure13/Figure14/Figure15: Clamp the terminal tightly to make sure they are sealed and waterproof.

Figure 16: Put the wires and terminals into hole and align the camera to screw holes.







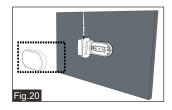


Figure 17/Figure 18: Remove the LED cover by straight screwdriver Figure 19: Secure the LED base on the vehicle wall using the four self-tapping screws.

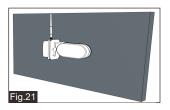
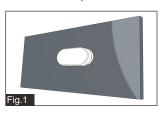


Figure 20/Figure 21: Replace the LED cover. Installation done.

#### CA115 Camera

CA115 Rear Light Camera Package Contents:

- 1. Manual
- 2. 3dBi 2.4G Antenna x 1PC
- 3. PB Stainless steel flat tail screws M2.6\*8mm (5PCS)
- 4. PA Stainless steel Philip's head screw M4\*18 (6PCS)
- 5. Terminal Cap x 4PCS



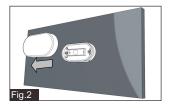






Figure1/Figure2/Figure3: Remove Rear Light From vehicle by straight screwdriver



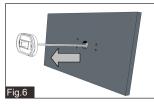
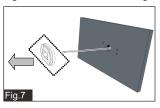


Figure 6: Remove the rear light and pull out the cables



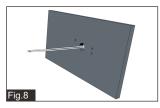
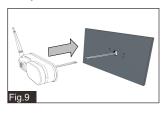


Figure7/Figure8: Cutting the cables by a plier and stripping the cables to expose the conductive core



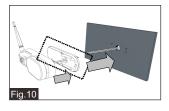
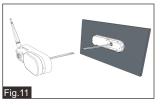


Figure 9/Figure 10/Figure 11: Secure the rear light camera base on the vehicle wall, aligning to the pre-install mounting holes.



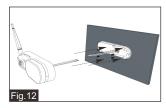
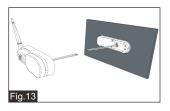


Figure 12/Figure 13: Secure the base with four provided screws.



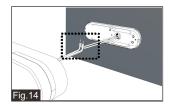
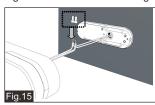


Figure 6: Remove the rear light and pull out the wires



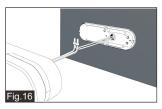
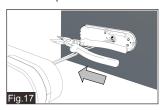


Figure 15/Figure 16: Wire connections and terminals must be sealed and waterproof.



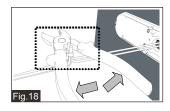


Figure 17/Figure 18/Figure 19: Clamp the terminal tightly to make sure they are sealed and waterproof.



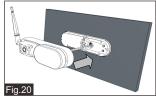
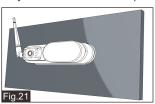


Figure 17/Figure 18/Figure 19: Clamp the terminal tightly to make sure they are sealed and waterproof.



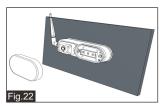
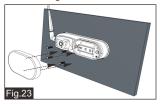


Figure 20/Figure 21: Put the wires and terminals into hole and fasten the rear light camera into base.



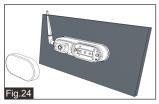


Figure 22/23: Remove the cover of rear light camera and secure the base with four provided screws.

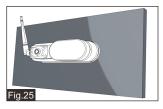


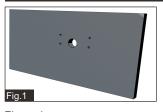
Figure 24/Figure 25: Replace the cover. Installation done.

#### CA116 Camera

CA116 Rear Camera Package Contents:

- 1. Manual
- 2. 3dBi 2.4G Antenna x 1PC
- 3. 3.5mm to DC power cable x 1PC
- 4. DC power cable to 2P wires x 1PC
- 5. PB Stainless steel flat tail screws M3\*10mm (5PCS)
- PA Stainless steel Philip's head screw M4\*18 (5PCS)
- 7. Magnet Mount x 1PC (optional)
- 8. Torx screw 1PCS (optional)
- 9. Metal plate with 3M tape x 1PC (optional)

#### **CA116 Installation**



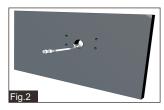


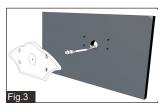
Figure1:

Select a suitable mounting position and drill a center hole on the vehicle wall.

#### Figure2:

For prewired trailer and fifthwheel, plug the 3.5mm to DC power cable. For unprewired trailer and fifthwheel, wire the DC to 2P cable with the vehicle circuit. Ensure correct polarity when wiring the cables.

#### Red + Black



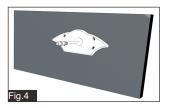
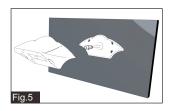


Figure 3/Figure 4: Feed the supplied power cable through gasket. Ensure the bare end of the cable goes into the vehicle and the flat side faces inward.



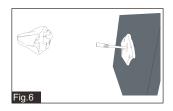
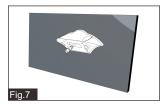
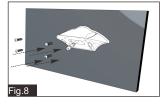
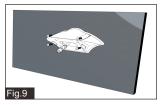


Figure5/Figure6/Figure7:
Fix the gasket and bracket to the vehicle Figure8, make sure the power cable is not wrapped or extruded.







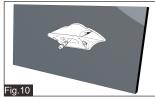
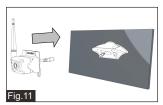
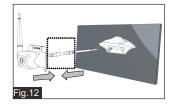
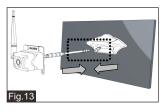


Figure 8/Figure 9/Figure 10: Make sure the sealing lip around the edge of the gasket is seated over the edge of bracket before fully tightening the provided screws.







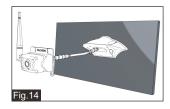
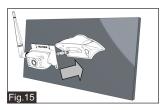
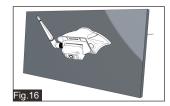
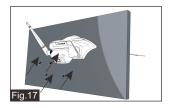


Figure 11/Figure 12/Figure 13/Figure 14: Pull out the power cable. Connect the 3.5mm to DC power cable. Connect the power cable to camera cable.







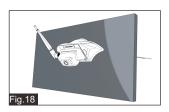


Figure 17/Figure 18: Secure the camera on bracket housing with provided screws. Make sure the connections and the camera antenna are secured tightly.

#### **CA116 Installation without drilling holes**



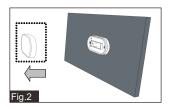
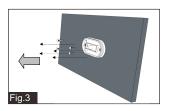


Figure 1/Figure 2: Remove LED From vehicle by straight screwdriver



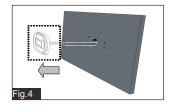
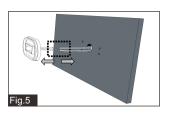


Figure1/Figure2: Remove LED From vehicle by straight screwdriver



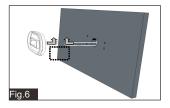
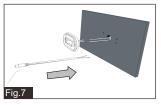


Figure5/Figure6: Cutting the cables by a plier and stripping the cables to expose the conductive core



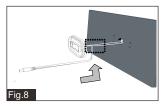
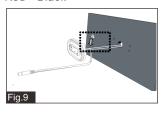


Figure7/Figure8: Ensure correct polarity when wiring the cables. Red + Black -



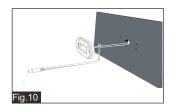
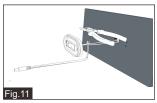
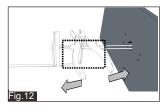


Figure 9/Figure 10: Clamp the terminal tightly to make sure they are sealed and waterproof.





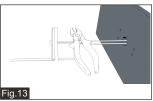
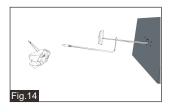
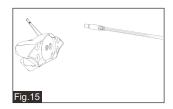
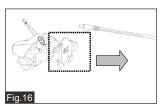


Figure11/Figure12/Figure13: Wire connections and terminals must be sealed securely and waterproof.







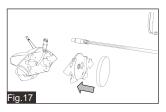
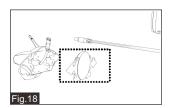


Figure 14/Figure 15/Figure 16: Take out the base from bracket housing.



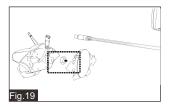
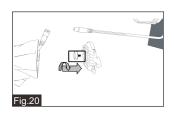
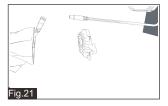
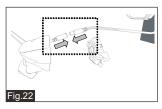


Figure 17/Figure 18: Insert magnet into base







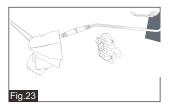
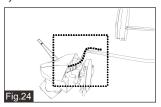


Figure19/Figure20/Figure21/Figure22: Lock the magnet with bracket by torx screw.



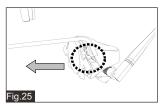
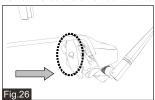


Figure 23/Figure 24: Connect the power cable to the camera cable. Bend the cable and tuck it into bracket housing.



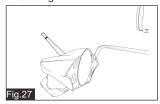
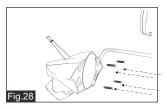
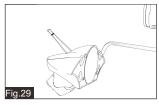


Figure 25/Figure 26: Remove the hole shield on the bracket base. Pull cables through the hole.





 $\label{lem:figure27} Figure 28: Secure the bracket housing and base with four provided screws.$ 

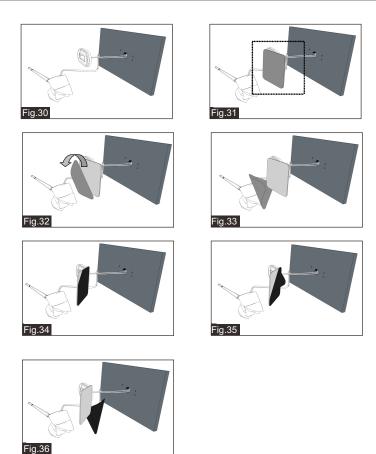
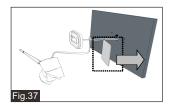


Figure 31/Figure 32/Figure 33/Figure 34/Figure 35/Figure 36: Remove the protector of metal plate and 3M tape.



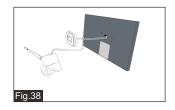
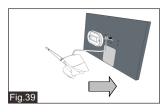
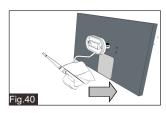


Figure 37/Figure 38: Stick the metal plate on flat surface of vehicle







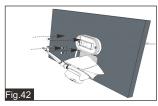


Figure 39/Figure 40/Figure 41: Adsorb the camera on metal plate Figure 42: Put the LED back and secure it with screws.

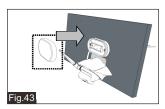




Figure 43/Figure 44: Replace the cover of LED. Installation done.

### **Connecting the Camera**

#### Warning

When connecting wires, ensure the circuit is isolated by disconnecting the negative terminal on the battery.

- Ensure correct polarity when wiring the cables. RED + BLACK -.
- Wire connections and terminals must be sealed and waterproof.

The haloview camera system can be connect to an electrical power source via a 7 way connector

#### Wiring to running lights:

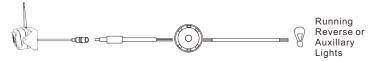
the camera will active when the running lights are switched on.

#### Wiring to reverse lights:

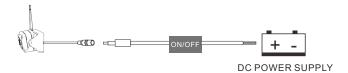
the camera will active when the vehicle engages reverse gear.



Consult the vehicle's service manual for specific wiring color code.

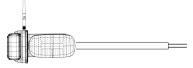


When wiring this camera directly to a 12V battery or converter in your RV, use an in-line switch on the power cable to power on or off your camera. This will enable this camera to be used when parked without a tow vehicle connected.



### **Connecting the Traffic Light**

Route the power cable to the vehicle's 12/24V running light. The cable must not interfere with the safe operation of the vehicle.



#### Care and Cleaning

Though your monitor requires little care, you will still need to maintain its condition and performance by following the guidelines below.

- Keep your system away from excessive moisture, extreme heat or cold.
- Keep liquids away from the display.
   Occasionally clean the surface of the monitor with a soft cloth moistened with water or glass cleaner.

Only clean the unit with a dry cloth. Do not clean the unit with strong chemical agents or abrasive cleaners. Never spill liquid of any kind on the product. Do not allow residue or liquids to enter any part of the appliance as this may cause rist of electrocution. Always disconnect from the mains before cleaning.

**CAUTION:** Never use solvents such as benzene, thinner or cleaners avaitable commercially to clean the system.

## CAMERA SPECIFICATION

Image Device	1/4" CMOS
TV System	25 f/s 30 f/s
Effective Pixels	1280×720 pixels
Pixel Size	3.0um×3.0um
Video Output	8bits YUV
Scanning System	Progressive Scanning
Sync. System	Internal
Gamma Consumption	0.45
AGC	Auto
White Balance	Auto
BLC	Auto
Electronic Shutter	Electronic Rolling Shutter
Operation Frequency	2412-2467MHz
Transmision Distance (barrier free)	300m (984ft)
Transmission Power	18dBm
Video Codec	H.264
Spread Spectrum	DSSS
Latency	200ms
RF Bit Rate	12Mbps
Minimum Illumination	0Lux
Power Supply	DC10~32V
Night vision distance	8~10m
Waterproof rating	IP69K
Viewing Angle	120°
Audio	Yes
Smart-IRCut	Yes
Operating Temperature	-20°C ~ 70°C, RH95%MAX.
Storage Temperature	-30°C ~ 80°C, RH95%MAX.