



OWNER'S MANUAL


High Definition Network Camera

Please read this manual carefully before operating your set and retain it for future reference.


To view the instructions for advanced features, visit <http://www.lgcommercial.com> and then download Owner's Manual.

MODEL  
LNU3110R series







**CAUTION**  
**RISK OF ELECTRIC SHOCK**  
**DO NOT OPEN**



**CAUTION:** TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER (OR BACK) NO USER-SERVICEABLE PARTS INSIDE REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



This lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

**FCC WARNING:** This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

REGULATORY INFORMATION: FCC Part 15

- This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.
- Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.
- A suitable conduit entries, knock-outs or glands shall be provided in the cable entries of this product in the end user.
  - Caution: Danger of explosion if battery is incorrectly replaced. Replaced only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.
  - Holes in metal, through which insulated wires pass, shall have smooth well rounded surfaces or shall be provided with brushings.

This Class A digital apparatus complies with Canadian ICES-003.  
Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.



Specification

	Item	LNU3110R series
Camera	Image Device	6.28 mm (1/3 type) CMOS
	Lens Type	4 mm F2.0
	Day/Night	ICR (Auto / Day / Night)
	Minimum Illumination	<b>Color:</b> 0.03 lx @ F2.0 (1/30 sec, 50 IRE) <b>B/W:</b> 0 lx @ IR LED on
	IR Distance	30 m
	WDR	Digital (Dynamic Range Enhancer)
	Image Enhancement	Backlight Compensation, DNR, Exposure Control, AGC, White Balance, Privacy Masking, Sharpness
Video	Compression	H.264_HIGH, H.264, MJPEG
	Resolution	1280 x 1024 / 1280 x 720 / D1 (704 x 480) / CIF (352 x 240)
	Maximum Frame Rate	30 fps @ 1280 x 1024
	Multi-Streaming	Up to 2
	Video Analytics	Motion detection, Tampering alarm
Event	Event Notification	Email, FTP
	Pre Event Buffering	Support
Network	Ethernet	RJ-45 10 / 100BASE-T
	Security	Password Protection, HTTPS(SSL, TLS), IP filtering, IEEE 802.1X
	Open Protocol	ONVIF 2.2 Profile S, PSIA 1.1
	Protocol	<b>IPv4 and IPv6:</b> TCP, UDP, HTTP, HTTPS, RTP, RTSP, DHCP, ICMP, QoS, UPnP <b>IPv4:</b> FTP, SMTP, NTP, ARP, SNMPv1/v2c/v3, DDNS(LG)
	Connections	Up to 10
	Integrated Software	LG Ipsolute VMS Suite / Mobile App (iPhone, iPad, Android)

General	Power Source	DC 12 V
	Maximum Power Consumption	6.1 W
	Maximum Input Current	510 mA (DC 12 V)
	Operation Temperature/ Humidity	-10 °C to 55 °C / 0 % RH to 80 % RH
	Protection	IP66
	Dimension (W x H x D)	89 mm x 83 mm x 280 mm
	Weight	406 g

Note that design and specification of this unit may change from the manual as quality and improvement without prior notice.

**Component**  
Camera, Installation Manual, Screws (3 EA), Anchor (3 EA), Installation sticker

Important Safety Instructions



- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use this apparatus near water.
- Clean only with dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- Only use attachments/accessories specified by the manufacturer.
- Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



OPEN SOURCE SOFTWARE NOTICE

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LG Electronics will also provide open source code to you on CD-ROM for a charge covering the cost of performing such distribution (such as the cost of media, shipping and handling) upon email request to [opensource@lge.com](mailto:opensource@lge.com). This offer is valid for three (3) years from the date on which you purchased the product.

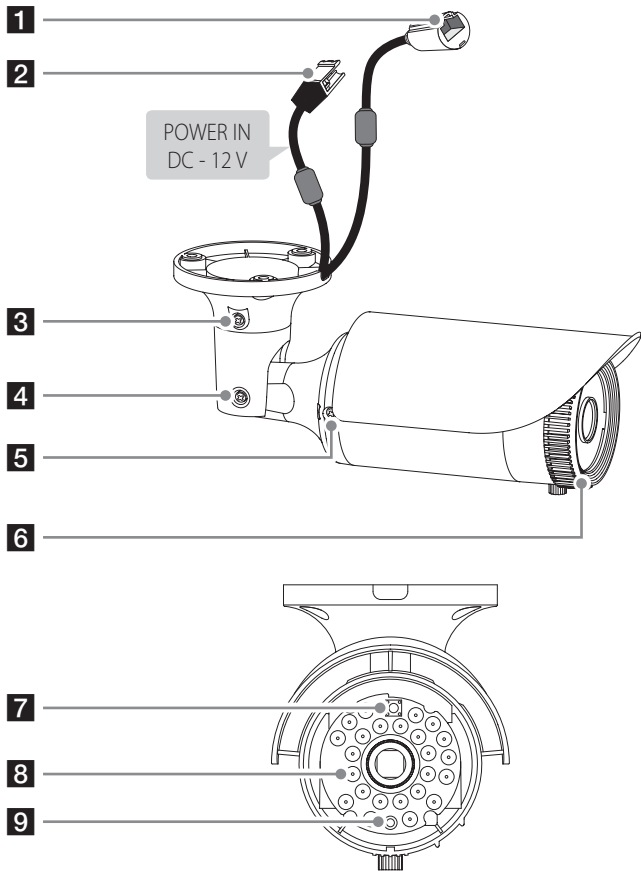
	Символ «не для пищевой продукции» применяется в соответствии с техническим регламентом Таможенного союза «О безопасности упаковки» 005/2011 и указывает на то, что упаковка данного продукта не предназначена для повторного использования и подлежит утилизации. Упаковку данного продукта запрещается использовать для хранения пищевой продукции.	Символ Көдендік одақтың 005/2011 техникалық регламентіне сәйкес қолданылады және осы өнімнің қаптамасын екінші рет пайдалануға арналмағанын және жоюға жататынын көрсетеді. Осы өнімнің қаптамасын азық-түлік өнімдерін сақтау үшін пайдалануға тыйым салынады.
	Символ «петля Мебиуса» указывает на возможность утилизации упаковки. Символ может быть дополнен обозначением материала упаковки в виде цифрового и/или буквенного обозначения.	Символ қаптаманы жою мүмкіндігін көрсетеді. Символ сандық код және/немесе әріп белгілері түріндегі қаптама материалының белгісімен толықтырылуы мүмкін.

Handling of the unit

- Be careful not to spill water or other liquids on the unit. Be cautious not to get combustible or metallic material inside the body. If used with foreign matter inside, the camera is liable to fail or to get cause of fire or electric shock.
- Remove dust or dirt on the surface of the lens with a blower.
  - Use a soft and lint-free, dry cloth(such as glass cleaner) to clean the body. If it is very dirty, use a cloth dampened with a small quantity of neutral detergent then wipe dry.
  - Avoid the use of volatile solvents such as thinners, alcohol, benzene and insecticides. They may damage the surface finish and/ or impair the operation of the camera.
  - This camera is designed for mounting on the ceiling or wall. If you install this camera upside down, it may cause malfunction.
- Operating and storage location**
- Avoid viewing a very bright object (such as light fittings) during an extended period. Avoid operating or storing the unit in the following locations.
- Extremely hot or cold places (operating temperature -10 °C to 55 °C, however, we recommend that the unit be used within a temperature range of 0 °C to 45 °C)
  - Damp or dust place
  - Places exposed to rain
  - Places subject to strong vibration
  - Close to generators of powerful electromagnetic radiation such as radio or TV transmitters.
  - Do not use the camera in such place where rapid temperature fluctuation by switching an air conditioner on and off.



## Part Names and Functions



### 1 ETHERNET

Connects to a PC or a network via a hub with a 10 BASE-T/100 BASE-TX cable attached RJ-45 connector.

### 2 Power input terminal

Connects to a DC 12 V power supply using proper cables. This camera must always be operated a DC 12 V. Certified/Listed Adaptor which comply with LPS.

### 3 Pan adjuster

Adjust the pan position.

### 4 Tilt adjuster

Adjust the tilt position.

### 5 Angle adjuster

Adjust the camera angle.

### 6 Lens Cover

### 7 RESET button

Push the button more than 3 seconds, this would restore the factory default network related settings.

### 8 IR LED

### 9 IR Sensor



## Connection

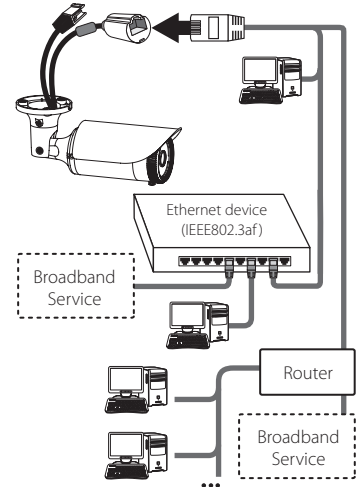
### Precautions

- Be sure to switch off the unit before installation and connection.
- The installation should be made by qualified service personnel or system installers.
- Do not expose the power and connection cables to moisture, which may cause damage to the unit.

### Connecting Network

You can control and monitor the system via network. With the remote control (monitoring), you can change the system configuration or monitor the image via network. After the installation, check the network settings for the remote control and monitoring work.

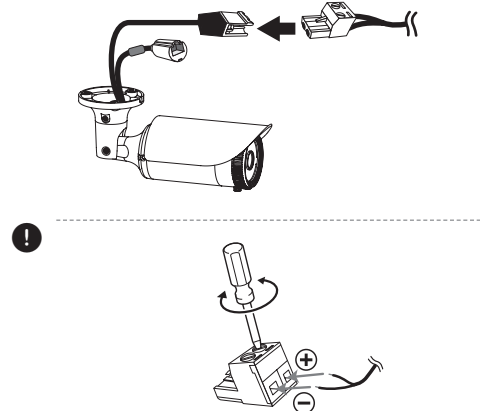
Connect the IP camera to your network using a standard RJ-45 network cable as shown below.



### Connecting Power Source

Connect a DC 12 V power source to the power input terminal as shown below.

(Recommended power adapter is DC 12 V/1.5 A or above)



When the connecting power adapter, tighten the screws as shown above.

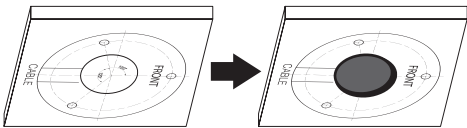


## Installation

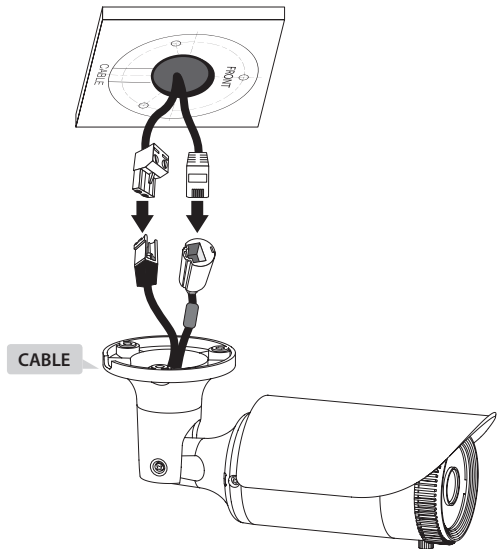
### Mounting the camera

Follow the instructions below to ceiling or wall mount the camera.

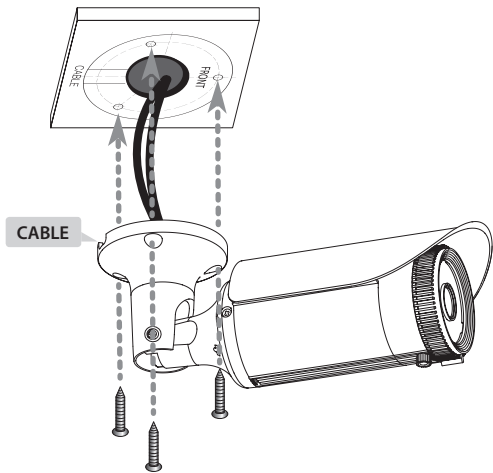
1. Use the installation guide template to check the mounting location. Face the front of the label toward the area of interest. Using the template as a guide, make a hole through the ceiling.



2. Connect the cables to the cable jacks of the camera body.



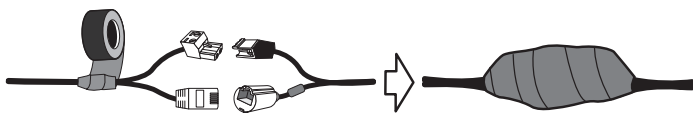
3. Install the camera by using M4 Tapping screws to fix it on the ceiling.



### Connecting Waterproof processing of cable

Surely use the Butyl tape.

1. Connect the cables.
2. Bind the cables together with Butyl tape.

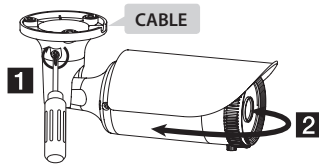


- The cables are not waterproofed completely. So seal the tube ends and the portions between cable cores as well as connecting portions with Butyl tape.
- If not using the Butyl tape, it may cause water absorption from a gap and finally condensation and water leakage.

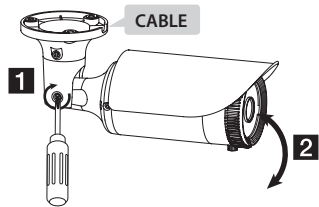
### Adjust the camera position

You should adjust the camera angle position as shown below illustration. Adjust the camera angle position by following step **1** and **2**.

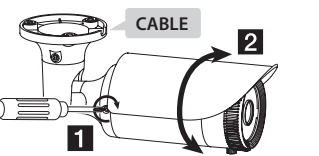
1. Adjust the Pan.



2. Adjust the Tilt.



3. Adjust the Angle.



- **Camera can be damaged if you adjust the Pan / Tilt / Angle when the screw is fixed.**
- Be careful not to rotate the Pan and Angle more than 360°, it may damage the internal cable.