LG
Life's Good

OWNER'S MANUAL

High Definition Network Dome Camera

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

MODEL
LW6424 series
LW6454 series

Ipsolute

MFL67468890

PCT
AB28

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.

Warning: Do not install this equipment in a confined space such as a bookcase or similar unit.

Warning: Wiring methods shall be in accordance with the National Electric Code, ANSI/NFPA 70.

Warning: This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Warning: To reduce a risk of fire or electric shock, do not expose this product to rain or moisture.

Caution: This installation should be made by a qualified service person and should conform to all local codes.

Caution: To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

Caution: The apparatus shall not be exposed to water (dripping or splashing) and no objects filled with liquids, such as vases, shall be placed on the apparatus.

To disconnect power from mains, pull out the mains cord plug. When installing the product, ensure that the plug is easily accessible.

CE LG Electronics hereby declares that this/these product(s) is/are in compliance with the essential requirements and other relevant provisions of Directive 2004/108/EC, 2006/95/EC, and 2009/125/EC.

European Standards Centre:
Krijgsman 1, 1186 DM
Amstelveen The Netherlands

Disposal of your old appliance

1. When this crossed-out wheeled bin symbol is attached to a product it means the product is covered by the European Directive 2002/96/EC.
2. All electrical and electronic products should be disposed of separately from the municipal waste stream via designated collection facilities appointed by the government or the local authorities.
3. The correct disposal of your old appliance will help prevent potential negative consequences for the environment and human health.
4. For more detailed information about disposal of your old appliance, please contact your city office, waste disposal service or the shop where you purchased the product.

EEE Compliance with Directive.
(for Turkey only)

Important Safety Instructions

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.

---

8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. 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.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. 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.

13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

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 dry soft cloth 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.

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 ℃ to 50 ℃, however, we recommend that the unit be used within a temperature range of 0 ℃ to 45 ℃)
- 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.


Specification

Item		LW6424	LW6454
Image Device		6.49 mm (1/2.8 type) Progressive Scan CMOS (2 Mega Pixels)	
Lens Type		F1.2 Varifocal Lens (2.8 mm to 10 mm)	
Day/Night		ICR	
Minimum Illumination	Color	2 lx (F1.2, Gain : High)	
	B/W	0.1 lx (F1.2, Gain : High)	
WDR		Support	
Image Enhancement		Backlight Compensation, 3D-DNR, Exposure Control, Sens Up Control, AGC, White Balance, Privacy Masking, EIS, Sharpness, Digital Zoom	
Resolution (Maximum)		Up to 1 920 x 1 072	
Output		1 RCA Output	
Frame Rate (Maximum)		30 fps @ 1 080p (1 920 x 1 072)	
Compression		H.264, MJPEG	
Multi-Streaming		Dual Streaming	
Audio In/Out		1/1 (Line level input / output)	
Audio Compression		G.711, G.726	
2-way Audio		Support	
Motion detection		Support	
Event Notification		Relay Out, Email, FTP	
VA	Intruder detection	Not support	Support
	Crossing Line	Not support	Support
	Object Removal	Not support	Support
	Object Counting	Not support	Support
	Tampering	Not support	Support

Integrated Client		LG Ipsolute VMS	
System Update		LG Ipsolute VMS or Web Client	
Connections		Up to 10	
Security		Password Protection, HTTPS(SSL, TLS)	
Ethernet		10/100 Ethernet	
Protocol	IPv4 and IPv6	TCP/IP, UDP, HTTP, HTTPS, RTP, RTSP, DHCP, ICMP	
	IPv4	FTP, SMTP, NTP, ARP, SNMP v1/v2c/v3, DDNS(LG)	
Operation Temperature/ Humidity		-10 ℃ to 50 ℃ / 0 % RH to 80 % RH	
Power Source		PoE (IEEE 802.3af), DC 12 V (±20 %)	
Power Consumption		6.9 W	8 W
Input current	DC 12 V	Maximum 500 mA	Maximum 580 mA
	PoE	Maximum 180 mA	Maximum 210 mA
Dimension		200 mm x 141 mm	
Weight		1.4 kg	

Part Names and Functions
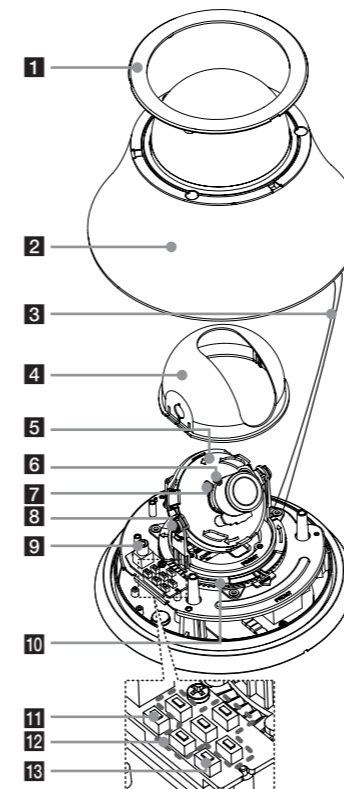
1 **Dome Cover Ring**
2 **Dome Cover**
3 **Fall Prevention rubber band**
4 **Lens Cover**
5 **Azimuth adjuster**
6 **Focus lock lever**
7 **Zoom lock lever**
8 **Tilting lock screw**
9 **Video Out connector**
10 **Pan adjuster**
Adjusts the pan position.
11 **ABF Auto Back Focus button**
ABF Auto Back Focus is an adjustable function for the back focus automatically. Before you use it, you should set the zoom and focus of the lens approximately. If you press this button, the camera will be activated to adjust the back focus automatically. If you keep pressing this button about 4 seconds, the focus reset function will be activated.
12 **OSD Setup menu control buttons**
13 **RESET button**
Push the button more than 3 seconds, this would restore the factory default network related settings.
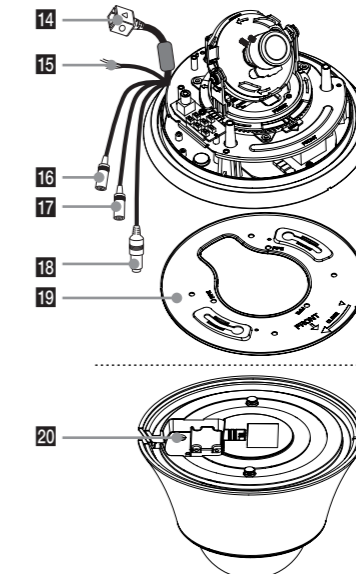
14 **ETHERNET/PoE Port**
Connects to a PC or a network via a hub with a 10 BASE-T/100 BASE-TX cable attached RJ-45 connector.

NOTE:
Power over Ethernet (PoE) is a technology that integrates power into a standard LAN infrastructure. It enables power to be provided to the network device, such as a network camera, using the same cable as that used for network connection. It eliminates the need for power outlets at the device locations and enables easier application of uninterruptible power supplies (UPS).

15 **ALARM IN / ALARM IN RETURN**
Provides physical interface for sensor.
ALARM OUT / ALARM OUT RETURN
Provides physical interface for Alarm/Relay.
16 **AUDIO OUT (Line Level Output)**
17 **AUDIO IN (Line Level Input)**
18 **Power input jack**
19 **Camera mounting bracket**
20 **GORE™ protective sticker / Air vent system**
Do not remove the GORE™ protection sticker. It helps the flow of air to prevent moisture and condensation inside of the camera. This air vent system helps the product's reliability and stability so it increases the life cycle.
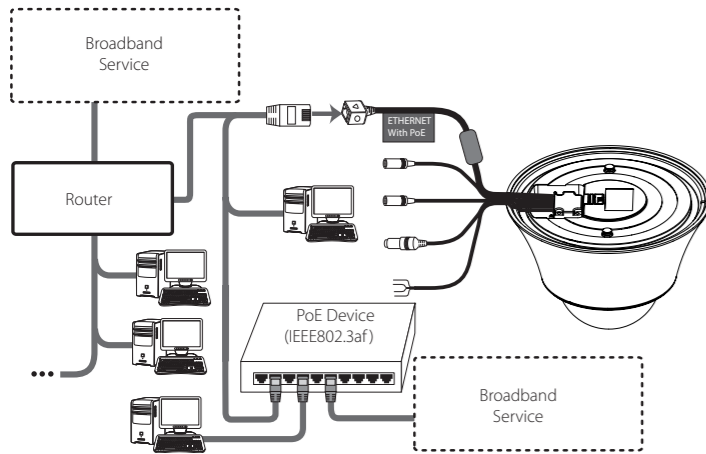
Connection

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 power, using one of the methods listed below:

To use the power adapter

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)

(Connect to the DC 12 V UL Listed, Class 2 Power Supply only on the unit.)
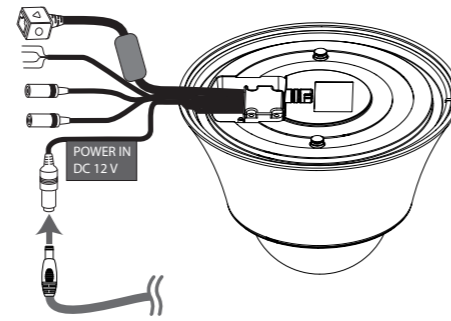
To use the PoE (Power over Ethernet) device

Connect the PoE cable to the LAN port on the unit. You must use the "IEEE802.3af" standard PoE device.
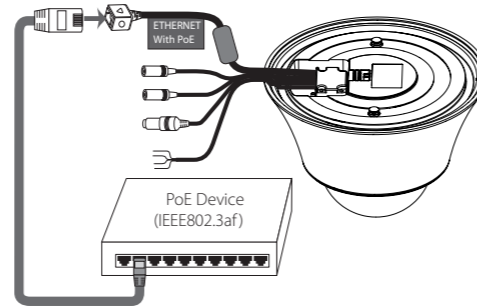
NOTE:
If the camera doesn't work properly after connecting PoE device, please check if the PoE device supplies enough power.

Connecting Alarm Device

Alarm terminals are used to connect the alarm (relay) devices such as sensors, door switches, etc.

ALARM IN / ALARM IN RETURN (Sensor Input)

Connect the sensor device to the sensor input terminal.
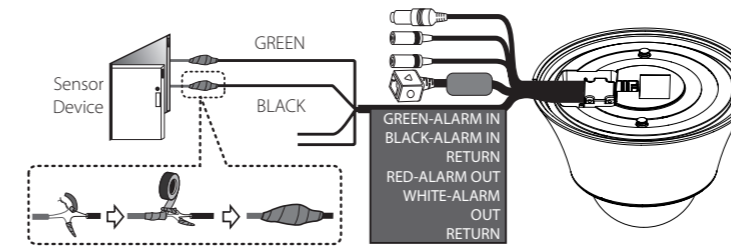
ALARM OUT / ALARM OUT RETURN (Relay Output)

Connect the alarm (relay) device to the relay output terminal. Alarm signal is outputted at an event occurrence.
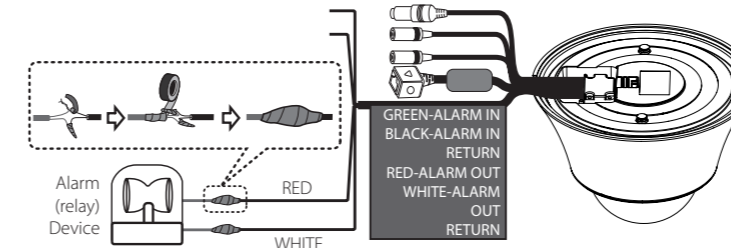
NOTE:
The Photo MOS Relay is rated for 100 mA at 20 V DC or 100 mA at 28 V AC.

Connecting Microphone and Speaker Device

Optionally connect an active speaker and/or external microphone with a built-in amplifier.
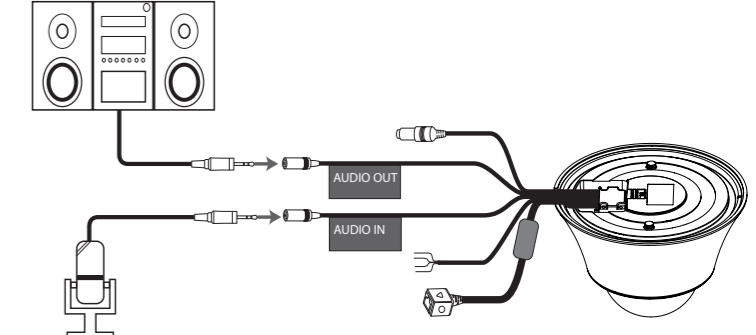
NOTE:
Keep the microphone away from the speaker to avoid howling.
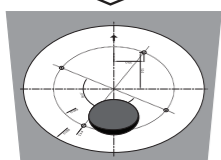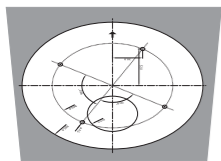

Installation

Mounting the camera

You can mount the camera on a ceiling or wall.

Surface mount

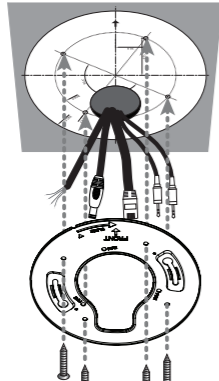Follow the instructions below to surface mount the camera.

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.
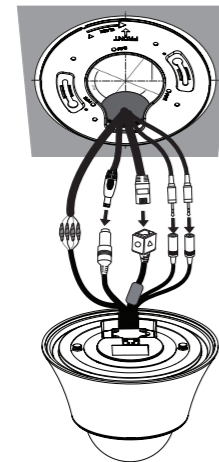
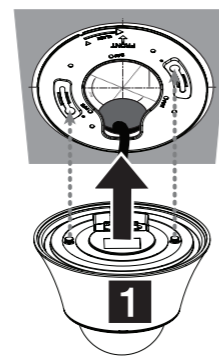2. Pass the connection cable through the inner side of the ceiling.
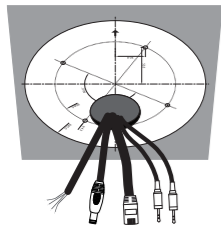
3. Fasten the camera assembly bracket to the ceiling.

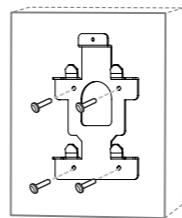4. Connect the cables to the cable jacks of the camera body.

5. Assemble the camera and mounting bracket. Connect the unit by following step **1** and **2**.
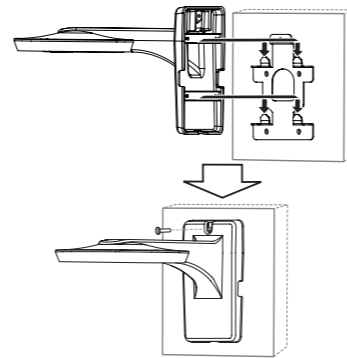
Wall mount (Optional)

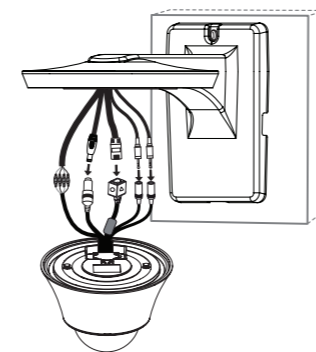Follow the instructions below to install the camera with a wall mount.

1. Drill holes in the wall where you want to install the wall mount.
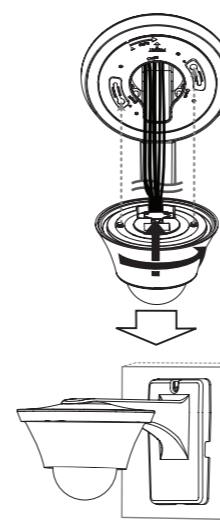2. Install the wall mount installation bracket.

3. Install the wall mount assembly as shown below.
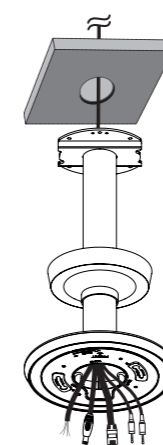
4. Connect the cables to the camera jack.

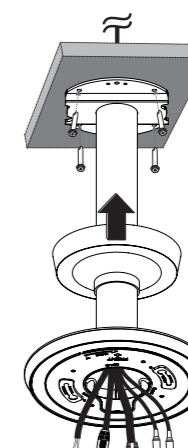5. Attach the camera to the wall mount assembly.

Pendant mount (Optional)

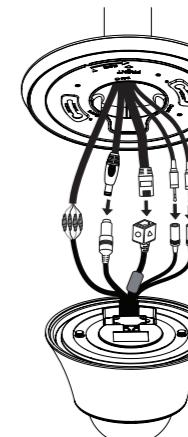Follow the instructions below to install the camera with a pendant mount.

1. Drill holes on the wall where you want to install the pendant mount.
2. Pass the connection cable through the pendant mount assembly so that they hang down.

3. Install the pendant mount assembly.

4. Connect the cables to the camera jacks.

5. Attach the camera to the pendant mount assembly.