



OWNER'S MANUAL


Color Video Camera

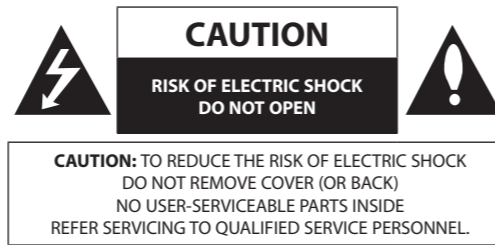
Please read this manual carefully before operating your set and retain it for future reference.

MODEL
L320-BP/L320-BN/L321-BP/L321-BN
L320-CP/L321-CP
L320-DN/L321-DN

P/NO : MFL63745106(A)

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.
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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.



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.

ITEM	L320-BP	L320-CP	L320-BN	L320-DN
Signal System	PAL		NTSC	
Total Pixels No.	470 000 Pixels		410 000 Pixels	
Effective Pixels No.	440 000 Pixels		380 000 Pixels	
Image Device	6 mm Super HAD II CCD			
Signal Process	XDI-S2			
Lens	CS Mount (C Mount using adaptor ring)			
IRIS Control	DC/ELC			
Sync. System	Internal			
Scanning Frequency (H/V)	15.625 kHz / 50 Hz		15.734 kHz / 59.94 Hz	
Horizontal Resolution	620 TV Lines			
S/N Ratio	52 dB			
Minimum Illumination (30 IRE)	Color Mode	0.06 lx @ Sens-up OFF 0.0001 lx @ Sens-up Auto		
	B/W Mode	0.03 lx @ Sens-up OFF 0.000 001 lx @ Sens-up x128		
Video Output Signal	1 Vp-p Composite (75 Ω)			
Day & Night	Digital Day / Night / Auto			
Backlight	OFF/BLC/HSBLC			
DNR	3D-DNR (Off/Low/Middle/High)			
Auto Gain Control	Off / Low / Middle / High			
Electronic Shutter Speed	1/50 to 1/90 000		1/60 to 1/90 000	
Electronic Sensitivity	OFF/Auto			

- 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.

ITEM	L320-BP	L320-CP	L320-BN	L320-DN
White Balance	ATW / AWC → PUSH / Manual			
User Color Mode	STANDARD/COOL/WARM/VIVID			
Power Source	AC 24 V, DC 12 V	AC 230 V	AC 24 V, DC 12 V	DC 12 V
Power Consumption	2.9 W	4.4 W	2.9 W	2.4 W
Operation Temp.	-10 °C to 50 °C			
Storage Temp.	-20 °C to 60 °C			
Operation Humidity	0 %RH to 80 %RH			
Storage Humidity	0 %RH to 85 %RH			
Weight	321 g			
Dimension (H x V x D)	67.4 mm x 61.5 mm x 134 mm			

ITEM	L321-BP	L321-CP	L321-BN	L321-DN
Signal System	PAL		NTSC	
Total Pixels No.	470 000 Pixels		410 000 Pixels	
Effective Pixels No.	440 000 Pixels		380 000 Pixels	
Image Device	6 mm Super HAD II CCD			
Signal Process	XDI-S2			
Lens	CS Mount (C Mount using adaptor ring)			
IRIS Control	DC/ELC			
Sync. System	Internal			
Scanning Frequency (H/V)	15.625 kHz / 50 Hz		15.734 kHz / 59.94 Hz	
Horizontal Resolution	620 TV Lines			
S/N Ratio	52 dB			



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 representative :

LG Electronics Service Europe B.V.
Veluwezoom 15, 1327 AE Almere,
The Netherlands (Tel : +31-(0)36-547-8888)

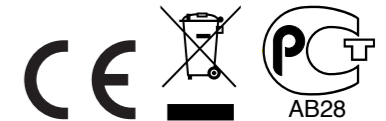
Disposal of your old appliance



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.

<For Turkey only>

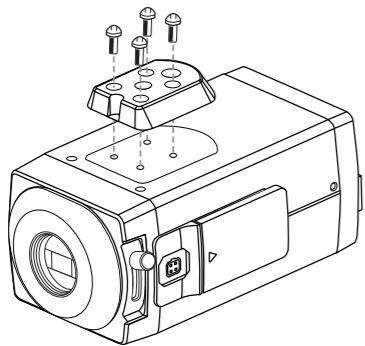
5. EEE Compliance with Directive. (EEE Yönetmeliğine Uygundur.)



ITEM	L321-BP	L321-CP	L321-BN	L321-DN
Minimum Illumination (30 IRE)	Color Mode	0.05 lx @ Sens-up OFF 0.0001 lx @ Sens-up Auto		
	B/W Mode	0.005 lx @ Sens-up OFF 0.000 001 lx @ Sens-up x128		
Video Output Signal	1 Vp-p Composite (75 Ω)			
Day & Night	Day / Night / Auto			
Backlight	OFF/BLC/HSBLC			
DNR	3D-DNR (Off/Low/Middle/High)			
Auto Gain Control	Off / Low / Middle / High			
Electronic Shutter Speed	1/50 to 1/90 000		1/60 to 1/90 000	
Electronic Sensitivity	OFF/Auto			
White Balance	ATW / AWC → PUSH / Manual			
User Color Mode	STANDARD/COOL/WARM/VIVID			
Power Source	AC 24 V, DC 12 V	AC 230 V	AC 24 V, DC 12 V	DC 12 V
Power Consumption	4.4 W	4.4 W	4.4 W	2.9 W
Operation Temp.	-10 °C to 50 °C			
Storage Temp.	-20 °C to 60 °C			
Operation Humidity	0 %RH to 80 %RH			
Storage Humidity	0 %RH to 85 %RH			
Weight	376 g			
Dimension (H x V x D)	67.4 mm x 61.5 mm x 134 mm			

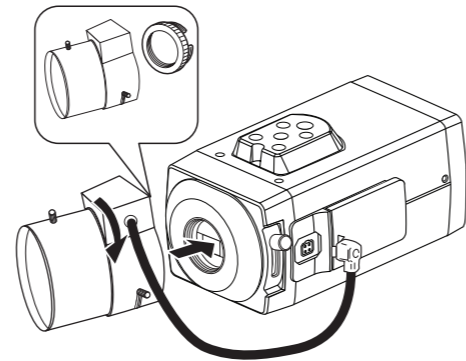
Installation Guide

- 1** Install the camera and mounting bracket securely.



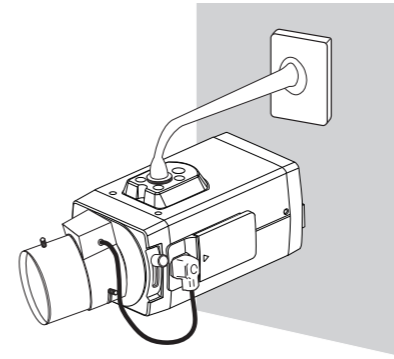
- <ITALIANO> Montare la videocamera alla staffa in maniera sicura.
- <FRANÇAIS> Installez solidement la caméra et le support de montage.
- <ESPAÑOL> Monte la cámara y el soporte.
- <PORTUGUÉS> Instale a câmara e o suporte de montagem firmemente.
- <РУССКИЙ> Надежно установить камеру и монтажный кронштейн.
- <POLSKI> Zamontować dokładnie kamerę oraz wspornik montażowy.
- <ČEŠTINA> Přepevněte řádně kameru a mechanismus pro uchycení.

- 2** Install the C or CS mount type lens.



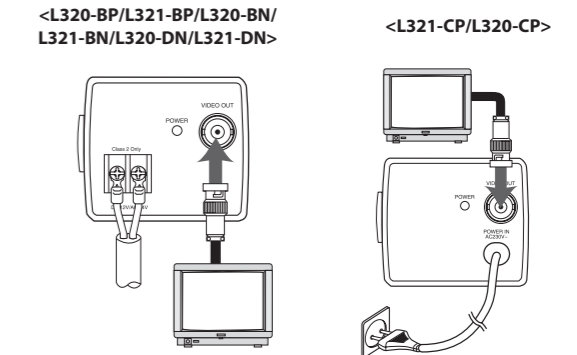
- <ITALIANO> Installare un obiettivo di tipo C o CS.
- <FRANÇAIS> Installez l'objectif à monture C ou CS.
- <ESPAÑOL> Instale un objetivo C o CS.
- <PORTUGUÉS> Instale as lentes de montagem do tipo C ou CS.
- <РУССКИЙ> Установить оправы объектива типа C или CS.
- <POLSKI> Montować obiektyw typu C lub CS.
- <ČEŠTINA> Nainstalujte přípevňovací čočky typu C nebo CS.

- 3** Install the camera and mounting arm.



- <ITALIANO> Montare la videocamera al braccio.
- <FRANÇAIS> Installez la caméra et le bras de montage.
- <ESPAÑOL> Monte la cámara y el brazo de soporte.
- <PORTUGUÉS> Instale a câmara e o braço de montagem.
- <РУССКИЙ> Установить камеру и монтажный кронштейн.
- <POLSKI> Zamontować kamerę oraz ramię montażowe.
- <ČEŠTINA> Přepevněte kameru a přípevňovací rameno.

- 4** Connect the power and monitor.

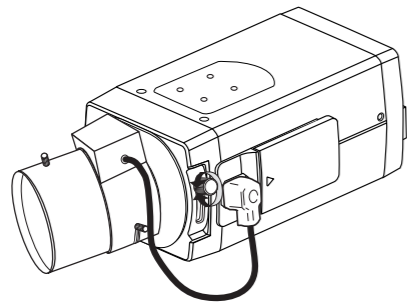


- <ITALIANO> Collegare l'alimentazione e il monitor.
- <FRANÇAIS> Raccordez l'alimentation et le moniteur.
- <ESPAÑOL> Conecte el monitor y la fuente de alimentación.
- <PORTUGUÉS> Ligue a alimentação e o monitor.
- <РУССКИЙ> Подключить питание и монитор.
- <POLSKI> Podłączyć zasilanie oraz monitor.
- <ČEŠTINA> Zapojte proud a monitor.

Flange-back Adjustment

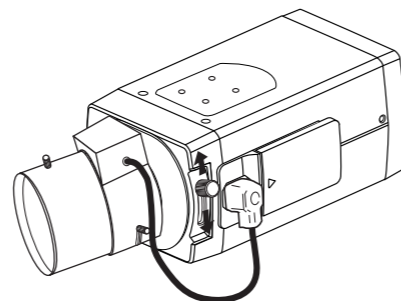
L321 series

- 1** Loosen the flange-back fixing lever.



- <ITALIANO> Allentare la leva per il fissaggio della flangia posteriore.
- <FRANÇAIS> Desserrez le levier de fixation de l'embase.
- <ESPAÑOL> Afloje la palanca de fijación.
- <PORTUGUÉS> Afrouxe o nivelador de fixação da flange traseira.
- <РУССКИЙ> Ослабить фиксирующий рычаг заднего фланца.
- <POLSKI> Poluzować dźwignię mocowania kołnierza.
- <ČEŠTINA> Povolte zpětnou přírubu upevňovací páčky.

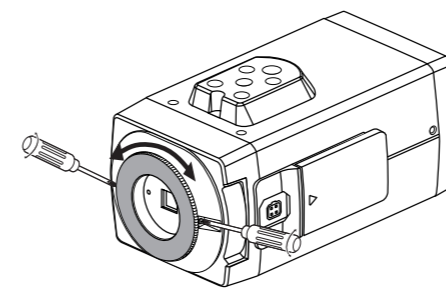
- 2** Up and down the flange-back adjusting lever to obtain a focused point



- <ITALIANO> Sollevare e abbassare la leva di regolazione della flangia posteriore per ottenere un punto di messa a fuoco.
- <FRANÇAIS> Levez ou abaissez le levier de réglage de l'embase pour obtenir un point net.
- <ESPAÑOL> Suba o baje la palanca de ajuste para obtener un punto de enfoque.
- <PORTUGUÉS> Suspenda e abaixe o nivelador de fixação da flange traseira para obter o ponto do foco.
- <РУССКИЙ> При регулировке рычага для достижения точки фокуса, следует поднимать и опускать задний фланец.
- <POLSKI> Aby uzyskać punkt ogniskowania poruszyć dźwignię regulacji kołnierza do góry i na dół.
- <ČEŠTINA> Pohybuje směrem nahoru a dolů zpětnou upevňovací páčkou pro získání zaměřovacího bodu.

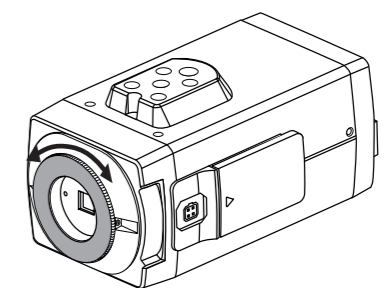
L320 series

- 1** Loosen the flange-back fixing screws.



- <ITALIANO> Allentare le viti per il fissaggio della flangia posteriore.
- <FRANÇAIS> Desserrez les vis de fixation de l'embase.
- <ESPAÑOL> Afloje los tornillos de fijación de la palanca de ajuste.
- <PORTUGUÉS> Desaperte os parafusos de fixação da flange traseira.
- <РУССКИЙ> Ослабить крепежные винты заднего фланца.
- <POLSKI> Poluzować śruby mocowania kołnierza.
- <ČEŠTINA> Povolte zpětnou přírubu upevňovací šroubu.

- 2** Use the flange-back adjusting ring to obtain a focused point.



- <ITALIANO> Utilizzare l'anello per la regolazione della flangia posteriore per ottenere un punto di messa a fuoco.
- <FRANÇAIS> Utilisez la bague de réglage de l'embase pour obtenir un point net.
- <ESPAÑOL> Utilice el anillo de ajuste para enfocar un punto.
- <PORTUGUÉS> Use o anel de ajuste da flange traseira para obter o ponto do foco.
- <РУССКИЙ> Использовать регулирующее кольцо заднего фланца для достижения точки фокуса.
- <POLSKI> Aby uzyskać punkt ogniskowania należy użyć pierścienia regulacyjnego kołnierza.
- <ČEŠTINA> Pohybuje směrem nahoru a dolů nastavitelným kolečkem pro získání zaměřovacího bodu.