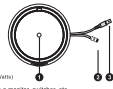


PRODUCTION RELEASE & REVISION						
REV	DESCRIPT'N/BUYER	DWG No	PARTS No.	BY	CHK	DATE
A	INITIAL	-----	50303953	K.H.JUNG		15-10-20

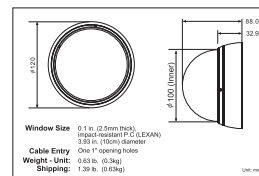
접지순서 1

**CAMERA CONNECTIONS**

- 1. Lens** : 3.6mm Fixed lens for wide area monitoring. (OSN with ICR model option)
- 2. Power** : 12V DC input power source from a DC/DC Converter or a 1.5V D-Cell. Certified UL listed Class 2 power source only.  
\*Using DC 12V power adaptor use a power source capable of supplying 1.5A (18.0Watt).
- 3. Video** : BNC connector used to connect to a monitor, switcher, etc.

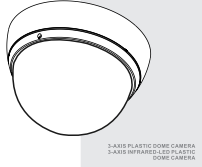


**EXTERNAL DIMENSION**



**INSTRUCTION MANUAL**

**700TV Lines Super High Resolution Color Camera**



Please read this manual thoroughly before use, and keep it handy for future reference. Design and specifications are subject to change without notice.

**FCC COMPLIANCE STATEMENT**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation.

**FCC INFORMATION** - 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.

**CAUTION** - Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.

**CE COMPLIANCE STATEMENT**

**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.

**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 appliances including freezers 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/appliances combination to avoid injury from tips.
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- 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.
- CAUTION - THESE SERVICING INSTRUCTIONS ARE FOR USE BY QUALIFIED SERVICE PERSONNEL ONLY TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT PERFORM ANY SERVICING OTHER THAN THAT CONTAINED IN THE OPERATING INSTRUCTIONS UNLESS YOU ARE QUALIFIED TO DO SO**
- Use safety class I or IEC9960 1 USA250V 1 or Certified Listed Class 2 power source only.



297 (+/-)5mm

210 (+/-)5mm

**NOTES**

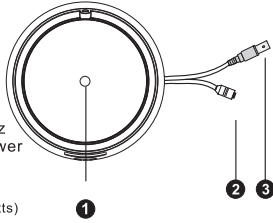
- MODEL: HCG-N91(5)NF3A32/NoBrand
- MATERIAL: 모조지100g/m<sup>2</sup> WHITE
- COLOR: BLACK
- SIZE: 210(+/-)5mm x 297(+/-)5mm
- LABEL: -----

협 의	전자
	이주영
	15-10-20

<b>50303953</b>		ITEM	DESCRIPTION/MATERIAL	QTY
		PARTS LIST		
UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN MM. - TOLERANCE		APPROVALS	DATE	
LABEL MANUAL GUIDE		K.H.JUNG	15-10-20	
MATERIAL	2	CHKED		
COLOR	3	DRAWN	M.J.KWON	15-10-20
		TITLE <b>Manual Instruction</b>		
		SIZE	A4	REV. A
		SCALE DO NOT SCALE		

## CAMERA CONNECTIONS

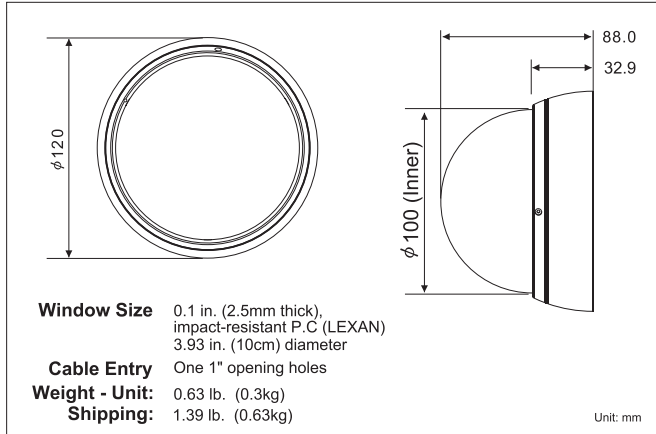
- Lens :** 3.6mm Fixed lens for wide area monitoring.  
(D&N with ICR model option)
- Power :** 24V AC input / 12V DC input power source from a DC 12V or AC 24V  $\pm 10\%$  60/50Hz  $\pm 1$ Hz  
Use Certified / Listed Class 2 power source only.



\*If using DC 12V power adaptor, use a power supply capable of supplying 5 Watts. (IR Model 7Watts)

- Video :** BNC connector used to connect to a monitor, switcher, etc.

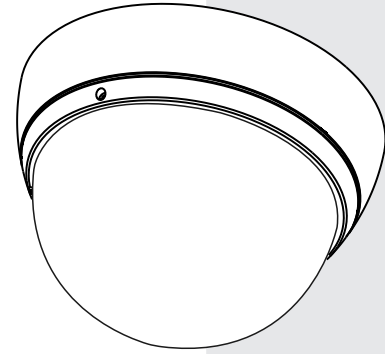
## EXTERNAL DIMENSION



50303953A

## INSTRUCTION MANUAL

## 700TV Lines Super High Resolution Color Camera



3-AXIS PLASTIC DOME CAMERA  
3-AXIS INFRARED-LED PLASTIC DOME CAMERA

## FCC COMPLIANCE STATEMENT

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**FCC INFORMATION :** 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.

**CAUTION :** Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.

## CE COMPLIANCE STATEMENT

### 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.

## IMPORTANT SAFETY INSTRUCTIONS

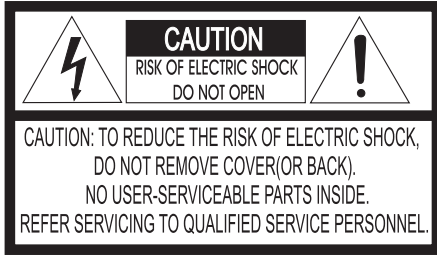
- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use this apparatus near water.
- Clean only with dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not install near any heat 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.
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- 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.
- CAUTION - THESE SERVICING INSTRUCTIONS ARE FOR USE BY QUALIFIED SERVICE PERSONNEL ONLY. TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT PERFORM ANY SERVICING OTHER THAN THAT CONTAINED IN THE OPERATING INSTRUCTIONS UNLESS YOU ARE QUALIFIED TO DO SO.**
- Use satisfy clause 2.5 of IEC60950-1/UL60950-1 or Certified/Listed Class 2 power source only.



## WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE. DO NOT INSERT ANY METALLIC OBJECTS THROUGH THE VENTILATION GRILLS OR OTHER OPENINGS ON THE EQUIPMENT.

## CAUTION:



The 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.

## PRECAUTIONS

### Safety

Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by the qualified personnel before operating it any further.

Unplug the unit from the wall outlet if it is not going to be used for several days or more. To disconnect the cord, pull it out by the plug. Never pull the cord itself.

Allow adequate air circulation to prevent internal heat build-up. Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes.

### Installation

Do not install the unit in an extremely hot or humid place or in a place subject to excessive dust, mechanical vibration.

### Cleaning

Clean the unit with a slightly damp soft cloth. Use a mild household detergent. Never use strong solvents such as thinner or benzene as they might damage the finish of the unit.

Retain the original carton and packing materials for safe transport of this unit in the future.

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## CONTENTS of PACKAGE

The package contains the following.

Camera in Housing_	1
Instruction Manual (This Document)_	1
Accessory Kit for Installing_	1
Drilling guide label_	1

## INTRODUCTION

The camera provides high-quality images using SONY CCD technology especially designed for closed-circuit television (CCTV) and security surveillance applications.

### Features:

- High resolution and high performance Sony®Super HAD™ I Technology
- Excellent picture quality
- 700 lines(Color) of resolution
- 0.1 lux(Color), 0 lux(B/W) @ F1.2 50IRE Sensitivity (IR CAMERA ONLY)
- Auto electronic shutter [1/60(1/50) ~ 1/100,000]
- 2D-DNR(Digital Noise Reduction)
- Auto white balance modes
- AGC (Auto Gain Control)
- VIDEO OUT BNC
- 3.6mm Fixed Lens
- Operates in 12V DC
- Use Certified / Listed Class 2 power source only
- Camera Mount : Camera mount directly to the wall or ceiling
- Smart IR (IR CAMERA ONLY)
- 24EA, 850nm IR LED (IR CAMERA ONLY)

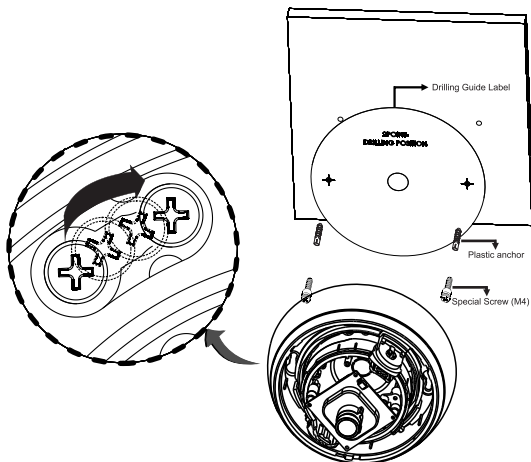
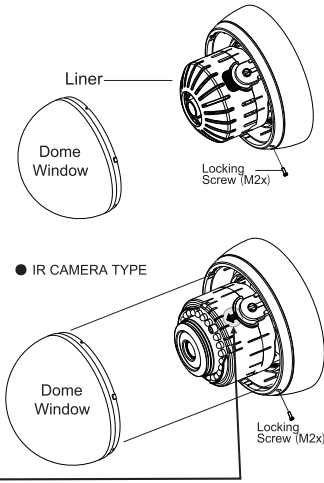


**IMPORTANT :** The user of this camera is responsible for checking and complying with local, state, and federal laws and statues concerning the recording and monitoring of audio signals.

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## BASE INSTALLATION

1. Make mounting holes and cable hole in the place (ceiling or wall) to which this dome camera is installed using the Drilling guide label.
2. To remove dome cover, turn the dome body counterclockwise until locators reach end of travel and pull off. Push the liner on the sides where the patterns are put in the teeth of a comb and put in the teeth of a comb and pull it out.
3. Attach the housing to the ceiling using suitable fasteners, M6x35 tapping screws are supplied only use if they are suitable. Turn the housing to right direction about 16 degrees to lock in place.
4. The assembly of the dome body and liner is in reverse order of disassembly. Finally, lock dome body with locking screw(M3x5) from the accessory kit.



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## SPECIFICATIONS

MODEL		NTSC	PAL
Power	Power source	AC24V ± 10% / DC12V ± 10%	
	Power consumption	DC12V-130mA(1.6Watts) AC24V / DC12V-200mA(2.5Watts)	
General	Image sensor	1/3" Sony®Super HAD™ I CCD	
	Total pixels	1020(H) x 508(V)	1020(H) x 596(V)
	Effective pixels	976(H) x 494(V)	976(H) x 582(V)
	Scanning system	2:1 interface	
	Scanning frequency	15.734KHz(H) x 59.94Hz(V)	15.625KHz(H) x 50Hz(V)
	Sync. system	Internal	
	Electronic Shutter	1/60 ~ 1/100,000 sec.	1/50 ~ 1/100,000 sec.
	Resolution	700TV lines (COLOR)	
	Min. illumination	0.1 Lux(Color), 0.04 Lux(B/W) @ F1.2, 50IRE	
	Video Output	1.0 Vp-p (75 ohm, Composite)	
S/N Ratio	More than 50dB (AGC off)		
Function	Smart IR	ON	
	Auto Exposure	ON	
	White Balance	AUTO (ATW)	
	Day / Night	AUTO	
	2D-DNR	ON	
	AGC	AUTO	
Connector & etc.	Gamma	0.45	
	Power input	DC Jack	
	Video output	BNC Connector	
	Lens Mount	Fixed mount	
	Lens	f 3.6mm Fixed Lens	
	Operating temperature	14°F ~ 122°F (-10°C ~ +50°C)	
	Operating humidity	0 ~ 96% (non-condensing)	
External Dimension	120(φ) x 88(H) mm		
Weight	270g		

● IR CAMERA TYPE		AC24V / DC12V-410mA(5.0Watts) - IR LED ON
Power	Power consumption	DC12V-250mA(3.0Watts) - IR LED ON
General	Min. illumination	0.1 Lux(Color), 0 Lux(B/W) IR LED ON @ F1.2, 50IRE
	IR LED / Sensor	IR LED 24EA (850 nm / 76degree), Sensor 1EA
	LED Lighting Distance	25M

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