

CONNECTING the cables

Connect the power and video cables
Connect the video cable from the monitor and the coaxial video cable attached to the camera body.

In case of using DC 12V, connect DC jack from camera with power supply (CLASS 2 ONLY) If necessary, after connecting DC jack from Camera to “ Additional power connector(Accessory) connect it with power supply.

In case of using AC 24V, after connecting DC jack from camera to “Additional power connector(accessory) connect it with power supply (CLASS ONLY 2)

Attention

Specification below is recommended as an Output rated capacity of Power supply that is connected to camera

* DC12V/AC24-DUAL

Input power	Voltage	Current
DC 12V	DC 12V±10%	200mA±10%
AC 24V	AC 24V±10%	250mA±10%

* DC12V-Single(optional)

Input power	Voltage	Current
DC 12V	DC 12V±10%	200mA±10%

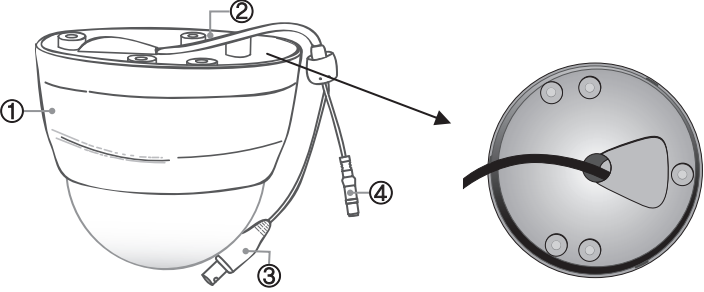
Attention

Be sure to check that the cables are connected correctly before turning on the power.

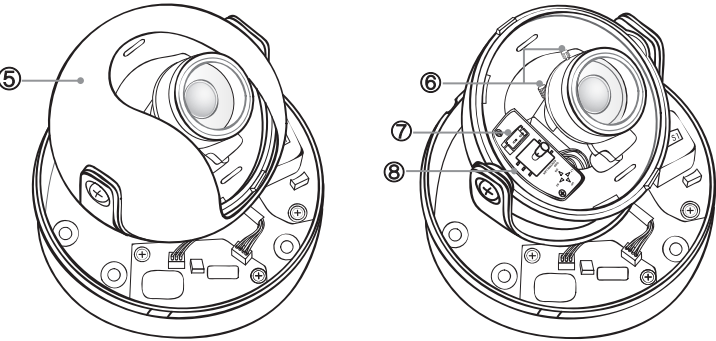
Turning on the power when the cables are connected with incorrect polarity may damage the camera .

PARTS DESCRIPTION

Outside



Inside



Turn Top Cover counter-clockwise to open the unit for adjustments Once adjusted, turn the top Cover back and tighten it clockwise.

MODEL

Lens Specification				Models (Standard DC12/AC24V Dual-Voltage)	
Focal Length	D/N	Aperture	View Angle	NTSC	PAL
3~9mm	Digital	1:1.2~2.1	90~31.8	ZC-D8039NBA	ZC-D8039PBA
	True	1:1.4~2.4		ZC-DN8039NBA	ZC-DN8039PBA
3.3~12mm	Digital	1:1.4~2.9	89.8~23.9	ZC-D8312NBA	ZC-D8312PBA
	True			ZC-DN8312NBA	ZC-DN8312PBA
2.5~6mm	Digital	1:1.2~1.8	111.6~47.3	ZC-D8026NBA	ZC-D8026PBA
	True			ZC-DN8026NBA	ZC-DN8026PBA
9~22mm	Digital	1:1.4~1.6	32.1~13.1	ZC-D8922NBA	ZC-D8922PBA
	True			ZC-DN8922NBA	ZC-DN8922PBA

* Optional DC12V Single-Voltage models : suffix “S” to the above model names(such as ZC-D8039PBAS)

PRODUCT FEATURES

- 1/3” SONY Super HAD-II CCD
- Built-in “COMPUTAR®” Vari-Focal Lens
- True or Digital Day & Night
- Auto-sensing DC12V/AC24V Dual-Voltage Operation(standard), or DC12V Single-Voltage Operation(optional)
- Digital WDR(Wide Dynamic Range)
- Back Light Compensation
- High Light Compensation
- Motion Detection
- Privacy Masking
- 2D Digital Noise Reduction (2DNR)
- Lens Shading Compensation
- Low Power Consumption
- Multi Tact Switch for OSD control

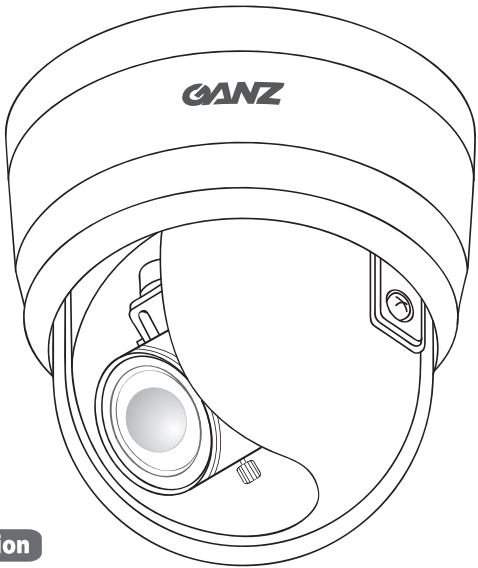
SPECIFICATION

TV System		NTSC	PAL
Scanning System		2 : 1 Interlace	
Image Sensor		1/3” Type Inter line transfer CCD(Sony HAD II CCD)	
Effective Elements		768(H) x 494(V)	752(H) x 582(V)
Scanning Frequency		15.734kHz(H) x 59.94Hz(V)	15.625kHz(H) x 50.00Hz(V)
Video Output		1.0Vp-p/75Ω	
Horizontal Resolution		More than 600 TVL	
Minimum Illumination(F1.4)		D-DN:0.4lx T-DN:0.04lx	
Day/Night		Digital or True Day/ Night	
S/N Ratio		More than 50dB(at minimum AGC gain)	
Gamma Characteristic		0.45	
Sync. System		Internal only	
Electronic Shutter		1/60 sec, FLK, 1/60 ~1/100,000(Selectable)	1/50 sec, FLK, 1/50 ~1/100,000(Selectable)
White Balance		ATW1, ATW2, AWC, Mannal (Selectable)	
Power Supply	AC	AC24V±10% 60Hz±1Hz	AC24V±10% 50Hz±1Hz
	DC	DC12V±10%	
Power Consumption	DC12V/ AC24V-DUAL	2.5 Watt (AC24V), 1.8 Watt (DC12V)	
	DC12V-Single (optional)	1.1 Watt	
Ambient Temperature		Operation : -10°C to +50°C / Storage : -20°C to +60°C	
Ambient Humidity		Operation : Max. 85%RH / Storage : Max. 95%RH	
External Dimensions		122mm(W) x 108.3mm(H)	
Weight		Approx. 280g	
Switches		Multi Tact Switch for OSD control	
Accessories		Self-tapping Screw : 3ea, Template : 1ea, Instruction Manual : 1ea, Additional Power Connector: 1ea	

Attention : Ensure to check your model name (specified in Box Label / Unit Label) and its Voltage Type whether it is a DC12V/AC24V Dual-Voltage (standard) or DC12V Single-Voltage (optional)

The specifications and/or appearance of the product may change without a prior notice

INDOOR COLOR CAMERA
ZC-D8000 SERIES
INSTRUCTION MANUAL



ENGLISH

600TVL High Resolution

Color / Day & Night



Edit : ZC-D8000-600-B-U_071211_V1

Thank you for your purchase of this product. Before operating the product, please read this instruction manual carefully to ensure proper use of the product. Please store this instruction manual in a safe place for future reference.

SAFETY PRECAUTIONS

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

WARNING
This symbol indicates that there is a possibility of death or damage to operator or others.
To prevent fire or electric shock, do not expose this product to rain or moisture.

CAUTIONS
This symbol indicates that there is a possibility of injury or damage to equipment.

- Use only 24V AC power supply marked class 2 or +12V DC regulated power supply marked class 2.
- To prevent fire or electrical shock, UL listed class 2 wiring should be used for the 12V DC or 24V AC input terminal.
- Be sure to connect each lead to the appropriate terminal, wrong connection may cause malfunction and/or damage to the camera.
- Do not attempt to aim the camera at the sun or other extremely bright objects that cause smear to appear irrespective of whether the camera is operating or not. This can damage the CCD (Charge Coupled Device).
- Do not place the camera in the following locations.
 - Locations subject to extremely high or low temperatures.
(Operating temperature range : -10°C to +50 °C {14°F to 122°F})
(Storage temperature range : -20°C to +60 °C {-4°F to 140°F })
 - Locations where there are large amounts of water vapor and steam.
- Ensure the location selected is sufficiently strong enough to support the weight of the camera and is free from vibration.
- When this camera is installed near equipment that emits a strong electromagnetic field, some irregularity such as noise on the monitor screen may happen.
- Be sure to use screws suitable for the type of material to which the camera is being mounted.
- Do not allow the camera to be subjected to strong impacts or shocks. The camera could be damaged by improper handling or storage.
- Never attempt to disassemble or mod
- If an abnormality should occur, immediately turn off the power and consult your dealer.

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

CE The CE Marking is a Directive Conformity mark of the European Union(EU)



English
Disposal of your old appliance
1. When this crossed-out wheeled bin symbol is attached to a product it means the products 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.

Franais/French
Elimination de votre ancien appareil
1. Ce symbole, représentant une poubelle sur roulettes barrée d'une croix, signifie que le produit est couvert par la directive européenne 2002/96/EC. 2. Tous les produits électriques et électroniques doivent être éliminés séparément de la chaîne de collecte municipale des ordures, par l'intermédiaire des installations de collecte prescrites et désignées par le gouvernement ou les autorités locales. 3. Une élimination conforme aux instructions aidera à réduire les conséquences négatives et risques éventuels pour l'environnement et la santé humaine. 4. Pour plus d'informations concernant l'élimination de votre ancien appareil, veuillez contacter votre mairie, le service des ordures ménagères ou encore le magasin où vous avez acheté ce produit.

Deutsch/German
Entsorgung von Altgeräten
1. Wenn dieses Symbol eines durchgestrichenen Abfalleimers auf einem Produkt angebracht ist, unterliegt dieses Produkt der europäischen Richtlinie 2002/96/EC. 2. Alle Elektro- und Elektronik-Altgeräte müssen getrennt vom Hausmüll über die dafür staatlich vorgesehenen Stellen entsorgt werden. 3. Mit der ordnungsgemäßen Entsorgung des alten Geräts vermeiden Sie Umweltschäden und eine Gefährdung der rsonlichen Gesundheit. 4. Weitere Informationen zur Entsorgung des alten Geräts erhalten Sie bei der Stadtverwaltung, beim Entsorgungsamt oder in dem Geschäft, wo Sie das Produkt erworben haben.

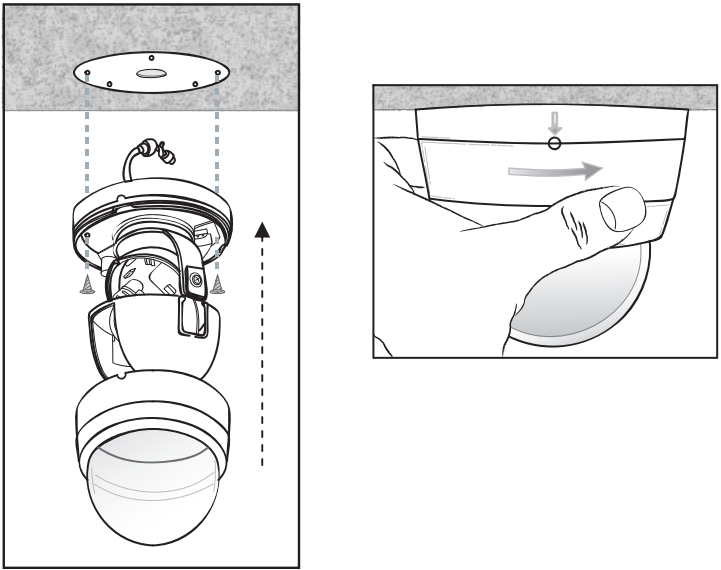
Italiano/Italian
RAEE: SMALTIMENTO DELLE VOSTRE VECCHIE APPARECCHIATURE
1. Quando il simbolo del "Cassonetto Barrato" è apposto su un prodotto, significa che lo stesso può ricadere nei termini previsti dalla Direttiva Europea nr. 2002/96/EC in funzione dell'attuazione definita dalla Legislazione dei singoli stati membri dell'Unione Europea. 2. Tutti i prodotti elettrici ed elettronici dovrebbero essere smaltiti separatamente dai rifiuti municipali, tramite appositi contenitori, approvati dall'Amministrazione Comunale o dalle Autorità Locali.
3. Il corretto smaltimento delle vostre vecchie apparecchiature, contribuirà a prevenire possibili conseguenze di impatto egativo sull'ambiente e per la salute dell'uomo. 4. Per maggiori informazioni circa lo smaltimento delle vostre vecchie apparecchiature, siete pregati di contattare l'ufficio municipale della vostra città, il servizio di smaltimento rifiuti o il punto vendita nel quale avete acquistato il prodotto.

Polski/Polish
Utylizacja starych urządzeń
1. Kiedy do produktu dołączony jest niniejszy przekreślony symbol kołowego pojemnika na śmieci, oznacza to, że produkt jest objęty europejską dyrektywą 2002/96/EC. 2. Wszystkie elektryczne i elektroniczne produkty powinny być utylizowane niezależnie od odpadów miejscich, wykorzystaniem przeznaczonych do tego miejsc składowaniawskazanych przez rząd lub miejscowe władze. 3. Właściwy sposób utylizacji starego urządzenia pomoże zapobiec potencjalnie negatywnemu wpływowi na zdrowie i środowisko. 4. Aby uzyskać więcej informacji o sposobach utylizacji starych urządzeń, należy skontaktować się z władzami lokalnymi, przedsiębiorstwem zajmującym się utylizacją odpadów lub sklepem, w którym produkt zostałakupiony.

Portugu s/Portuguese
Eliminação do seu antigo aparelho
1. Quando este símbolo de latão cruzado estiver afixado a um produto, significa que o produto é abrangido pela Directiva Europeia 002/96/EC. 2. Todos os produtos eléctricos e electrónicos devem ser eliminados separadamente da coleta de lixo municipal através de pontos de recolha designados, facilitados pelo governo ou autoridades locais. 3. A eliminação correcta do seu aparelho antigo ajuda a evitar potenciais onsequências negativas para o ambiente e para a saúde humana. 4. Para obter informações mais detalhadas acerca da eliminação do seu aparelho antigo, contacte as autoridades locais, um service de eliminação de resíduos ou a loja onde comprou o produto.

Espa ol/Spanish
Cómo deshacerse de aparatos eléctricos y electrónicos viejos
1. Si en un producto aparece el símbolo de un contenedor de basura tachado, significa que éste se acoge a la Directiva 2002/96/EC. 2. Todos los aparatos eléctricos o electrónicos se deben desechar de forma distinta del servicio municipal de recogida de basura, a través de puntos de recogida designados por el gobierno o las autoridades locales. 3. La correcta recogida y tratamiento de los dispositivos inservibles contribuye a evitar riesgos potenciales para el medio ambiente y la salud pública. 4. Para obtener más información sobre cómo deshacerse de sus aparatos eléctricos y electrónicos viejos, póngase en contacto con su ayuntamiento, el servicio de recogida de basuras o el establecimiento donde adquirió el producto.

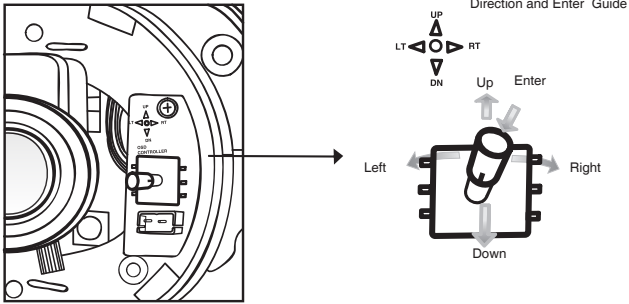
INSTALLATION



Attaching to the ceiling or wall
This section explains how to install the unit where cables are running through the interior of the ceiling or wall.
- Drilling holes in the ceiling or wall:
Use the template included to mark out the position on the ceiling or wall where you want to install the unit.
When running cables through the interior of the ceiling or wall Use the template, and drill two or four holes for screws used to attach the camera body and one hole for the cables (Cables).

2. OSD Switch and OSD Menu

Use the Multi Tact Switch within the camera



OSD MENU FUNCTION	
LENS	DC MANUAL
EXPOSURE	SHUTTER BRIGHTNESS AGC DWDR
WHITE BAL	ATW1 ATW2 AWC -> SET MANUAL
BACKLIGHT	OFF BLC HLC
DAY&NIGHT	AUTO COLOR B/W EXT
SPECIAL	CAM TITLE MOTION PRIVACY IMAGE ADJ DPC LANGUAGE VERSION
RESET	FACTORY
EXIT	

2) EXPOSURE

SETUP
LENS DC
EXPOSURE
WHITE BAL ATW1
BACKLIGHT OFF
DAY&NIGHT AUTO
SPECIAL
RESET
EXIT

SHUTTER
▶ SHUTTER AUTO
NTSC: 1/60, PAL: 1/50
FLK 1/250 ~ 1/100,000

BRIGHTNESS
▶ BRIGHTNESS 000 255
*darker — brighter

DWDR
▶ DWDR OFF — ON — 000 ~ 063

Attention BRIGHTNESS adjusts DC level of the lens

3) WHITE BALANCE

SETUP
LENS DC
EXPOSURE
▶ WHITE BAL ATW1
BACKLIGHT OFF
DAY&NIGHT AUTO
SPECIAL
RESET
EXIT

ATW1 (wider range)
ATW2 (narrower range)
AWC->SET
MANUAL
WB MANUAL
INDOOR
OUTDOOR
MANUAL
BLUE 000-255
RED 000-255

6) SPECIAL

SETUP
LENS DC
EXPOSURE
WHITE BAL ATW1
BACKLIGHT OFF
DAY&NIGHT AUTO
▶ SPECIAL
RESET
EXIT

* SPECIAL SUB MANU LIST
SPECIAL
▶ CAM TITLE ON OFF * CAMERA TITLE
MOTION OFF ON
PRIVACY OFF ON
IMAGE ADJ.
DPC
LANGUAGE ENGLISH 中文
VERSION 10 10 21
RETURN RET

SPECIAL
CAM TITLE ON
▶ MOTION ON
PRIVACY OFF
IMAGE ADJ.
DPC
LANGUAGE ENGLISH
VERSION 10 10 21
RETURN RET

▶ AREA SEL. AREA 1 AREA 4
AREA STATE ON-OFF
HEIGHT 000 ~ 013
WIDTH 000 ~ 013
LEFT/RIGHT 000 ~ 011
TOP/BOTTOM 000 ~ 011
DEGREE 000 ~ 255
VIEW ON-OFF

SPECIAL
CAM TITLE ON
▶ MOTION OFF
▶ PRIVACY ON
IMAGE ADJ.
DPC
LANGUAGE ENGLISH
VERSION 10 10 21
RETURN RET

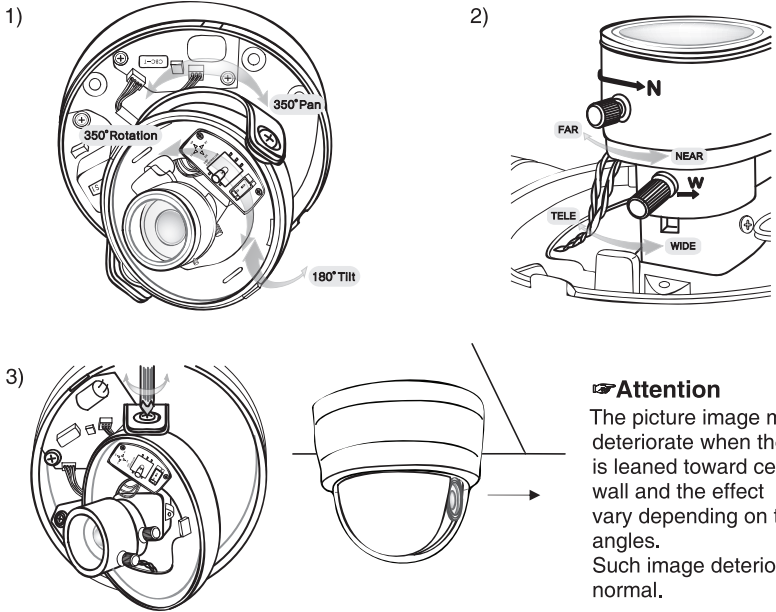
▶ AREA SEL. AREA 1 AREA 8
AREA STATE ON-OFF
HEIGHT 000 ~ 108
WIDTH 000 ~ 180
LEFT/RIGHT 000 ~ 167
TOP/BOTTOM 000 ~ 092
COLOR 000 ~ 015

Attention When select ON, AREA 1 always turns on

ADJUSTMENT

1. Direction and Lens

The camera body is set in a tri-axial mounting allowing movement in the pan, tilt and rotational planes.
1) Adjust the direction of the lens so it faces the subject
2) Move the lever to adjust focus and angle of view
3) When you finished adjusting the direction of the lens, tighten the locking screw with a screwdriver.



Attention
The picture image may deteriorate when the lens is leaned toward ceiling or wall and the effect may vary depending on the view angles. Such image deterioration is normal.

* START SET UP MENU

Press the Middle Multi Tact Switch, the main setup menu is displayed on the monitor screen

SETUP
▶ LENS DC
EXPOSURE
WHITE BAL ATW1
BACKLIGHT OFF
DAY&NIGHT AUTO
SPECIAL
RESET
EXIT

Select the function by using the switch

A function with the icon has sub menus. To select a sub menu, select a function with the icon and press the switch

1) LENS

Turn the Switch toward Left or Right side, Select DC or MANUAL

SETUP
▶ LENS DC
EXPOSURE
WHITE BAL ATW1
BACKLIGHT OFF
DAY&NIGHT AUTO
SPECIAL
RESET
EXIT

* Simply make the adjustment in the following order to help make the focusing easier:
- Select MANUAL
- Adjust lens focus well
- Then return to DC

MANUAL

4) BACKLIGHT

SETUP
LENS DC
EXPOSURE
WHITE BAL ATW1
▶ BACKLIGHT OFF
DAY&NIGHT AUTO
SPECIAL
RESET
EXIT

BLC
HLC
▶ AREA SEL. AREA 1 AREA 2
AREA STATE ON-OFF
GAIN 000-255
HEIGHT 000-010
WIDTH 000-009
LEFT/RIGHT 000-011
TOP/BOTTOM 000-010
▶ LEVEL 000-255
MODE ALL DAY NIGHT ONLY

Attention When select BLC, AREA 1 always turns on

5) DAY&NIGHT

SETUP
LENS DC
EXPOSURE
WHITE BAL ATW1
▶ DAY&NIGHT AUTO
SPECIAL
RESET
EXIT

AUTO
D->N LEVEL 040-224 140-224
D->N DELAY 1 SEC-60SEC
N->D LEVEL 000-184 000-084
N->D DELAY 1 SEC- 60SEC
WARNING Do not change the above factory-set levels
COLOR
▶ BURST ON-OFF
IR SMART OFF-ON
IR LEVEL HIGH-LOW
EXT
IR GAIN 000-255
HEIGHT 000-008
WIDTH 000-013
LEFT/RIGHT 000-005
TOP/BOTTOM 000-009

7) RESET & EXIT

SETUP
LENS DC
EXPOSURE
WHITE BAL ATW1
BACKLIGHT OFF
DAY&NIGHT AUTO
SPECIAL
▶ RESET
EXIT

▶ FACTORY RESSET