

**CILT13D1G (DC AI 2.8~12mm)**



**CILT13D7G (3.6mm)**

**620Line Intense Light  
Tamperproof Dome  
Vandal Resistant  
w/Chameleon Cover  
Wall/Ceiling Mount**



Please read this manual thoroughly before operation and keep it handy for further reference.

# WARNING & CAUTION

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



The lightning flash with an arrowhead symbol, within an equilateral triangle is intended to alert the user to the presence of un-insulated "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 appliance

**INFORMATION** -This equipment has been tested and found to comply with 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.

**WARNING** – Change or modification not expressly approved by the manufacturer could void the user's authority to operate the equipment

**CAUTION :** To prevent electric shock and risk of fire hazards.

**DO NOT** use power sources other than that specified.

**DO NOT** expose this appliance to rain or moisture.

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

# PACKAGE CONTENTS

---

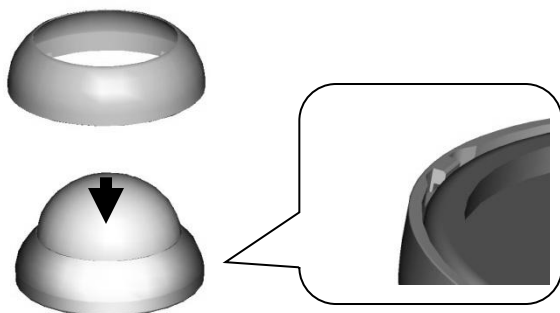
**Please make sure that the following items are included in the Package:**

- **3 Mounting Screws and Anchors**
- **1 Tamperproof Screw**
- **1 Wrench**
- **1 Video Test Connector**
- **1 Power Cable**
- **1 Chameleon Cover**

# CAMERA INSTALLATION

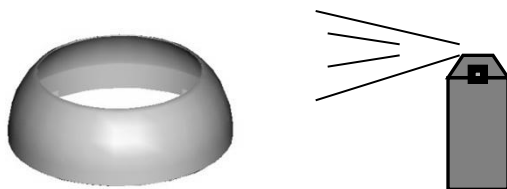
## CHAMELEON COVER

Place the Chameleon Dome over the camera and push until it snaps into position.



● **Notes : Optional painting before installation**

### \* **Painting method for the Chameleon Dome**



- \* **Spray the color of your choice onto the Chameleon cover**
- \* **If necessary, apply a second coat**

# FEATURES

---

## **1. SUPER HIGH RESOLUTION**

Sony Super HAD II CCD with an innovated new DSP Technology will enable to achieve Super High Resolution 620TVL with High S/N Ratio.

## **2. SENS-UP**

Digitally manipulates the exposure level of the image to produce bright images in the darkest of scenarios.

## **3. 3D-DNR**

The high performance DSP Technology reduces the gain noise in digital image processing, producing clear sharp images in low light condition.

## **4. HLC**

This feature allows extremely bright areas in the viewing area to be masked off.

## **5. D-WDR (Digital Wide Dynamic Range)**

With the newly innovated DSP Technology, the camera produces high quality images even with strong backlight.

## **6. DPC (Defect Pixel Correction)**

It performs the detection and correction of defective pixels in a camera Image sensor array.

## **7. DAY / NIGHT**

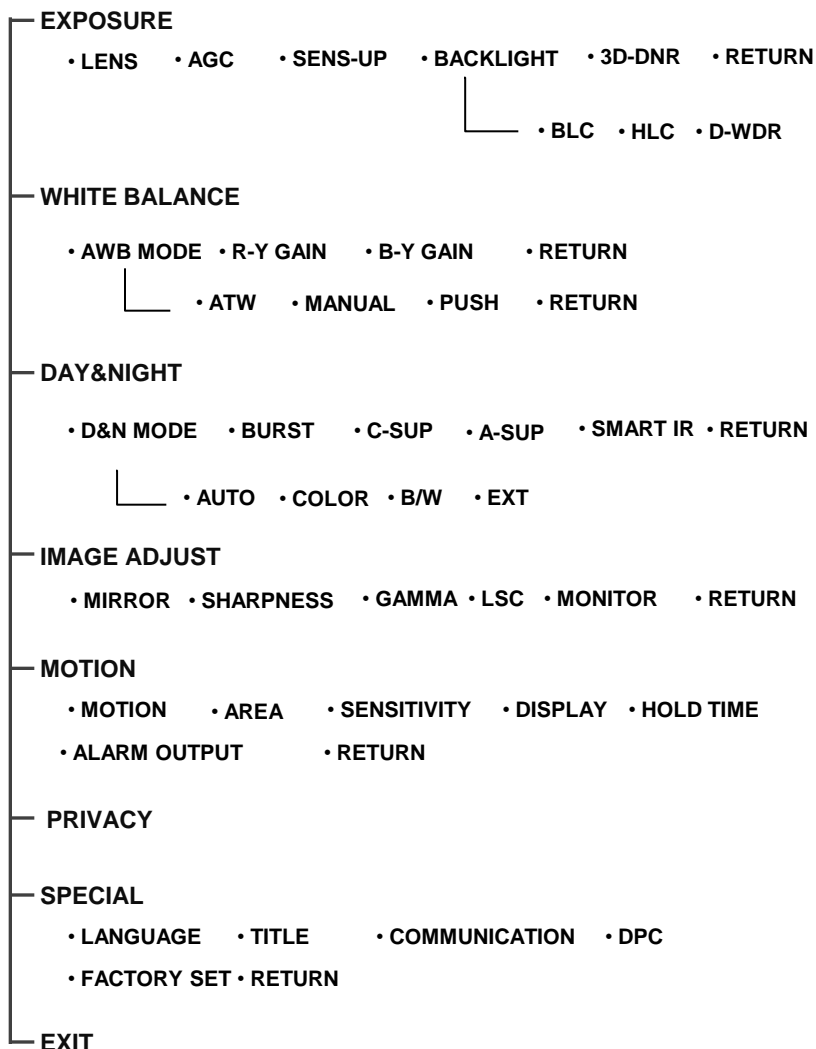
Switch to appropriate mode (Color or B/W) automatically.

## **8 . Miscellaneous**

The camera conveys various features including Motion detection, Privacy Masking, Mirror, Sharpness, BLC, etc.

# OSD MENU TREE

---



# OSD MENU DETAILS

---

## **\*EXPOSURE\***

### **1) LENS**

**DC IRIS** : Used with DC auto iris lens.

- **BRIGHTNESS** : Adjusts image brightness. (000 ~ 100)
- **E. SHUTTER** : Auto / Manual Shutter can be selectable.

**MANUAL** : Used with manual lens.

- **BRIGHTNESS** : Adjusts image brightness.
- **E. SHUTTER** : Auto / Manual Shutter can be selectable.

### **2) AGC** : Adjusts the AGC level. (HIGH/MID/LOW/OFF)

### **3) SENS-UP** : Sets the desired multiple of the digital exposure length. (AUTO/OFF/x2 ~ x256)

### **4) BACKLIGHT** : : Adjusts backlight options.

**BLC** : **Compensates for heavily backlit scenes.**

- **BLC MODEL** : Adjusts the BLC mode (AUTO/MANUAL)
- **BLC LEVEL** : Adjusts the BLC level.(HIGH/MID/OFF)

**HLC** : **This feature allows extremely bright areas in the viewing area to be masked off.**

- **HBLC** : **Adjust the BLC function additionally while the HLC is enabled.**
- **MODE** : **Sets the desired mode to use HLC all day or night time only.**  
**( ALL DAY/ NIGHT)**
- **HLC LEVEL** : **Adjusts the level of masking.**
- **MASK1 ~4** : **Sets which areas will be active for the HLC feature.**

**D-WDR** : **Enables digital wide dynamic range to balance dark and light areas in the scene.**

### **5) 3D-DNR** : Reduces the background noise caused by the digital enhancement of a low light environment. If AGC is turned OFF, the 3D-DNR will be disabled. (AUTO / HIGH / MID / LOW / OFF)

# OSD MENU DETAILS

---

## **\*WHITE BALANCE\***

### **1) AWB MODE**

**ATW** : Automatically white balances the image.

**MANUAL** : Select M-WR or M-WB then enter the MANUAL white balancing mode to manually adjust the scene to your desired settings.

**2) R-Y GAIN** : Adjusts the red gain level. (000 ~ 255)

**3) B-Y GAIN** : Adjusts the blue gain level. (000~255)

## **\*DAY / NIGHT\***

### **1) DAY/NIGHT MODE**

**AUTO**: Automatically determines the D/N switching points.

- DAY/NIGHT : Adjusts the switching point level

- NIGHT>DAY : Adjusts the switching point level.

- DELAY TIME : Adjusts the calculation time for the trigger.

**COLOR** : Color mode.

**B/W** : B/W mode.

**EXT** : This mode allows you to apply a desired filter to external signals.

**2) BURST** : Selects the BURST Mode (OFF / ON)

**3) C-SUP** : Controls color noise suppression at night time. (000~100).

**4) A-SUP** : Controls aperture level suppression at night time. (000~100).

**5) SMART IR** : Produces the best image quality by preventing IR saturation when IR LEDs are on. (AUTO (000~040) / OFF)

## **\*IMAGE ADJUST\***

**1) MIRROR** : Flips the image along the y-axis.

**2) SHARPNESS** : Sets the amount of sharpness applied on the image.

**3) GAMMA** : Sets the desired Gamma value. (0.45/55/65/USER)

**4) LSC** : Sets the Lens Shading Compensation value. (000~030)

**5) MONITOR** : Sets the video output to three main input types. (CRT/LCD)



# OSD MENU DETAILS

---

## **\*MOTION\***

- 1) **MOTION** : Adjust motion detection settings.
- 2) **AREA** : Selects the current motion zone from area1 to 4
- 3) **SENSITIVITY** : Sets the desired multiple of the digital exposure length. (000~030)
- 4) **DISPLAY** : Sets the desired display mode when the motion is detected. (OFF/MESSAGE/TRACE)
- 5) **HOLD TIME** : Sets the hold time when the event is detected. (000~015)
- 6) **ALARM OUTPUT** : Selects the alarm output mode. (ON/OFF)

## **\*PRIVACY**

- 1) **MASK 1~8** : Selects the current mask number
- 2) **DOT SEL** : Sets the size of Left-Bottom/Right-Bottom/Left-Top/Right-Top.
- 3) **DOT XY** : Sets the coordinate of Horizontal / Vertical Axis for PM position.
- 4) **MOVE XY** : Moves the mask horizontally and vertically.
- 5) **COLOR** : Selects the desired mask color. Black, White, Red, Green, Blue, Magenta, Cyan, Gray colors are available.

## **\*SPECIAL\***

- 1) **LANGUAGE** : Sets the desired OSD language.  
(ENGLISH, SPANISH, PORTUGUESE, POLISH, GERMAN, ITALIAN, NETHERLANDIC, KOREAN, CHINESE ).
- 2) **TITLE** : Determine the camera name. (ON/OFF)
- 3) **COMMUNICATION** : Used to configure the RS-485 port.  
\*Requires the RS-485 option.  
ID : Sets the ID for the RS-485 (0~255).  
BAUD RATE : Sets the baud rate for the RS-485 (2400~9600).  
**PROTOCOL** : Pelco-D
- 4) **DPC** : Automatically detect and correct the defective pixels in a camera image sensor array.  
AUTO : Adjust white THR and Luma THR level.  
White THR (000~255) / LUMA THR (000~255)
- 5) **FACTORY SET** : Resets all settings to it's factory defaults.

## OSD MENU DETAILS

---

### **\*EXIT\***

**SAVE & EXIT** : Press to save the current settings and exit main menu.

**EXIT** : Press to exit main menu without saving settings.

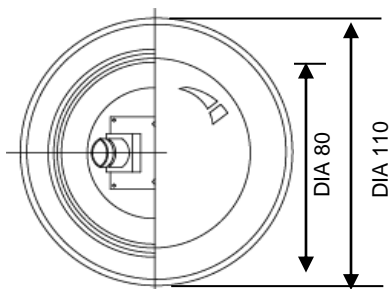
# SPECIFICATIONS

Item	CILT13D1G CILT13D7G
Power Source	12VDC & 24VAC ( Dual Voltage )
Power Consumption	150mA (DC) / 1.9W (AC)
Image Sensor	1/3", SONY SUPER HAD II CCD, 410,000 pixels
Total Pixels	811(H) x 508(V) , 1/3" CCD
Effective Pixels	768(H) x 494(V) , 1/3" CCD
Lens Type	CILT13D1G : DC AUTO IRIS 2.8~12mm CILT13D7G : 3.6mm
Maximum Aperture Ratio	1 : 1.3 ~2.0
Scanning System	2 : 1 Interlaced 525 Lines / 60 Fields / 30 Frames
Synchronization	Internal
Video Output	1.0V [p-p] Composite, 75Ω
Resolution	620 TV Line
Gain Control	Low / Middle / High / OFF selectable
Electric Shutter Speed	1/60 ~ 1/90,000 sec
SENS UP	Built-in ( selectable limit ~ X256)
White Balance	ATW / R-Y GAIN / B-Y GAIN / MANUAL
Min. Illumination	0.03Lux at F1.2, 0.00001Lux (Sens-up × 256)
S/N ( Y signal)	52dB (Weight On)
DNR	Low / Middle / High / OFF selectable
Motion Detection	ON / OFF (4 Programmable Zone)
OSD	Built - in
Privacy Function	ON / OFF (8 Programmable Zone)
Operational Temperature	-29°C ~ +50°C ( - 20°F ~122°F)
Operational Humidity	30% ~90% RH
Weight	1.54lbs

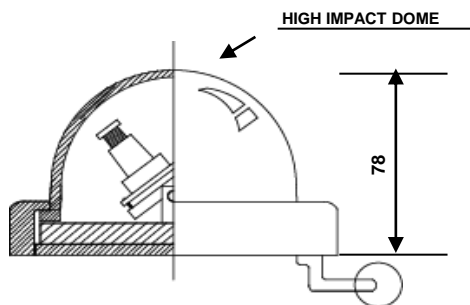
# DIMENSIONS

---

**\* TOP VIEW**



**\* SIDE VIEW**



# WARRANTY



## LIMITED WARRANTY - VIDEO PRODUCTS

THIS WARRANTY IS VALID ONLY ON PRODUCTS PURCHASED AND USED IN THE UNITED STATES OF AMERICA AND CANADA. THIS WARRANTY APPLIES ONLY TO THE ORIGINAL USER.

SUBJECT TO CONDITIONS AND EXCLUSIONS FOUND BELOW, THIS PRODUCT IS WARRANTED AGAINST MANUFACTURING DEFECTS IN MATERIAL AND WORKMANSHIP FOR THE FOLLOWING PERIOD FOR PARTS AND LABOR:

SPECO TECHNOLOGIES CAMERAS .....	5 YEARS	DVRs .....	3 YEARS
SPECO TECHNOLOGIES IP CAMERAS .....	2 YEARS	NVRs .....	3 YEARS
SPECO PTZ AND VL CAMERAS .....	1 YEAR	BALANCE OF	
SPECO TECHNOLOGIES MONITORS .....	1 YEAR	SPECO TECHNOLOGIES LINE .....	1 YEAR
IR LEDS .....	90 DAYS		

SPECO TECHNOLOGIES WILL REPAIR OR REPLACE (AT OUR DISCRETION) ANY PARTS FOUND TO BE DEFECTIVE FOR THE WARRANTY PERIOD SPECIFIED. WE WILL PROVIDE A REPLACEMENT FOR ANY DEFECTIVE PART.

### CONDITIONS

1. YOU MUST OBTAIN A RETURN AUTHORIZATION (RA) NUMBER FOR ANY MERCHANDISE BEING RETURNED TO SPECO TECHNOLOGIES, WHETHER FOR RETURN/EXCHANGE OR REPAIR, WHETHER IN OR OUT OF WARRANTY.
2. THIS WARRANTY WILL BE HONORED ONLY UPON PRESENTATION OF THE ORIGINAL DATED BILL OF SALE OR SALES SLIP.
3. TRANSPORTATION OF THE PRODUCT TO OUR SERVICE DEPARTMENT IS THE RESPONSIBILITY OF THE USER. REPAIRED OR REPLACED PRODUCT WILL BE RETURNED PREPAID DURING THE WARRANTY PERIOD.
4. SPECO TECHNOLOGIES DOES NOT AUTHORIZE ANY INTERNET OR MAIL ORDER PRODUCT SALES. IF A SPECO TECHNOLOGIES PRODUCT IS PURCHASED FROM AN UNAUTHORIZED DISTRIBUTOR OR OTHER SOURCE, INCLUDING RETAILERS, MAIL ORDER SELLERS AND ONLINE SELLERS, IT WILL NOT BE HONORED OR SERVICED UNDER THE EXISTING SPECO TECHNOLOGIES WARRANTY POLICY. ANY SPECO TECHNOLOGIES PRODUCT PURCHASED FROM THESE ONLINE MERCHANTS WILL VOID THE APPLICABLE WARRANTY AND IS INELIGIBLE FOR TECHNICAL SUPPORT. IF YOU HAVE QUESTIONS ABOUT A RESELLER, PLEASE CONTACT SPECO TECHNOLOGIES AT 1-800-645-5516 FOR A LIST OF UNAUTHORIZED DEALERS, VISIT: [www.specotech.com/unauthorized](http://www.specotech.com/unauthorized).

### EXCLUSIONS

1. THIS WARRANTY SHALL NOT COVER ADJUSTMENT OF CUSTOMER OPERATED CONTROLS AS EXPLAINED IN THE APPROPRIATE MODEL'S INSTRUCTION MANUAL OR PRODUCTS WHICH HAVE BEEN ALTERED, ABUSED, OR HAVE MISSING OR ALTERED SERIAL NUMBERS.
2. THIS WARRANTY SHALL NOT APPLY TO UNCRATING, SETUP, INSTALLATION, OR THE REMOVAL AND REINSTALLATION OF PRODUCTS AFTER REPAIR.
3. THIS WARRANTY SHALL NOT APPLY TO REPAIRS OR REPLACEMENTS NECESSITATED BY ANY CAUSE BEYOND THE RESULT OF MANUFACTURE INCLUDING, BUT NOT LIMITED TO, ANY MALFUNCTION, DEFECTS OR FAILURE CAUSED BY OR RESULTING FROM UNAUTHORIZED SERVICE OR PARTS, IMPROPER MAINTENANCE, MODIFICATION OR REPAIR BY THE USER, ABUSE, MISUSE, NEGLIGENCE, ACCIDENT, FIRE, FLOOD, OR OTHER ACTS OF NATURE, INCORRECT LINE VOLTAGE, DAMAGE OR IMAGE BURNS TO TELEVISION PICTURE TUBES CAUSED BY OR ATTRIBUTABLE TO THE USE OF ANY ACCESSORY, ELECTRONICS GAME OR DEVICE, OR DAMAGE CAUSED TO IMAGE PICKUP DEVICES BY EXCESSIVE LIGHT.

THE FOREGOING IS IN LIEU OF ALL OTHER EXPRESSED WARRANTIES AND WE DO NOT AUTHORIZE ANY PARTY TO ASSUME FOR US ANY OTHER OBLIGATION OR LIABILITY. IN NO EVENT SHALL WE BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING FROM THE USE OF THIS PRODUCT, OR FOR ANY DELAY IN THE USE OF THIS PRODUCT DUE TO CAUSES BEYOND OUR CONTROL. SOME STATES DO NOT ALLOW LIMITATIONS OF HOW LONG AN IMPLIED WARRANTY LASTS AND/OR DO NOT ALLOW THE EXCLUSION OR LIMITATION OF CONSEQUENTIAL DAMAGES. THE ABOVE LIMITATIONS ON IMPLIED WARRANTY AND CONSEQUENTIAL DAMAGES MAY NOT APPLY TO YOU.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

NOTE: FOR YOUR PROTECTION IN THE EVENT OF THEFT OR LOSS OF THIS PRODUCT, PLEASE FILL IN THE INFORMATION REQUESTED BELOW AND RETAIN WITH YOUR SALES RECEIPT.

MODEL NO.: \_\_\_\_\_ SERIAL NO.: \_\_\_\_\_  
(LOCATED ON BACK OR BOTTOM OF UNIT)

DATE OF PURCHASE: \_\_\_\_\_

WHERE PURCHASED: \_\_\_\_\_ PURCHASE PRICE: \_\_\_\_\_

Speco Technologies  
200 New Highway  
Amityville, NY 11701  
[www.specotech.com](http://www.specotech.com)

FOR MORE INFORMATION REGARDING SERVICE OR RETURN,  
CALL US TOLL FREE: 1-800-645-5516 IN METRO NY: 631-457-8700

ALWAYS USE DISCRETION WHEN INSTALLING VIDEO AND/OR AUDIO SURVEILLANCE EQUIPMENT ESPECIALLY WHEN THERE IS AN EXPECTATION OF PRIVACY. INQUIRE REGARDING FEDERAL, STATE AND/OR LOCAL REGULATIONS APPLICABLE TO THE LAWFUL INSTALLATION OF VIDEO AND/OR AUDIO RECORDING OR SURVEILLANCE EQUIPMENT. PARTY CONSENT MAY BE REQUIRED.

# MEMO

---

# MEMO

---



---

**200 New Highway  
Amityville, NY 11701  
631-957-8700  
[www.specotech.com](http://www.specotech.com)**

**Rev. 120719**

Speco Technologies is constantly developing product improvements.  
We reserve the right to modify product design and specifications without notice  
and without incurring any obligation.