



CVC6146SCS Series  
540 Line Color Dome Camera  
Wall & Ceiling Mountable



**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.

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## PACKAGE CONTENTS

- Please make sure that the following items are included in the package:

1 CVC6146SCS Series Camera

2 Mounting Screws

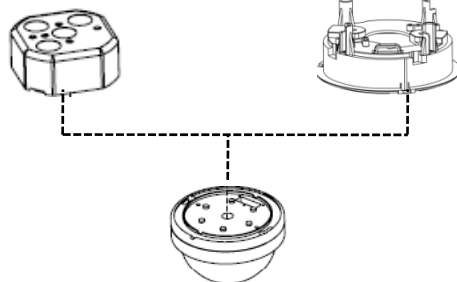
1 Video test Connector

Please leave this manual with the end-user for future reference.

### COMPATIBILITY

"A" type Box

DFM Series



Electrical Box is not included in the package but  
Is compatible with the camera

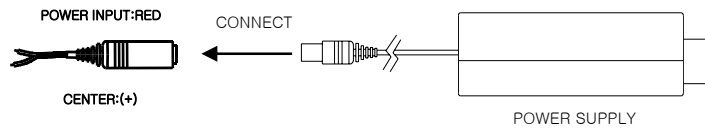
## **PRECAUTIONS**

- **THIS DOME CAMERA SHOULD BE ONLY INSTALLED BY QUALIFIED PERSONNEL**
- **TO PREVENT A FIRE OR ELECTRICAL HAZARD PLEASE USE PROPER POWER CABLE**
- **THE DOME COVER SHOULD BE TREATED WITH CARE. DO NOT CLEAN THE COVER WITH AN ABRASIVE CLEANING MATERIAL - PLEASE USE A SOFT CLOTH OR TISSUE TO CLEAN THE DOME COVER**
- **THERE ARE NO USER-SERVICEABLE PARTS INSIDE. PLEASE DO NOT DISASSEMBLE THIS CAMERA OTHER THAN TO MAKE INITIAL ADJUSTMENTS**
- **PLEASE USE A UL APPROVED REGULATED 24 VOLT AC OR 12 VOLT DC POWER SUPPLY**
- **PLEASE USE APPROPRIATE LOW VOLTAGE POWER CABLE TO PREVENT FIRE OR ELECTRICAL SHOCK**
- **PLEASE INSURE THAT YOUR INSTALLATION AREA CAN SUPPORT THE WEIGHT OF THE CAMERA**
- **PLEASE HANDLE THIS CAMERA CAREFULLY:  
- DON'T USE A STRONG OR ABRASIVE DETERGENT WHEN CLEANING THE CAMERA.  
- DO NOT EXPOSE THE CAMERA TO DIRECT SUN**

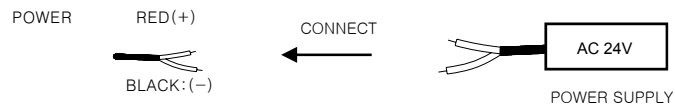
# CAMERA INSTALLATION

## CONNECT POWER CABLE

### 1. WHEN USING 12 VOLTS DC (constant voltage 500 mA)



### 2. WHEN USING 24 VOLTS AC (20 Volt Amps) -CONNECT ACCESSORY CABLE TO THE POWER JACK AND CONNECT 24V AC TO THE LEAD

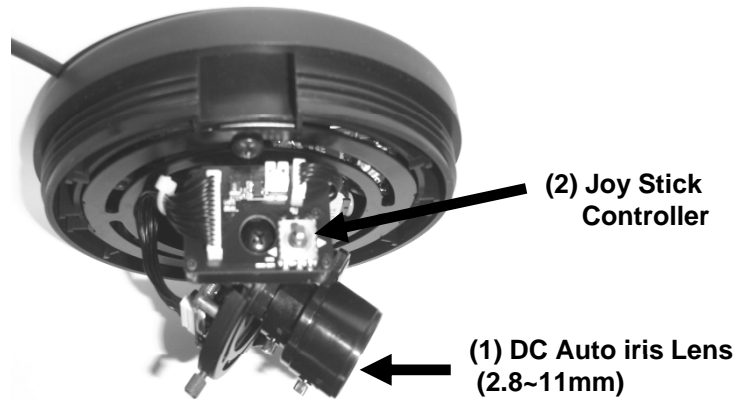


### 3. CONNECT VIDEO CABLE -CONNECT BNC CABLE TO THE BNC JACK.



# INTERNAL COMPONENTS

## 1. Mechanical



### (1) DC AUTO-IRIS LENS

Adjust between T $\leftrightarrow$ W (TELE  $\leftrightarrow$  WIDE) to set the angle (focal length) Set the focus by adjusting  $\infty\leftrightarrow$ N

**NOTE: BOTH OF THE ABOVE ADJUSTMENTS GET LOCKED INTO POSITION THROUGH THE USE OF "LOCKING HANDLES".**

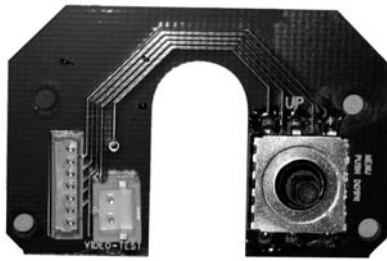
### (2) JOY STICK

TO SET THE OSD (ON SCREEN DISPLAY) , PRESS THE JOY STICK FOR ONE SECOND AND SET AS DESCRIBED IN THE MANUAL



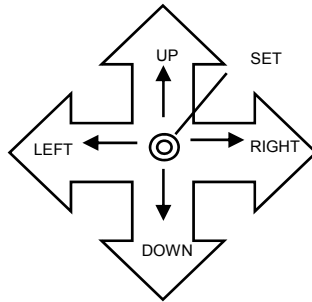
# INTERNAL COMPONENTS

## 2. Joy Stick



Video Test Terminal

OSD Joystick Switch



Push the Joy stick for one second, and the OSD appears on the screen. Move the Joy Stick up, down, left & right to control the OSD functions.

## ● Features

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### BLC

When the image is in front of strong background lighting, your camera allows you to get a clear image.

### High Resolution

Horizontal resolution of 540 TV lines is achieved by using a SONY Double Speed CCD with 410,000 pixels, yielding pictures with a high S/N ratio.

### OSD

All camera functions are menu driven for easy use.

### ELECTRONIC DAY/NIGHT

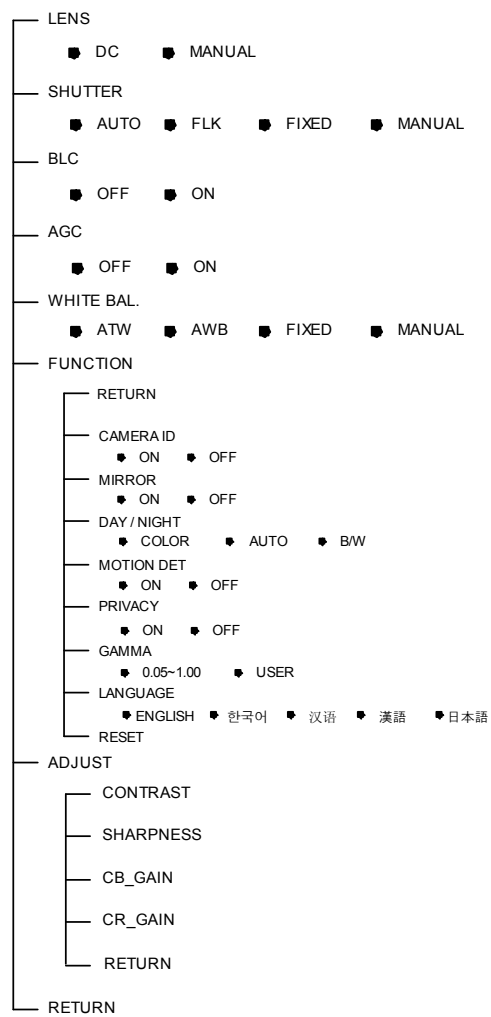
The camera can show color pictures in all lighting conditions, or you can have it automatically switch to a B/W picture in low light conditions

### Motion Detection

Built in motion detector with adjustable areas of coverage will flash a warning on the screen when motion is detected.

## ● Operating your camera

### OSD Function



## ● Operating your camera – SETUP

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### 1) LENS

<DC / MANUAL>

Selects Lens Type.

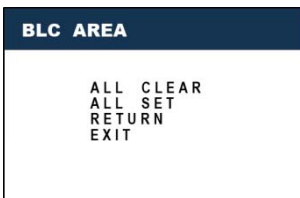
### 2) SHUTTER

<AUTO / FLK / FIXED / MANUAL>

Adjusts shutter settings.  
Flicker-less mode (FLK) reduces on-screen flickering.  
Electronic Shutter Control (AUTO) adjusts brightness level on screen.  
Manual mode allows you to adjust the shutter speed from 1/60~1/120,000 of a second (NTSC), or 1/50~1/100,000(PAL).  
FLK is the only option available when the camera lens is set to the recommended DC mode.

### 3) BLC

<ON / OFF>



Provides light level control to overcome severe backlighting conditions.

### 4) AGC

<ON / OFF>

Adjusts value of AGC gain. Increase the GAIN level to brighten the picture. (noise / distortion may develop)

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### 5) WHITE BAL.

<ATC / AWB / FIXED / MANUAL>

Controls color on the screen.  
Select Auto Tracking White Balance (ATW) when the color temp. is 2400°K~12000°K (for example when under a fluorescent light or outdoors).  
Manual mode allows you to increase or decrease the red or blue factor on screen.  
Auto White Balance Control (AWC) automatically adjusts the white balance to your specific environment.

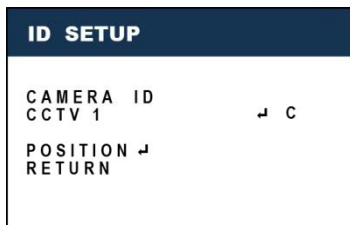
### 6) FUNCTION

#### (6-1) RETURN

Return to the main SETUP menu.

#### (6-2) CAMERA ID

<OFF / ON>



Display a name and/or number on the monitor.  
To add a camera title:

CAMERA ID : Select character by moving joystick up and down.  
C = Delete the entire name and start again.  
POSITION = Position the camera title on the screen.  
Push down the button to set the position.

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**(6-3) MIRROR**

<ON / OFF>

Produce a horizontal mirror image on screen.

**(6-4) DAY / NIGHT**

<AUTO / COLOR / BW>

AUTO = Automatically detect color or black/white.  
Delay – When the Day & Night function starts or stops (0~15sec)  
Start Level – Set the brightness level where the Day & Night function start to operate  
End Level – Set the brightness level where the Day & Night function stops operate  
COLOR = Full time color mode  
B/W = Full time B/W mode

**(6-5) MOTION DET**

<ON / OFF>

MOTION	MOTION AREA
AREA	
MOTION TH. 037	ALL CLEAR
MOTION TRACE OFF	ALL SET
RETURN	RETURN
	EXIT

AREA = Select motion detection area.  
MOTION TH = Select low luminous motion threshold value.  
MOTION TRACE = Display motion trace.

**(6-6) PRIVACY**

<ON / OFF>

PRIVACY	AREA SEL	AREA 0
AREA STATE		ON
LEFT	150	
RIGHT	170	
TOP	029	
BOTTOM	056	
COLOR	006	
RETURN		

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AREA SEL = Select a motion detection grid (top left, top ,right, bottom left, bottom right) to modify.  
AREA STATE = Activate or deactivate the selected grid.  
LEFT/RIGHT/TOP/BOTTOM = Alter the dimensions of the selected grid.  
COLOR = Select color of privacy area.

**(6-7) GAMMA**

<ON / USER>

Sharpen the image on screen.  
Excessive sharpening may cause picture noise.

**(6-8) LANGUAGE (English / 한국어 / 汉语/漢語 / 日本語)**

Choose language that should be displayed.

**(6-9) RESET**

Restore all factory default settings.

**7) ADJUST**

Adjust level of sharpness / contrast / CB\_Gain / CR\_Gain.

**8) EXIT(SAVE)**

Save OSD settings and exit the SETUP menu.

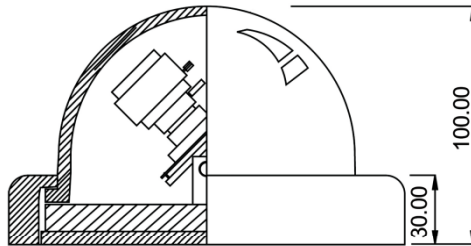
## SPECIFICATIONS

ITEM	CVC6146SCS Series
Power Source	DC12V & AC24V (Dual Voltage)
Image Sensor	1/3", SONY SUPER HAD CCD, 410,000 pixels
Effective Pixels	755(H) x 582(V) , 1/3" CCD
Maximum Aperture Ratio	1 : 1.3 ~ 2.0
Scanning System	2 : 1 Interlaced 525 Lines / 60Fields / 30Frames
Video Output	1.0V [p-p] Composite, 75Ω
Resolution	540 TV Line
Back Light Compensation	AUTO / OFF
Gain Control	ON / OFF
Electric Shutter Speed	1/50 ~ 1/100,000 sec
WHITE BALANCE	W-ATW / FIXED / AWB / MANUAL
Min. Illumination	0.3Lux (F1.3)
S/N ( Y signal)	50dB (Weight On)
Motion Detection	MD64 / OFF
On Screen Display	Built - in
PRIVACY Function	ON / OFF (4 Programmable Zone)
Operational Temperature	-10℃ ~ +50℃ (14°F ~ 122°F)
Operational Humidity	30% ~ 90% RH

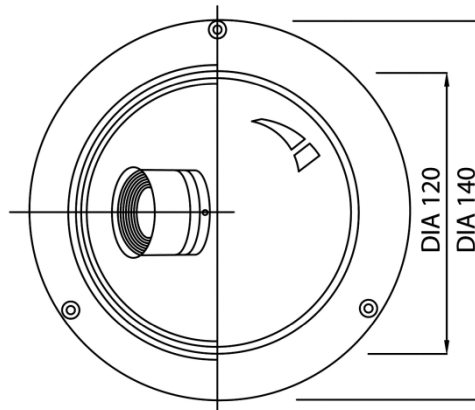


## DIMENSIONS

\* SIDE VIEW



\* TOP VIEW



# WARRANTY



## LIMITED WARRANTY

THIS WARRANTY IS VALID ONLY ON PRODUCTS PURCHASED AND USED IN THE UNITED STATES OF AMERICA. 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
SPECO TECHNOLOGIES MONITORS:	1 YEAR
BALANCE OF SPECO TECHNOLOGIES LINE:	1 YEAR*
* IR LEDs, Time lapse VCR Drum Assemblies & Heads:	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 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.

### 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	FOR MORE INFORMATION REGARDING SERVICE OR RETURN, CALL US TOLL FREE: 1-800-645-5516 IN METRO NY: 631-957-8700
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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**



**200 New Highway**

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**Amityville, NY 11701**

**631-957-8700**

**[www.specotech.com](http://www.specotech.com)**

Rev. 100125

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