700Line IntensifierH^{TM} *Series*

CVC6246H (Black Housing)
CVC6246HW (White Housing)

INDOOR DOME
Wall/Ceiling Mount
DC auto iris 2.8~12mm
Dual Voltage (12VDC / 24VAC)

speco technologies®

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

WARNING & CAUTION

CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION : 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 lighting 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 (serving) instructions in the literature accompanying the appliance

INFORMATION -This equipment has been tested and found to company 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 equipments 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.

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
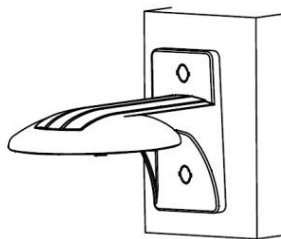in the Package:**

- **2 Mounting Screws**
- **1 Video Test Connector**
- **1 Power Cable**

OPTIONAL ACCESSORIES

DFM
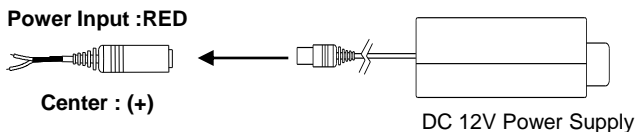**(Tile Ceiling Flush Mount)**

CVCWMTIND
(Indoor Wall Mount)

CAMERA INSTALLATION

CONNECT POWER CABLE

1. When using 12 VOLTS DC (constant voltage 500mA)

Power Input :RED

Center : (+)

DC 12V Power Supply

2. When using 24 VOLTS AC (40Volt Amps)

Power Input :RED   **Cable Lead (Accessory)**

Center : (+)

AC 24V
Power Supply
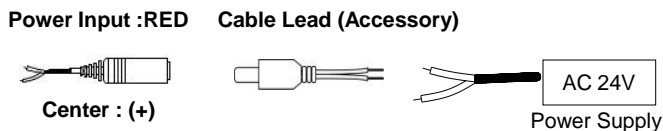
3. CONNECT VIDEO CABLE
-CONNECT BNC CABLE TO THE BNC JACK.
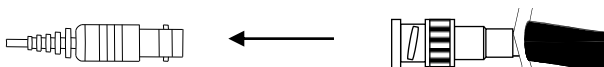
4. CONNECT Alarm output (Relay output)
-Connect (+ , COM) for Positive activation and (-. COM) for
Negative activation of External Alarm Device when Motion
Detection is 'ON' in the camera.

+ RED
COM (GREY)
- WHITE

Positive Alarm Device

Negative Alarm Device

Alarm Output

FEATURES

Now with "PRESETS"

PRESETS (Outdoor, Indoor, Elevator, Lobby, Hallway & Low Light)
Used for a quick and easy setup for the installation environment.

700TVL Resolution

Horizontal resolution of 700 TV lines is achieved by using a
SONY Super-HAD CCD with 520,000 pixels, and a custom DSP
yielding pictures with a high S/N ratio.

INTENSIFIER H

More Powerful Performance in low light condition.
High quality pictures to be captured in very low light condition.

WDR

More Powerful WDR in strong back lighting.

SPECO DNR

The Intensifier camera has a DSP chip that can remove image
noise efficiently showing clean images in low light conditions.

HLC (High Light Compensation)

This function reverses bright spots in the picture (such as
headlights). This enables the entire system to do a better job of
resolving and displaying grayscale information such as a
license plate.

FEATURES

Motion Detection with Alarm Output

Built in motion detector with adjustable areas of coverage will send a signal to an external alarm device when motion is detected.

PRIVACY MASK

It also has the ability to mask up to 8 areas of the picture where viewing is not desired. Each zone can be independently programmed via the OSD.

STABILIZER

This function removes image jitter that is caused by vibrations in the building and reduces the amount of hard drive space.

DIGITAL ZOOM

The picture could be enlarged by using this digital zoom function.

DAY/NIGHT

The IntensifierH 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
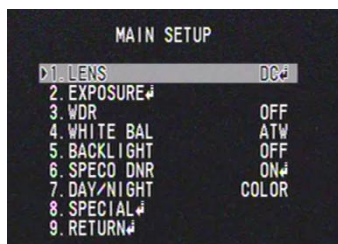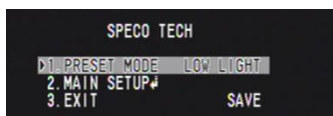
OSD

All camera functions are menu driven for easy use.

OSD MENU DETAILS

1. PRESET

[INDOOR / OUTDOOR / LOW LIGHT / LOBBY / HALLWAY / ELEVATOR]
- Used for quick and easy setup for the installation environment.

```
        SPECO TECH                      MAIN SETUP

▷1. PRESET MODE   LOW LIGHT    ▷1. LENS              DC↵
  2. MAIN SETUP↵                 2. EXPOSURE↵
  3. EXIT           SAVE         3. WDR              OFF
                                 4. WHITE BAL        ATW
                                 5. BACKLIGHT        OFF
                                 6. SPECO DNR        ON↵
                                 7. DAY/NIGHT        COLOR
                                 8. SPECIAL↵
                                 9. RETURN↵
```

2. LENS SETUP

- BRIGHTNESS : Adjusts the video brightness (selectable from 1-70)
- IRIS SPEED : Adjusts Iris control speed of the DC lens. If the control
    speed is too slow or fast, use this menu to adjust the speed.
- FOCUS ADJ : To adjust the DC lens focus correctly, you must change
    MODE to ON under the FOCUS ADJUST menu. Adjust the lens
    focus and after the lens focus had been adjusted, change MODE
    to OFF.

3. EXPOSURE SETUP

◆ BRIGHTNESS : Adjusts the video brightness.
◆ SHUTTER : You can select either auto or manual shutter.
* A.FLK : Select this when you see picture flicker, this can happen when
    the frequency of the local lighting clashes with the camera.
* ESC : Select this to control the shutter speed automatically. If ESC is
    selected, the shutter speed is automatically controlled depending
    on the ambient illumination of the subject.
* MANUAL : You can control shutter speed manually. (1/60 ~ 1/120,000)
•   --- : Shutter speed is fixed at 1/60 sec. (1/50 sec.)

☞ **NOTE**
■ **When using a DC lens, set the shutter mode to A.FLK if color rolling occurs.**
■ **When the SHUTTER is set to ESC after selecting Internal Synchronization Type, the picture may become unstable if the camera faces a bright fluorescent light. Therefore, take care when choosing the installation position.**
■ **When the SHUTTER is set to MANUAL or A.FLK mode, INTENSIFY will be disabled.**

OSD MENU DETAILS

◆ AGC(AUTO GAIN CONTROL) : The higher the gain level, the brighter the screen, but higher the noise.
* OFF : Deactivates the AGC function.
* LOW : Allows automatic gain control from 5.3dB to 32dB.
* HIGH : Allows automatic gain control from 5.3dB to 37dB.
◆ INTENSIFY : When it is night or dark, the camera automatically detects the light level and maintains a clear picture if this mode is activated.
* OFF : Deactivates the INTENSIFY function.
•AUTO : Activates the INTENSIFY function.

> ☞ **NOTE**
> ■ **If you press the SET button in 'AUTO' mode, you can adjust brightness by increasing or decreasing the shutter speed. (x2 ~ x512)**
> ■ **Note that the higher the INTENSIFY level, the brighter the screen, but the more likely there will be a ghosting effect.**
> ■ **It is normal for noise, spots and whitish symptoms to appear in INTENSIFY mode when the D-ZOOM level is increased.**

4. WDR SETUP
WDR illuminates darker areas of an image while retaining the same light level for brighter area to even out the overall brightness of images with high contrast between bright and dark areas.

5. WHITE BALANCE SETUP

◆ ATW : Select this when the color temperature is between 1,700˚K and 11,000˚K.
◆ OUTDOOR : Select this when the color temperature is between 1,700˚K and 11,000˚K.(sodium light inclusion)
◆ INDOOR : Select this when the color temperature is between 4,500˚K and 8,500˚K.
◆ MANUAL : Select this to fine-tune White Balance manually. Set White Balance first by using the ATW or AWC mode. After that switch to MANUAL mode, fine-tune the White Balance and then press the SET button.
◆ AWC→SET : To find the optimal luminance level for the current environment, point the camera towards a sheet of white paper and press the Function Setup switch. If the environment changes, readjust it.

OSD MENU DETAILS

6. BACK LIGHT SETUP

◆ USER BLC : Enables a user to select a desired area on a picture and view that area more clearly.

◆ HLC (High Light Compensation) : If the scene contains extremely bright light areas such as from car headlight, the light can mask out much of the on-screen detail. Use HLC feature to remove these exceptionally bright light areas to allow detail such as car license plate number to become visible.
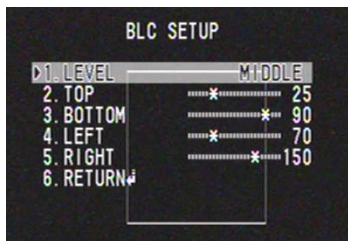
☞ NOTE
■ Because there can be a difference in the effectiveness of HLC according to the amount of light area in the screen, optimize the installation angle for the best HLC performance.
■ When dark, the HLC is only activated when a bright light exceeding a specific size in NIGHT ONLY mode.
■ The HLC is not activated in day light or when bright light is not present at night in NIGHT ONLY mode.
■ BLC Function doesn't work in the B/W mode of the DAY/NIGHT menu.

7. SPECO DNR SETUP

This function reduces the background noise in a low light environment.
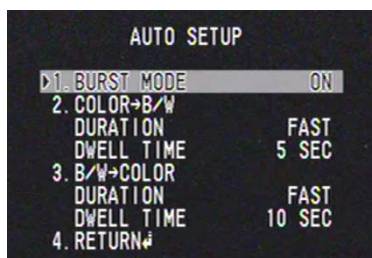
☞ NOTE
■ When the AGC mode of the EXPOSURE menu is 'OFF', you cannot set the SPECO DNR to 'ON' or 'OFF'.
■ When adjusting the noise reduction level in DNR3 mode, remember that the higher level is set, the greater reduction in noise level, as will the brightness of the image.

8. DAY / NIGHT SETUP

◆ EXTERN : This mode allows you to supply a desired filter to external signals.
◆ COLOR : The picture is always displayed in color.
◆ B/W :The picture is always displayed in black and white.
You can turn on or off the burst signal on B/W mode.
◆ AUTO : The mode is switched to 'Color' in a normal environment, but switches to 'B/W' mode when ambient illumination is low. To set up the switching time for AUTO mode, press the SET button.

```
            AUTO SETUP

▶1. BURST MODE              ON
  2. COLOR→B/W
     DURATION              FAST
     DWELL TIME          5 SEC
  3. B/W→COLOR
     DURATION              FAST
     DWELL TIME         10 SEC
  4. RETURN↵
```

You can turn on or off the burst signal on B/W mode.
- BURST MODE : You can turn on or off the burst signal on B/W mode.
- DURATION : You can select the brightness level at which the camera switches from day to night mode.
- DWELL TIME : You can select the duration the camera changes from day to night mode and night to day.

	COLOR→B/W	B/W→COLOR
FAST	2 lux	5 lux
SLOW	1 lux	5.5 lux

☞ **NOTE**
■ **When using a Video Auto Iris Lens, if you set the lens level to low, automatic switching between Color and Black&White may not occur.**
■ **When AGC in the EXPOSURE menu is 'OFF', '---' mode operates as 'COLOR' mode and 'AUTO' mode cannot be selected.**

OSD MENU DETAILS

9. SPECIAL SETUP

◆ IMAGE ADJ.
* MONITOR : Change the setting value of video that is appropriate to your monitor.
- LCD : Select this menu item when using a LCD monitor.
- CRT : Select this menu item when using a CRT monitor.
- USER : Select this menu item when using a monitor other than standard ones. You can change the gamma, PED level, and color gain in the sub menus.
* Reverse :You can reverse the picture.
- OFF : Picture will not be reversed.
- H-REV : Horizontal flip.
- V-REV : Vertical flip.
- HV-REV : Both Horizontal and Vertical flip.
* PIP (Picture in Picture) :Displays a full size image along with the thumbnail to provide more detailed information. The position of the thumbnail is adjustable.

```
          IMAGE SETUP
▷1. MONITOR          LCD↵
 2. REVERSE          OFF
 3. PIP             OFF
 4. D-ZOOM          OFF
 5. FONT COLOR      WHITE
 6. SHARPNESS       ON↵
 7. LANGUAGE        ENGLISH
 8. RETURN↵
```

* D-ZOOM : You can digital zoom the video image from x1 ~ x16.
* FONT COLOR: You can change the OSD font color.
* SHARPNESS: As you increase this value, the picture outline becomes stronger and clearer.
Adjust this value appropriately depending on the sharpness of the picture.
* LANGUAGE: You can select the menu language.
- NTSC : Korean, English, French, Spanish, Japanese, Portuguese.
- PAL : English, Chinese, German, Italian, French, Spanish, Russian, Serbian, Swedish, Danish, Turkish, Portuguese.
◆ CAM TITLE : If you enter a title, the title will appear on the monitor.
◆ SYNC : In areas where the supply is at 60Hz, you can synchronize the output phase of multiple cameras using the power synchronization function (Line-Lock) without using a synchronization signal generator.
- INT : Internal Synchronization Type.
* Press the Function Setup switch.
* You can select a desired phase from 0 to 359 when select 'phase'.

☞ NOTE
■ When the power is DC12V, the SYNC menu is fixed to the 'INT' mode.

OSD MENU DETAILS

◆ **MOTION DET**
- MOTION : Enable or disable the motion detection feature.
- DETECTION : Activates motion detection
- DETECT BOX : Outlines an object on the screen in a box when movement matches a custom motion type.
- ALARM OUT : Trigger the signal from the Alarm Output Terminal of the camera when an object's movement matched a custom motion type.
- DETECT AREA : Defines the motion detection area.
- MASK AREA : Specify a detection exception area to mask. Select a mask area number and specify the size and position.
* AREA : Select up to 4 areas
* MODE : Turn the selected area ON or OFF.
* TOP/BOTTOM/LEFT/RIGHT : Adjust the size and position of the selected area.
* RETURN : Select this to save the mask area menu settings and return to the MOTION menu.
- SENSITIVITY : Set the sensitivity of the motion detection. The higher the level, the motion detection sensitivity is increased to recognize smaller movements.
- DET. SIZE : Selects an object size to detect on the screen. The higher the level means the larger the detection size.
◆ **PRIVACY**
- AREA SEL : You can select up to 12 PRIVACY areas.
- MODE : Turn the selected area ON or OFF.
- MASK COLOR : Determine area color. Select GREEN, RED, BLUE, BLACK, WHITE and GRAY.
- TRANSPARENCY : Add or remove transparency from the masked area.
- SEL POS : Adjust the size and position of the selected area.
- X POS
- Y POS
◆ DIS (Digital Image Stabilizer) :
This function mitigates any picture movement due to external factors such as wind.

10. EXIT SETUP
- SAVE : Save the current settings and exit the MAIN SETUP menu.
- NOT SAVE : Do not save the current settings and exit the MAIN SETUP.
- RESET : Resets the camera settings to the factory defaults. Language and Monitor settings are not initialized.

SPECIFICATIONS

| Item	CVC6246H (Black Housing) CVC6246HW (White Housing)
Power Source	12VDC & 24VAC (Dual Voltage)
Power Consumption	210mA (DC) / 2.7W (AC)
Image Sensor	1/3", 960H SONY CCD, 520,000 pixels
Total Pixels	NTSC=1020(H) * 508(V)
Effective Pixels	NTSC=976(H) * 494(V)
Lens Type	DC Auto Iris 2.8~12mm Varifocal Lens
Maximum Aperture Ratio	1 : 1.3 ~2.0
Scanning System	2 : 1 Interlaced
Synchronization	Internal / Line-Lock
Video Output	1.0V [p-p] Composite, 75Ω
Resolution	700 TV Line
Gain Control	Low / High / OFF selectable
Electric Shutter Speed	NTSC=(1/60sec~1/120,000sec)
INTENSIFIER H	Built-in (selectable limit ~ X512)
COLOR TEMP (White Balance)	ATW / Outdoor / Indoor / Manual / AWC (1,700°K ~ 11,000°K)
Min. Illumination	0.15 Lux, 0.00002 Lux (Sens-up)
S/N (Y signal)	More than 52dB
SPECO DNR	ON / OFF
Motion Detection	ON / OFF (8 Programmable Zone)
OSD	Built - in
Privacy Function	ON / OFF (12 Programmable Zone)
Operational Temperature	14°F ~122°F
Operational Humidity	30% ~90% RH
Weight	1.54lbs

DIMENSIONS

Unit : mm

* TOP VIEW

DIA 120
DIA 140

* SIDE VIEW

100.00

30.00

WARRANTY

speco technologies®
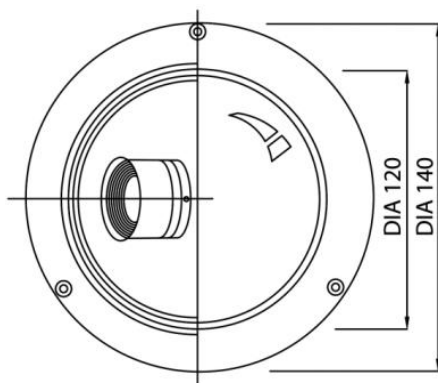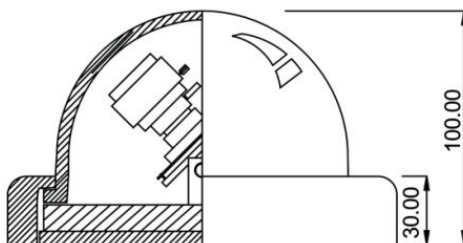
LIMITED WARRANTY - VIDEO PRODUCTS
THIS WARRANTY IS VALID ONLY ON PRODUCTS PURCHASED AND USED IN THE UNITED STATES OF AMERICA AND CANADA. THIS WARRANTY APPLIES ONLY TO THE ORIGINAL USER.

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.**

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, NEGLECT, 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**

12-300 5/12

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.

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Amityville, NY 11701

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