

HT7246iHR (2.8~12mm)

HT7247iHR (9.0~22mm)

HT7250iHR (5.0~50mm)

580 Line Color Dome Camera

Intensifier 2 Series

Wall & Ceiling Mountable



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

WARNING & CAUTION



CAUTION



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 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 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.

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 HT7246IHR, HT7247IHR or HT7250IHR Camera**
- 2 Mounting Screws**
- 1 Chameleon Dome Cover**
- 1 Video Test Connector**

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

PRECAUTIONS

- **THIS CAMERA SHOULD BE ONLY INSTALLED BY QUALIFIED PERSONNEL**
- **TO PREVENT A FIRE OR ELECTRICAL HAZARD PLEASE USE PROPER POWER CABLE**
- **DO NOT CLEAN THE DOME 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.**
 - **DON'T EXPOSE THE CAMERA TO DIRECT SUN**

CAMERA INSTALLATION

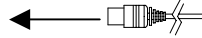
CONNECT POWER CABLE

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

Power Input :RED



Center : (+)



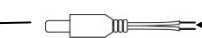
DC 12V Power Supply

2. WHEN USING 24 VOLTS AC (40 Volt Amps)

Power Input :RED



Center : (+)

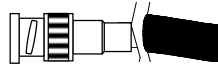


AC 24V

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.



Alarm Output

Positive Alarm Device (NO)

Negative Alarm Device (NC)

CAMERA INSTALLATION

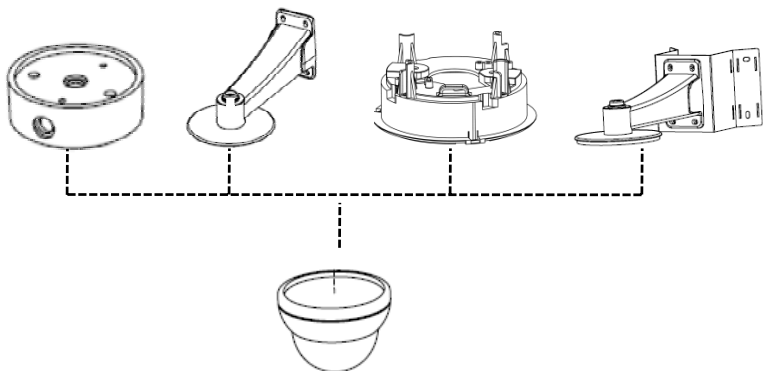
COMPATIBILITY

HT7246(7)IHR

CVCTPEXT

7246WMT

* DFM2 BCP(Using 7246WMT)

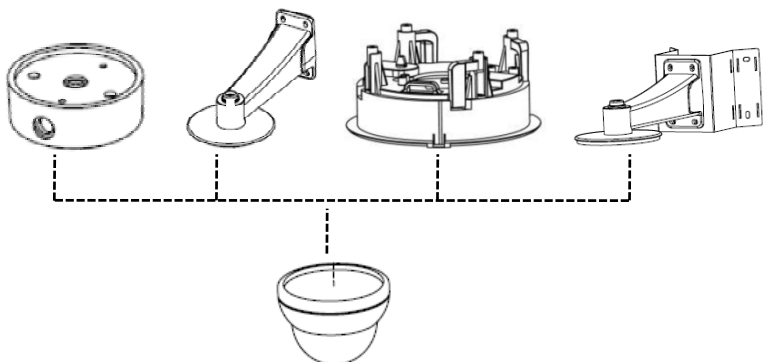


HT7250IHR

CVCTPEXT

7246WMT

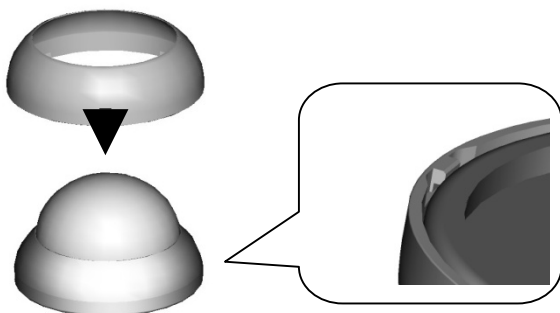
* DFM3 BCP(Using 7246WMT)



CAMERA INSTALLATION

CHAMELEON COVER

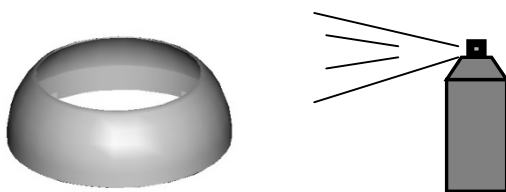
If you wish to change the color of the HT7246(7)iHR or HT7250iHR place the Chameleon Dome over the camera



Place the Chameleon Dome over the HT7246(7)iHR or HT7250iHR and push until it snaps into position.

● **Notes : Optional painting before installation**

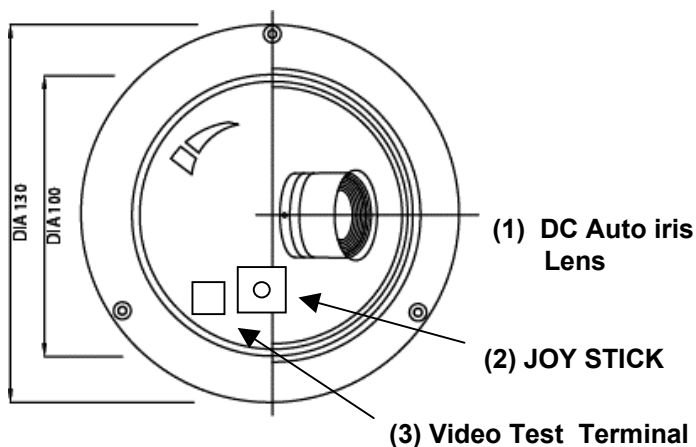
* **Painting method for the Chameleon Dome**



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

CAMERA INSTALLATION

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) OSD (On screen Display) JOY STICK

Press the Joy stick for one second and set as described in the manual

(3) VIDEO TEST TERMINAL

FEATURES

High Resolution

Horizontal resolution of 580 TV lines is achieved by using a SONY Super-HAD CCD with 410,000 pixels, and a custom DSP yielding pictures with a high S/N ratio..

INTENSIFIER

1/3inch High-inch density CCD and digital processor permit high quality Pictures to be captured in very low light condition.

SPECO DNR

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

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.

DAY/NIGHT

The Intensifier 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

FEATURES

OSD

All camera functions are menu driven for easy use.

SLC

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

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.

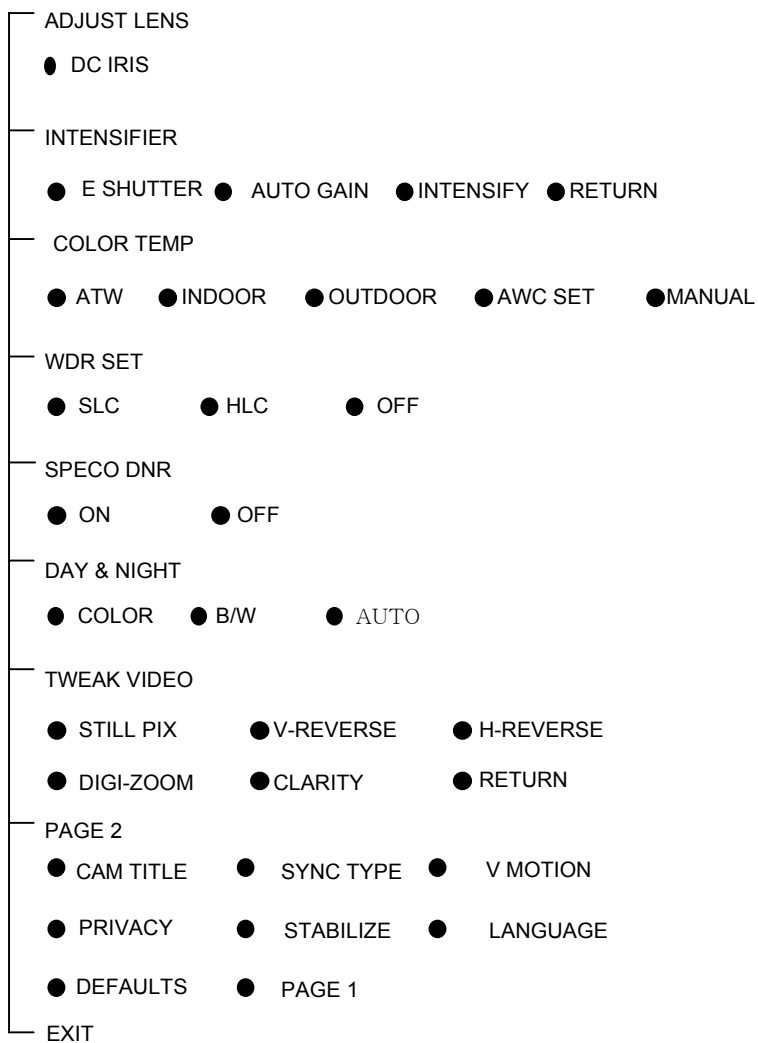
STABILIZATION

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

PRIVACY

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

OSD MENU TREE



OSD MENU DETAILS

1. INTENSIFIER

[OPTION : E SHUTTER / AUTO GAIN / INTENSIFY / RETURN]

- E SHUTTER

- * FLK - Flicker-less mode (FLK) reduces on-screen flickering.
- * ESC - Electronic Shutter Control (AUTO) adjusts brightness level on screen.

- AUTO GAIN

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

- **INTENSIFY** : Automatically provides a clear image under low-light conditions. You can control the maximum low-light magnification from 2x to 256x (increasing magnification may cause noise/distortion). This function is deactivated when SHUTTER is set to FLK mode.

2. COLOR TEMP

[OPTIONS : ATW / INDOOR / OUTDOOR / AWC SET / MANUAL]

- ATW

Select Auto Tracking White Balance (ATW) when the color temp. is 1800°K~10500°K.

- INDOOR

Select this when the color temp. is 4500°K~ 8500°K.

- OUTDOOR

Select this when the color temp. is 1800°K ~10500°K

- AWC SET

Set while pointing the camera towards a sheet of white paper.

- Manual

It allows you to increase or decrease the red or blue factor on screen.

OSD MENU DETAILS

3. WDR SET

[OPTION : SLC / HLC / OFF]

- SLC (Speco Light Compensation)

Provides light level control to overcome severe back light conditions.

- HLC (High Light Compensation)

High Light Compensation removes the high light and makes it possible to view the image clearly.

4. SPECO DNR

[OPTION : ON / OFF]

- Reduces noise/distortion on the screen.

Increasing the DNR level reduces noise but may introduce video artifacts.

DNR is deactivated if AGC is turned off.

5. DAY / NIGHT

[OPTION : COLOR / BW / AUTO]

- COLOR : Full time color mode

- BW : Full time black & white mode

- AUTO: Automatically detect color or black/white

6. TWEAK VIDEO

[OPTION : STILL PIX / V-REVERSE / H-REVERSE / DIGI-ZOOM / CLARITY / RETURN]

- STILL PIX : Freezes the picture on the screen.

- V-REV : Flips the picture vertically on the screen.

- H-REV : Flips the picture horizontally on the screen.

- D-ZOOM : Digital zoom of 1 ~10X.

- CLARITY : Sharpen the image on screen, but excessive sharpening may cause picture noise.

- RETURN : Save the settings and return to the SETUP menu

OSD MENU DETAILS

7. CAM TITLE

[OPTION : ON / OFF]

- Display a name and/or number on the monitor.

8. SYNC TYPE

[OPTION : INT / LL]

- INTERNAL : When external line lock is not required.
- LINELOCK : Adjust the vertical phase (V-P) from 000~ 359 (factory default is 0). This function is only available with 24VAC power.

9. V MOTION

[OPTION : ON / OFF]

- When movement is detected, camera sends a signal to an external alarm device.



- SENSITIVITY : Select 8 different Motion Detection area. When sensitivity number is high, it will recognize even small movement.
- AREA MODE : Activate or deactivate the selected area.
- SEL POS : Select setting point from 4 different points, Left-Top, Left Bottom, Right-Top and Right-Bottom.
- YPOS : Move setting point to vertical direction.
- XPOS : Move setting point to horizontal direction.
- FILL SET : Fills selected area with proper color.

OSD MENU DETAILS

10. PRIVACY

[OPTION : ON / OFF]

- Mask up to 8 areas of the screen.



- AREA SEL : Select up to 8 mask areas.
- AREA mode : Activate or deactivate the selected area.
- MASK COLOR : Select area color.
- TRANSP : Adjust the transparency of selected area.
- RETURN : Save the settings and return to the SPECIAL menu.

11. STABILIZE

[OPTION : ON / OFF]

- Reduces picture movement due to external factors.

12. LANGUAGE

[OPTION : English / Korean / Japanese / Spanish / French]

- Choose the language that should be displayed.

13. DEFAULTS

- Restore all factory default settings.

TROUBLESHOOTING

If you have trouble operating your camera, refer to the following

Problem	Solution
Nothing appears on the screen.	<ul style="list-style-type: none">● Check that the power cord and line connection between the camera and monitor are correct● Check that you have properly connected VIDEO cable to the camera VIDEO output jack.
The image on the screen is dim.	<ul style="list-style-type: none">● Is the lens stained with dirt? Clean your lens with soft, clean cloth.● Set the monitor for the proper conditions.● If the camera is exposed to too strong light change the camera position.● Adjust the lens' focus.
The image on the screen is dark.	<ul style="list-style-type: none">● Adjust the contrast feature of the monitor.● If you have an intermediate device, set the 75Ω/Hi-z properly.
The camera is not working properly, and the surface of the camera is hot.	<ul style="list-style-type: none">● Check that you have properly connected the camera to an appropriate power source.
MOTION DETECTION function is not active.	<ul style="list-style-type: none">● Have you set 'MOTION DET.' menu to off?● Have you set 'MD LEVEL' to too low?● Have you set 'MD AREA' properly

TROUBLESHOOTING

Problem	Solution
The color of the picture is not proper.	<ul style="list-style-type: none">● Check that you have properly set the ' WHITE BALANCE ' menu
The image on the screen flickers.	<ul style="list-style-type: none">● Is the camera facing to direct sunlight or fluorescent lighting? Change the camera position.
L/L mode isn't able to be selected.	<ul style="list-style-type: none">● Have you connected your camera to DC power source? Connect it to AC power source.

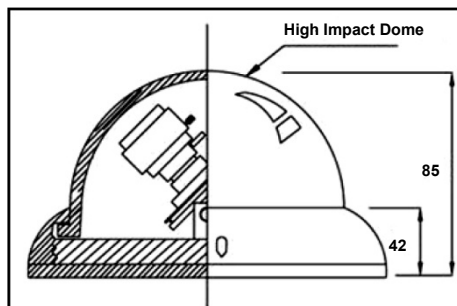
SPECIFICATIONS

ITEM	HT7246(7)IHR & HT7250IHR
Power Source	12VDC & 24VAC (Dual Voltage)
Power Consumption	230mA (DC) / 3.8W (AC)
Image Sensor	1/3", SONY SUPER HAD 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	DC Auto Iris Varifocal 2.8~12mm (HT7246IHR) 9.0~22mm (HT7247IHR) 5.0~50mm (HT7250IHR)
Maximum Aperture Ratio	1 : 1.3 ~2.0
Scanning System	2 : 1 Interlaced 525 Lines / 60 Fields / 30 Frames
Synchronization	Internal / Line Lock selectable
Video Output	1.0V [p-p] Composite, 75Ω
Resolution	580 TV Line
Gain Control	AGC-L, AGC-H, OFF selectable
Electric Shutter Speed	1/60 ~ 1/200,000 sec
INTENSIFIER 2	Built-in (selectable limit ~ X256)
COLOR TEMP (White Balance)	ATW / INDOOR / OUTDOOR / AWC SET / MANUAL
Min. Illumination	0.002Lux (intensifier) 0.05Lux (shutter)
S/N (Y signal)	52dB (Weight On)
SPECO DNR	ON - DYNAMIC / OFF
Motion Detection	ON / OFF (8 Programmable Zone)
On Screen Display (O.S.D)	Built - in
PRIVACY Function	ON / OFF (8 Programmable Zone)
Operational Temperature	-29℃ ~ +50℃ (- 20°F ~122°F)
Operational Humidity	30% ~90% RH

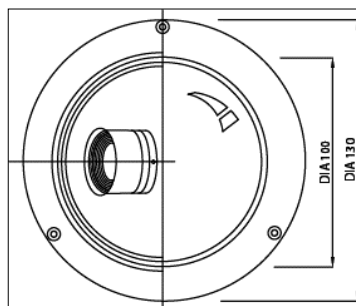
DIMENSIONS

HT7246(7)IHR

* SIDE VIEW

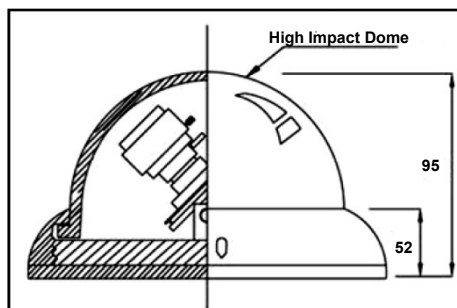


* TOP VIEW

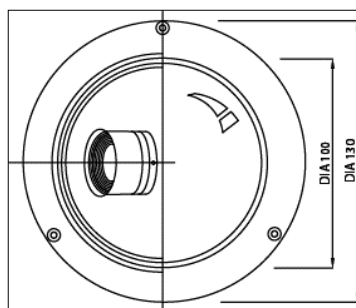


HT7250IHR

* 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

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**

VER. 100111

This manual is based on the date as shown in the right and specifications are subject to Change without notice for quality improvement.