

# clintonelectronics



**For 2MP HD Analog Cameras**

## **ON SCREEN DISPLAY User Manual**

Make sure you read this manual before using the camera. Store this manual safely so that you can use it in the future. Please use this manual along with the Installation Manual included with the camera.

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## IMPORTANT SAFETY INSTRUCTIONS

1. Read & keep these instructions.
2. Do not use this apparatus near water.
3. Clean only with dry cloth.
4. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions and local codes/ordinances.
5. Do not install near any heat sources such as radiators, heat registers, stoves, or other devices that produce heat.
6. Protect the power/video cable from being pinched.
7. Only use attachments/accessories specified by the manufacturer.
8. Unplug this apparatus during lightning storms or when unused for long periods of time.
9. Refer all servicing to qualified service personnel. Servicing is required when the camera has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled into the camera, exposure to moisture, does not operate normally, or has been dropped.



### CAUTION



TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT DISASSEMBLE. NO USER SERVICEABLE PARTS INSIDE. REFER SERVICE TO QUALIFIED PERSONNEL.



The lightning flash symbol within a triangle is intended to alert the user to the presence of 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 a triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

### In USA and Canada, Use Class 2 Power Supply Only

**FCC 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:** Changes or modifications 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 the inside of this appliance to rain or moisture.

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

**The camera requires periodic inspection.**

Contact an authorized technician to carry out the inspection.

**Stop using the camera if it malfunctions.**

If the camera emits smoke or is unusually hot for a long period, a fire may be caused.

**Don't hold plug with wet hands.**

It could cause an electric shock.

**Don't disassemble the camera.**

It may result in an electric shock or other hazards.

**Don't touch the front lens of the camera.**

This is one of the most important parts of the camera. Don't leave fingerprints on the lens.

**Don't expose the camera to radioactivity.**

If exposed to radioactivity the Image Sensor will fail.

**Don't install the camera on a surface that can't support it.**

If the camera is installed on an inappropriate surface, it may fall and cause injury.

**Don't use the camera near a gas or oil leak.**

It may result in a fire or other hazards.

**Never keep the camera pointed directly at strong light.**

It can damage the Image Sensor.

**Don't install the camera under unstable lighting conditions.**

Severe lighting change or flicker can cause the camera to work improperly.

**Don't install the camera in extreme temperature conditions.**

Only use the camera under conditions when temperatures are between -20°F ~ 122°F. Be especially careful to provide ventilation when operating under high temperatures.

**Don't drop the camera or subject it to physical shocks.**

It can damage the housing, compromising weather resistance.

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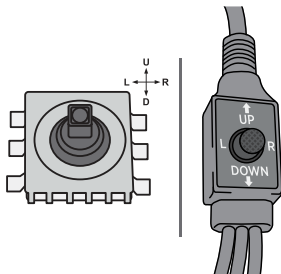
## OSD (On Screen Display) MENU

Camera functions and settings can be adjusted or changed by activating the OSD menu. When the OSD menu is activated, text will display on the monitor. The user can then move the cursor to the desired function to change the setting.

EXPOSURE	• SHUTTER	• SENS-UP	• AGC
WHITE BAL	• ATW • MANUAL	• AWB	• AWC-SET
IMAGE ADJ	• SHARPNESS • COLOR MODE	• GAMMA • SATURATION	• BRIGHTNESS • BLACK LVL
BACKLIGHT	• OFF • WDR	• HLC	• BLC
DAY & NIGHT	• AUTO • EXTERN	• COLOR	• B&W
DNR	• LOW • OFF	• MIDDLE	• HIGH
SPECIAL	• ROTATE • MOTION	• ACE • PRIVACY	• DEFOG
SERIAL	• CAM ID	• ID DISPLAY	• BAUDRATE
SYSTEM	• HD ANALOG • CVBS_FILTER • RESET	• FRAME RATE • LANGUAGE • CAM TITLE	• CVBS_FILTER • CAM TITLE
EXIT	• SAVE	• CANCEL	

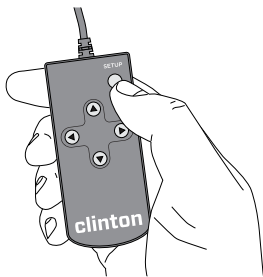
## ACCESSING THE OSD

Settings can be adjusted using the built-in joystick, button pad, or optional hand-held CE-REMOTE (sold separately).



### Joystick :

Press directly down on the joystick to activate the OSD menu. The OSD joystick is either located on the camera board, or in-line (on the cable).



### CE-REMOTE\* :

Plug the remote into port located on the camera. Press the SETUP button to activate the OSD menu.

*\*CE-REMOTE  
(sold separately) not available for every model.*

# OSD MENU SETTINGS

1. Press the SET button.
  - Settings can only be changed when the OSD menu is displayed on the monitor.

Select the function using the UP or DOWN buttons.

Change the setting using the LEFT or RIGHT buttons.

MENU	
1. EXPOSURE	←
2. WHITE BAL	AWC-SET
3. IMAGE ADJ	←
4. BACKLIGHT	OFF
5. DAY&NIGHT	AUTO
6. DNR	HIGH
7. SPECIAL	←
8. SERIAL	←
9. SYSTEM	←
10. EXIT	SAVE

When an arrow is present, press the SET button to enter the sub menu.

When a finger & button is present, press and hold the SET button.

2. Scroll through menu items from the list available by using the UP or DOWN buttons.
3. Use the LEFT or RIGHT buttons to change a setting.
4. When finished— select 'EXIT' with SAVE selected, then press the SET button to save settings.



## Notes

- An item with the ← icon also has sub menus. To select a sub menu, select an item with the icon and press the SET button.
- An item with the “ - - - ” icon is unavailable due to function settings.
- All menu items have a 'RETURN' option. With this function you have the option to go back to the previous menu screen.
- The OSD times-out after a period of no activity. Any adjustments there were made will be lost.

# EXPOSURE

This function allows for the control of the amount of light that enters the camera. Too much light results in a washed out image.

MENU	
1. EXPOSURE	←
2. WHITE BAL	ATW
3. IMAGE ADJ	←
4. BACKLIGHT	OFF
5. DAY&NIGHT	AUTO ←
6. DNR	HIGH
7. SPECIAL	←
8. SERIAL	←
9. SYSTEM	←
10. EXIT	SAVE ←

Press the SET button to access the sub-menu items listed below.

► **SHUTTER**

Select either *AUTO*, *MANUAL* or *FLICKER*.

- **AUTO** ←: Automatic shutter speed/control.
- **MANUAL** ←: Control the shutter speed manually (1/30-1/30,000).
- **FLICKER**: Select this when you experience picture flicker, which can happen when there is a clash with the frequency of the installed lighting.

► **SENS-UP**

During low light situations, the camera will automatically detect the light level and maintain a clear picture if this mode is activated. (x2-x32)

► **AGC (Auto Gain Control)**

The higher the gain level, the brighter the screen, but the higher the noise.



## Notes

- The higher the SENS-UP level, the brighter the screen, but the more likely it is that an after-image will appear. Possible image blur is normal with increased zoom while using SENS-UP.

# WHITE BALANCE

This function allows the ability to adjust the color temperature, based on colors being emitted from different light sources.

MENU	
1. EXPOSURE	↵
2. WHITE BAL	ATW
3. IMAGE ADJ	↵
4. BACKLIGHT	OFF
5. DAY&NIGHT	AUTO ↵
6. DNR	HIGH

From the main menu, scroll to WHITE BAL and select one of the 4 following modes using the Left or Right buttons.

► **ATW (Auto Tracking White Balance)**

Select this to automatically readjust the white balance each time a change in the ambient color temperature is detected.

► **AWB (Auto White Balance)**

Select this to set the white balance for only one particular environment. More accurate than AUTO, but has to be reset manually when there is a change in ambient color temperature.

► **AWC-SET** 

Select this to find the optimal luminance level for the current environment, point the camera towards a sheet of white paper, then press and hold the SET button. 'PUSH&HOLD' will display once the change has been made.

► **MANUAL** 

Select this to fine-tune white balance manually. Color Temp (°Kelvin) and Red/Blue gain values are adjustable.



## Notes

- WHITE BALANCE may not work properly under the following conditions:
  1. When the color temperature of the environment surrounding the subject is out of the control range (ie. clear sky or sunset).
  2. When the ambient illumination of the subject is dim.
  3. If the camera is directed towards a fluorescent light or is installed in a place where illumination changes dramatically, the WHITE BALANCE operation may become unstable.

# IMAGE ADJUST

This function includes features that allow you to make adjustments to fine-tune the quality of the image displayed on the monitor.

MENU	
1. EXPOSURE	↵
2. WHITE BAL	ATW
3. IMAGE ADJ	↵
4. BACKLIGHT	OFF
5. DAY&NIGHT	AUTO ↵
6. DNR	HIGH
7. SPECIAL	↵
8. SERIAL	↵

Press the SET button to access the sub-menu items listed below.

► **SHARPNESS**

*The outline of the image becomes cleaner and more distinctive as the SHARPNESS level increases. If you increase the SHARPNESS level too high, the picture may become distorted or noise may appear.*

► **GAMMA**

*Adjust how light and color are displayed.*

► **BRIGHTNESS**

*Increase or decrease overall brightness of the image.*

► **COLOR MODE**

*Select the appropriate color mode for the scene; Normal or Vivid. If colors look too muted select Vivid, if the scene is overly colorful select Normal.*

► **SATURATION**

*The higher the value, the more saturated the colors are. The lower the value, the less color there is overall.*

► **BLACK LEVEL**

*The lower the value, the darker the overall image.*



## Notes

- Adjustments to Gamma are disabled when WDR is enabled.
- The HD Analog signal loses chroma (color) and luminance (brightness) over distance, sometimes the image at the DVR might appear desaturated and lacking brightness when compared to how the image looks using a test monitor at the camera.
- Before making image adjustments at the camera, try adjusting the color saturation and brightness at the DVR (if the DVR has camera image adjustments).

# BACKLIGHT

This function is useful for adjusting areas of interest that appear too bright or too dark due to bright lighting conditions.

MENU	
1. EXPOSURE	↵
2. WHITE BAL	ATW
3. IMAGE ADJ	↵
4. BACKLIGHT	WDR ↵
5. DAY&NIGHT	AUTO ↵
6. DNR	HIGH
7. SPECIAL	↵
8. SERIAL	↵
9. SYSTEM	↵
10. EXIT	SAVE ↵

Select a desired mode using the LEFT or RIGHT buttons depending on the camera purpose.

► **HLC** ↵ (High Light Compensation)

*If the scene contains extremely bright light areas such as car headlights, the light can mask out much of the on-screen detail. Use the HLC feature to remove these bright lit areas to allow detail, such as a car license plate number, to become more visible.*

- **LEVEL:** The lower the level, the more of the HLC mask will be applied.
- **COLOR:** Black, White, Yellow, Cyan, Green, Magenta, Red, and Blue.

► **BLC** ↵ (Back Light Compensation)

*An area with a bright light source in the background can cause objects in the foreground to appear as silhouettes. Use this setting to adjust the exposure of the image to properly expose the object in the foreground.*

- **H-POS:** Adjust LEFT or RIGHT to move the Horizontal Position.
- **V-POS:** Adjust LEFT or RIGHT to move the Vertical Position.
- **H-SIZE:** Adjust LEFT or RIGHT to increase or decrease the Horizontal Size.
- **V-SIZE:** Adjust LEFT or RIGHT to increase or decrease the Vertical Size.



## Notes

- If the HLC option is turned 'ON'— the DVR will record the colored HLC mask areas.

## BACKLIGHT : CONTINUED

### ► WDR ↴ (Wide Dynamic Range)

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

- **WDR MODE:** Choose either Normal or ROI

- » **NORMAL:** Combines 2 frames (over-exposed and under-exposed) into 1 frame providing an improved WDR image, especially in low-light environments.

- » **ROI (Region Of Interest):** ROI Mode compensates the exposure for inside and outside the selected areas.

- **Window Zone:** Select the desired Zone 0-3.

- **Window Use:** Turn ON or OFF the selected Zone.

- **H-POS / V-POS:** Adjust LEFT or RIGHT to move the Hor/Ver Position.

- **H-SIZE / V-SIZE:** Adjust LEFT or RIGHT to increase or decrease the Hor/Ver Size.

- **WEIGHT:** Set to LOW, MIDDLE or HIGH.



### ATTENTION:

**WDR is an HD ANALOG only function.**

**CVBS video will go black (be disabled) if WDR is turned On.**



## Notes

- Enabling WDR can disable certain camera functions; Gamma, ACE, Defog, etc...

## DAY & NIGHT

This function displays images in color or B/W. In AUTO mode the camera will automatically transition to B/W to allow for clearer low-light images. This also allows cameras equipped with infrared illuminators to provide clear images in low-light or no-light situations.

MENU	
1. EXPOSURE	↕
2. WHITE BAL	ATW
3. IMAGE ADJ	↕
4. BACKLIGHT	OFF
5. DAY&NIGHT	AUTO ↕
6. DNR	HIGH
7. SPECIAL	↕
8. SERIAL	↕

From the main menu, scroll to DAY&NIGHT and select a desired mode using the Left or RIGHT buttons according to the picture display you want.

### ► AUTO ↕

*The mode is switched to 'COLOR' in a normal environment, but switches to 'B/W' mode when ambient illumination is low. \*Default setting for standard cameras (non-IR cameras).*

- **AGC Thres:** Day/Night switching level in Auto Mode.
- **AGC Margin:** Margin between Day/Night and Night/Day switching level.
- **DELAY:** Sets a delay time before the switch is made from day to night/night to day.

### ► COLOR

*The image is always displayed in color. Automatic switching does not occur.*

### ► B/W

*The image is always displayed in black and white. Automatic switching does not occur.*

### ► EXTERN ↕ (External)

*The mode is switched to 'COLOR' in a normal environment, but switches to 'B/W' mode when ambient illumination is low. \*Default setting for cameras with IR LEDs.*

- **ANTI-SAT:** Cameras equipped with IR LEDs may have an over-saturated night time image. Adjust the level of ANTI-SAT to compensate for over-saturation.
- **D>N THRES:** Day to Night change level.
- **N>D THRES:** Night to Day change level.
- **DELAY:** Sets a delay time before the switch is made from day to night/night to day.



## Notes

- On cameras equipped with IR LEDs it is recommended to choose EXTERN instead of AUTO. Choosing AUTO can cause intermittent changing of Day to Night.

## DNR (DIGITAL NOISE REDUCTION)

This function reduces background image noise in a low light environment, improving visibility.

MENU	
1. EXPOSURE	↵
2. WHITE BAL	ATW
3. IMAGE ADJ	↵
4. BACKLIGHT	OFF
5. DAY&NIGHT	AUTO ↵
6. DNR	HIGH
7. SPECIAL	↵
8. SERIAL	↵
9. SYSTEM	↵
10. EXIT	SAVE ↵

From the main menu, scroll to DNR and select one of the 4 following modes using the Left or Right buttons.

► **DNR**

- OFF
- LOW
- MIDDLE
- HIGH



OFF



LOW



MIDDLE



HIGH



### Notes

- When adjusting the noise reduction level, remember that the higher the level is set, the greater the reduction in noise level, as well as the brightness of the image but trailing may occur with moving objects.

## SPECIAL

This function includes features that allow you to make adjustments to fine-tune the quality of the image displayed on the monitor.

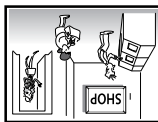
MENU	
1. EXPOSURE	↕
2. WHITE BAL	ATW
3. IMAGE ADJ	↕
4. BACKLIGHT	OFF
5. DAY&NIGHT	AUTO ↕
6. DNR	HIGH
7. SPECIAL	↕
8. SERIAL	↕
9. SYSTEM	↕
10. EXIT	SAVE ↕

Press the SET button to access the sub-menu items listed below.

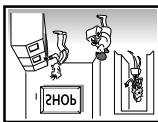
### ► ROTATE

Digital flip the camera image instead of manually rotating the camera.

- **MIRROR:** Mirrors the image left to right.
- **FLIP:** Flips the image top to bottom.
- **ROTATE 180 :** Mirrors and Flips the image (Rotates 180°).



OFF



MIRROR



FLIP



ROTATE 180

### ► ACE (Adaptive Color Enhancement)

Enhance the color contrast of the image.

### ► DEFOG

Images in extraordinary environments such as fog, smoke, rain or smog have a dynamic range lower than ordinary images. This function is a contrast enhancement, which is used to overcome such shortcomings.



## Notes

- ACE & DEFOG adjustments are disabled when WDR is enabled.

## SPECIAL : CONTINUED

### ► MOTION ↴

*Monitor activity more efficient with this feature by means of highlighting moving objects with a red outlined box around the moving object.*

- **DET WINDOW** ↴

*Choose from 4 different detection windows to adjust their size and position as needed.*

- **SENSITIVITY:**

*The lower the value the less sensitive the camera will be to motion.*

- **TEXT ALARM**

*When motion is detected text will be displayed on screen to alert you to the type of motion; Motion Detected / Shifting Detected / Brightness Changes, etc...*

### ► PRIVACY ↴

*Apply a mask to an area you want to hide. Useful in areas where a camera can see into areas that are not relevant to security needs.*

- **ZONE NUM:** Select Privacy mask 0-15.
- **ZONE DISP:** Turn 'ON' or 'OFF' the selected mask.
- **H-POS/V-POS:** Adjust Left or Right to move position of the mask area.
- **H-SIZE/V-SIZE:** Adjust Left or Right to change the size of the mask area.
- **Y/Cr/Cb LEVEL:** Adjust the color of the mask area.
- **TRANS:** Adjust the transparency of the mask area.



## Notes

- If MOTION and/or PRIVACY options are turned 'ON'— the DVR will record with any colored Motion boxes and/or Privacy areas.

# SERIAL

This function can be used to set up the camera communication status when controlling through a compatible DVR.

MENU	
1. EXPOSURE	↵
2. WHITE BAL	ATW
3. IMAGE ADJ	↵
4. BACKLIGHT	OFF
5. DAY&NIGHT	AUTO ↵
6. DNR	HIGH
7. SPECIAL	↵
8. SERIAL	↵
9. SYSTEM	↵
10. EXIT	SAVE ↵

From the main menu, scroll to **SERIAL** and press the **SET** button to access the sub-menu.

► **CAM ID**

*Set the ID # of the camera. (selectable from 000-255)*

► **ID DISPLAY**

*Display the set ID # in the top left corner of the image.*

► **BAUDRATE**

*Set the baudrate value of the camera. (2400 / 4800 / 9600 / 57600 / 115200)*



## Notes

- Because there are signal tuning variations between each HD Analog DVR manufacturer—we can not guarantee that the HD Analog remote coax control will function.
- The CAM ID & BAUDRATE of the camera need to match the DVR.
- Coax control does not function through the CVBS output.

# SYSTEM

3. IMAGE ADJ	↵
4. BACKLIGHT	OFF
5. DAY&NIGHT	AUTO ↵
6. DNR	HIGH
7. SPECIAL	↵
8. SERIAL	↵
9. SYSTEM	↵
10. EXIT	SAVE ↵

From the main menu, scroll to **SYSTEM** and press the **SET** button to access the sub-menu.

## ► HD ANALOG

Select the HD Analog video output of the camera (Green BNC Connector): A\_HD, C\_VI, or T\_VI. Verify the connected equipment can support the analog output type if set to one of the HD Analog signals.

### • A\_HD ↵ / C\_VI ↵ / T\_VI ↵

- » **Y GAIN:** Adjust the Luminance of the signal.
- » **CB GAIN:** Adjust the Blue Chroma of the signal.
- » **CR GAIN:** Adjust the Red Chroma of the signal.
- » **BURST FREQ:** Adjustments not recommended, can cause errors with the signal tuning.
- » **BURST GAIN:** Adjustments not recommended, can cause errors with the signal tuning.

## ► FRAME RATE

Displays the current frame rate of the camera, not adjustable.

- **1080p 30**



## Notes

- The CVBS output (Yellow BNC Connector) is not adjustable.
- Before changing the HD Analog output of the camera, check the compatibility of the DVR to ensure that it can accept the desired camera output. Selecting an incorrect HD Analog output from the camera can result in poor video / no video on the connected DVR.
- The HD Analog signal loses chroma (color) and luminance (brightness) over distance, sometimes the image at the DVR might appear desaturated and lacking brightness when compared to how the image looks using a test monitor at the camera. Each HD Analog option has a submenu for fine-tuning image adjustments. These settings should only be adjusted by advanced users.

## SYSTEM : CONTINUED

### ► VIDEOSYS

Choose either NTSC or PAL depending on the region of the world the camera is installed and display settings other connecting video components are set to. In North America leave set to NTSC.



## Notes

- Switching from NTSC to PAL can result in no image.

### ► CVBS FILTER

The resolution of the CVBS output might be too high for older DVRs (pre 960H) or PC based DVRs (that only accept D1 or CIF), and can result in moiré patterns (rainbow artifacts). Turn this filter 'ON' to soften the resolution of the CVBS signal. Enabling this does not effect the HD Analog output.

- OFF / LOW / MIDDLE / HIGH

### ► LANGUAGE

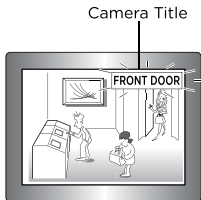
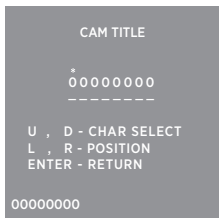
Change the language of the OSD Menu.

- ENGLISH, CHINESE, CHINESE (S), JAPANESE or KOREAN

### ► CAM TITLE

Use this feature if you want to quickly identify a given image by assigning a title that will display on the screen.

- RIGHT UP ↗, LEFT DOWN ↘



- 1) Select CAM TITLE, then use the LEFT/RIGHT button to select either location, RIGHT UP or LEFT DOWN, then press the SET button.
- 2) Use the 4 direction buttons to move to a desired character and select the letter by pressing the SET button. Repeat this to enter multiple letters. You can enter up to 8 characters.

### ► RESET

Press and hold the SET button to reset the camera OSD settings to the factory defaults. Release the SET button when "PUSHING" is displayed.

# EXIT

MENU	
1. EXPOSURE	↵
2. WHITE BAL	ATW
3. IMAGE ADJ	↵
4. BACKLIGHT	OFF
5. DAY&NIGHT	AUTO ↵
6. DNR	HIGH
7. SPECIAL	↵
8. SERIAL	↵
9. SYSTEM	↵
10. EXIT	SAVE ↵

From the main menu, scroll to EXIT and press the SET button to exit from the OSD menu.

► **SAVE**

*Saves current settings and exits the OSD menu.*

► **CANCEL**

*Deletes any changes made to the settings and exits the OSD menu.*

# HD ANALOG INSTALL TIPS

## COMPATIBILITY:

While Analog (CVBS) and HD Analog (T\_VI, C\_VI, A\_HD) share the same type of BNC connectors, they're different signal types that are not compatible with each other.

- **HD Analog will not work on Analog only DVRs & Devices**
- **CVBS will often not work on HD Analog only DVRs & Devices**
- **HD Analog will not work on EX-SDI only DVRs & Devices**

Because there are signal tuning variations between each HD Analog DVR manufacturer—we can not guarantee that the HD Analog output from the camera will display correctly with off-brand equipment.

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## DISTANCES:

HD Analog signals degrade with long runs of cable. The image can appear washed out and lacking color saturation (black & white).

Cable splices, improper BNC termination, damaged shielding, kinks and severe bends in the cable will reduce the possible distance of the video transmission.

# TROUBLESHOOTING

Problem	Solution
Nothing appears on the screen.	<ul style="list-style-type: none"> <li>• Check the power connection.</li> <li>• Check the video signal connection (HD Analog or CVBS).</li> <li>• Check HD Analog output type. Ensure connected DVR supports the signal.</li> <li>• If set to WDR, the CVBS signal is disabled.</li> </ul>
The video image is not clear.	<ul style="list-style-type: none"> <li>• Check if the lens is clean. Clean the lens with a clean cloth.</li> <li>• Check if the dome is clean. Clean the dome with water and a clean, lint-free cloth.</li> <li>• Check the focus of the camera.</li> <li>• Adjust the contrast feature of the monitor.</li> <li>• Make sure that the screen is not exposed directly to a bright light. Move the camera if necessary.</li> </ul>
The screen is dark.	<ul style="list-style-type: none"> <li>• Adjust the contrast feature of the monitor.</li> <li>• Adjust the BRIGHTNESS level of the IMAGE ADJ.</li> <li>• If you have an intermediate device, set the 75Ω/Hi-z properly, and check the terminals.</li> </ul>
There is a problem with the camera operation. The camera surface is too hot and black stripes appear on the screen.	<ul style="list-style-type: none"> <li>• Check if the camera power supply meets the minimum power requirement, or if the voltage keeps changing.</li> </ul>
The MOTION function is not working.	<ul style="list-style-type: none"> <li>• Check if the SENSITIVITY level is too low.</li> <li>• Motion OSD need to be set to ON for the detection boxes to display.</li> </ul>
Colors are not quite right.	<ul style="list-style-type: none"> <li>• Check the WHITE BAL setting.</li> <li>• Perform AWC→SET.</li> <li>• Check and adjust Color Mode and Saturation values.</li> <li>• Reduce length of cable. HD Analog signals degrade with long runs of cable. The image can appear washed out and lacking color saturation (black &amp; white).</li> <li>• Adjust image settings at the DVR (if supported).</li> <li>• Adjust the HD Analog Y, CR, CB GAIN values.</li> </ul>

# TROUBLESHOOTING

Problem	Solution
<b>SENS-UP function is not working.</b>	<ul style="list-style-type: none"> <li>• Check if Shutter settings are set to AUTO or 1/30.</li> </ul>
<b>The screen is flickering.</b>	<ul style="list-style-type: none"> <li>• Check if the camera is facing directly into sunlight or fluorescent light. Move the camera if necessary.</li> <li>• Set Shutter to FLK. (Flicker)</li> <li>• When a BNC cable adapter is used to combine two or more BNC cables for distributed video transfer, make sure the impedance of the adapter is 75Ω. Otherwise, it may cause shorter transfer distance or broken video transfer.</li> </ul>
<b>COLOR (Day&amp;Night) mode is not working.</b>	<ul style="list-style-type: none"> <li>• Check the delay in the DAY&amp;NIGHT 'AUTO' sub-menu.</li> </ul>
<b>The camera is not switching to B/W mode at night.</b>	<ul style="list-style-type: none"> <li>• Check the DAY&amp;NIGHT setting. If the camera is equipped with IRs, leave set to EXTERN.</li> </ul>
<b>CVBS: Areas of the image have moiré patterns (rainbow artifacts).</b>	<ul style="list-style-type: none"> <li>• Turn ON CVBS Filter. Older DVRs (pre 960H) or PC based DVRs (that only accept D1 or CIF) were not designed for high resolution analog signals. Turning ON CVBS Filter softens the CVBS image, helping to reduce the "rainbow" effect.</li> </ul>

If these guidelines do not help to solve the problem, contact Clinton Electronics Technical Support at 1-800-549-6393 or 815-633-1444.

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**For 2MP HD Analog Cameras**

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