

ADCDS camera specifications

Type / Format	NTSC	PAL
Scanning Element	2:1 Interlace, H15.734KHz / V :59.94Hz	2:1 Interlace, H15.625KHz / V :50Hz
Image Picture Element	1/3" Interline CCD	
Effective Picture Element	510(H) x 492(V)	500(H) x 582(V)
Approximate pixels	380K	430K
Resolution (TV lines)	330	
Minimum Illumination	0.7 Lux @ F1.2	
S/N Ratio	48dB	
Exposure Control	DC Auto IRIS	
Sync System	Internal	
Gamma Compensation	0.45	
Video Output	1.0Vpp, 75 ohm Unbalanced	
White Balance	Automatic White Balance	
Auto White Balance Range	2700K – 11000K	
Power Range	AC: 24VAC ±20% or DC: 12VDC -10% +12%	
Power Consumption	1.7W (Max)	
Operating Temperature	-30°C to +50°C	
Storage Temperature	-35°C to +60°C	

ADCDH camera specifications

Type / Format	NTSC	PAL
Scanning Element	2:1 Interlace, H15.750KHz / V :59.94Hz	2:1 Interlace, H15.625KHz / V :50Hz
Image Picture Element	1/3" Interline CCD	
Effective Picture Element	768(H) x 494(V)	752(H) x 582(V)
Approximate pixels	380K	430K
Resolution (TV lines)	540 (normal)	
Minimum Illumination	0.65 Lux @ F1.2	
S/N Ratio	50dB	
AGC.EX Gain	30dB	
AGC Preset Gain	26dB	
Back Light Compensation	Central area for auto iris	
Exposure Control	DC Auto IRIS Drive	
Sync System	Internal/Line lock	
Line Lock (Phase Adj. Range)	0°~270°	
Line Lock (Frequency Range)	60Hz ±1Hz	50Hz ±1Hz
Gamma Compensation	0.45	
Video Output	1.0Vpp, 75 ohm Unbalanced	
White Balance	Automatic White Balance	
AWB Normal Range	2700K – 11000K	
AWB.EX Range	2000K – 18000K	
Power Range	AC: 24VAC ±20% or DC: 12VDC -10% +12%	
Power Consumption	2.8W (Max)	
Operating Temperature	-30°C to +50°C	
Storage Temperature	-35°C to +60°C	

ADCDW camera specifications

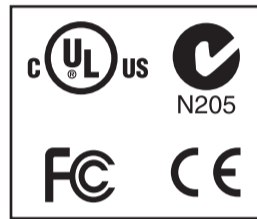
Image Picture Element	Pixim Orca Sensor
Effective Picture Element	720(H) x 540(V)
Resolution (TV lines)	540
Minimum Illumination	0.95 Lux @ F1.2 (AGC Boost)
S/N Ratio	>42dB
Wide Dynamic Range	120 dB / 17bit
Wide Dynamic Range Area	1 Zone - Fully Adjustable
Slow Shutter	Default 2x, max 32x
Electronic Shutter	1/50 or 1/60 ~ 1/100000
Day/Night	Night Saver Auto/On/Off
White Balance	ATW, MWB, 1-Touch
Auto White Balance Range	2200°K – 7500°K, 2000°K – 11000°K
Sync System	Internal/Line lock 57Hz - 62.4Hz for NTSC 47.5Hz - 52Hz for PAL
Video Output	1.0Vpp, 75 ohm Unbalanced
Power Range	AC: 24VAC ±20% or DC: 12VDC -10% +12%
Power Consumption	3W (Max)
Operating Temperature	-30°C to +50°C
Storage Temperature	-35°C to +60°C

Lens specifications (for all camera models)

Focal Length	2.5-6.0mm	3.8-9.5mm	9-22mm
F-No.	F1.3	F1.2	F1.8
Iris Range	F1.3-F360	F1.2-F360	F1.8-F360
Minimum Object Distance	0.15mm (6")	0.15mm (6")	0.2mm (8")
Field Of View	Diagonal	136.6°~59.4°	96.8°~37.4°
	Horizontal	108.2°~47.6°	74.2°~30.0°
	Vertical	80.4°~35.6°	54.0°~22.4°
Lens Type	Aspherical	Aspherical	Spherical
IR Corrective Coating	Yes	Yes	No

Regulatory Compliance

Emissions	FCC part 15 Class B CE: EN55011 ICES-003 EN55022 CISPR 11 CISPR22 ANSI C63.4
Immunity	CE: EN50130-4
Safety	CSA C22.2 UL60065



FCC COMPLIANCE: This equipment complies with Part 15 of the FCC rules for intentional radiators and Class B digital devices when installed and used in accordance with the instruction manual. Following these rules provides reasonable protection against harmful interference from equipment operated in a commercial area. This equipment should not be installed in a residential area as it can radiate radio frequency energy that could interfere with radio communications, a situation the user would have to fix at their own expense.

CISPR 22 WARNING: This is a Class B product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

POWER SUPPLY REQUIREMENTS: For use with listed Audio/Video Product and only connected to 15W or less power supply. Power supply should be a NEC Class 2 / LPS Supply.

EQUIPMENT MODIFICATION CAUTION: Equipment changes or modifications not expressly approved by Sensormatic Electronics Corporation, the party responsible for FCC compliance, could void the user's authority to operate the equipment and could create a hazardous condition.

RLJ 02/2005

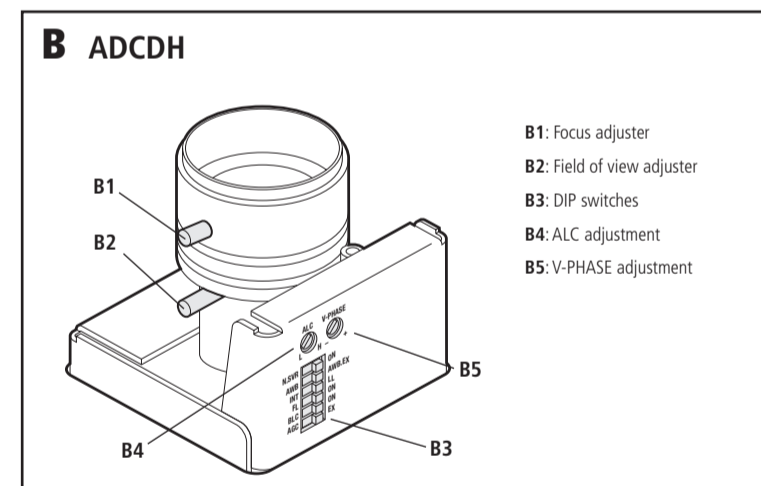
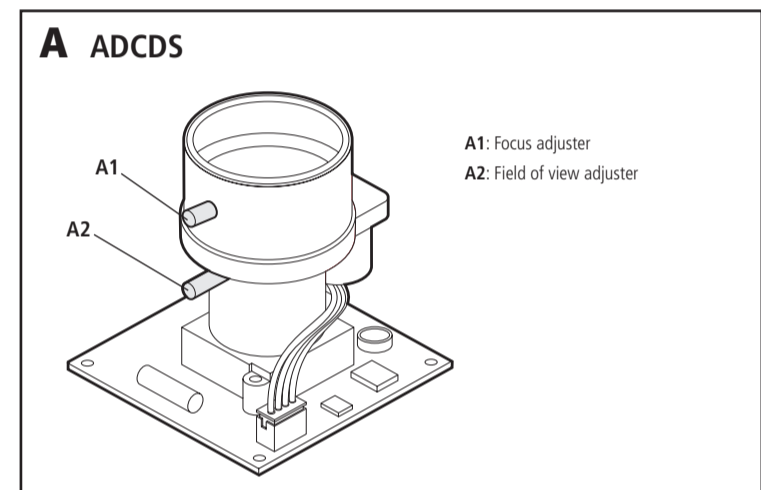
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8200-0206-28 Rev E

Camera adjustments



Camera adjustments for the ADCDH series

DIP switch settings

The bank of dip switches allow the following settings to be made:

Night-Saver mode (N.SVR / ON)

When ON the camera operates in monochrome mode in reduced lighting.

Auto White Balance (AWB / AWB.EX)

AWB: The camera operates in the normal Auto White Balance range 2700K~11000K.

AWB EX: The camera runs in the extended Auto White Balance range 2000K~18000K.

Line Lock (INT / LL)

In LL mode the V-Phase may be adjusted to compensate for connected supply phase differences. Only applicable for 24VAC supply – otherwise the camera operates with INTERNAL sync.

Flickerless mode (FL / ON)

ON: The Camera reduces flicker in the image under fluorescent lighting.

Back Light Compensation (BLC)

When set ON, this option improves the camera response to strong, unwanted lighting effects behind the required subject.

Low light sensitivity (AGC-EX)

When set to EX sensitivity in low light is increased.

Focus & field of view adjustment

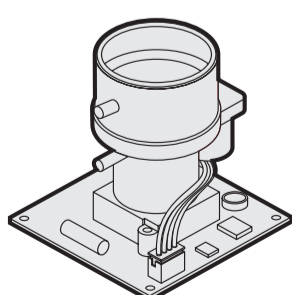
Twist the levers on the side of the varifocal camera to adjust the focus and field of view settings. TIP: If necessary, perform the final focus through the dome cover, holding it to the lens reversed to confirm the final results.

Vertical phase adjustment

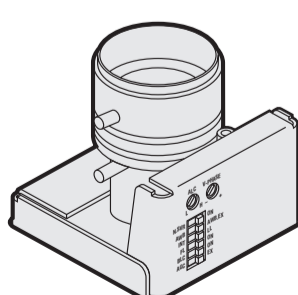
Use this adjustment when using an AC supply to align the camera phase with that of the supply.

Iris adjustment

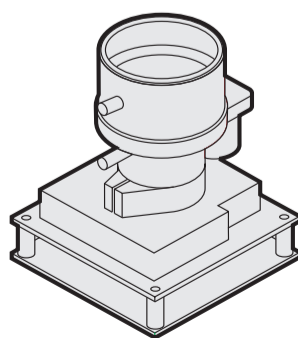
This is factory set and should not normally require adjustment except to compensate for excessive image blooming.



ADCDS
Standard Resolution
330TVL

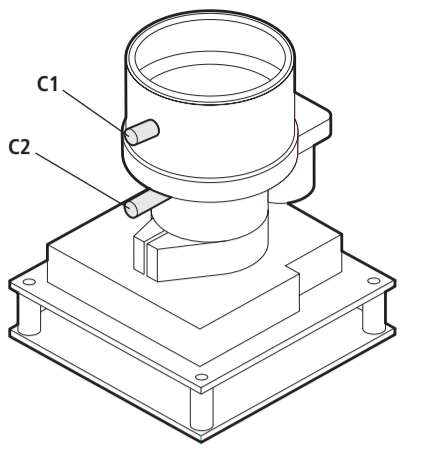


ADCDH
High Resolution
540TVL



ADCDW
High Resolution
Wide Dynamic Range 540TVL

C ADCDW



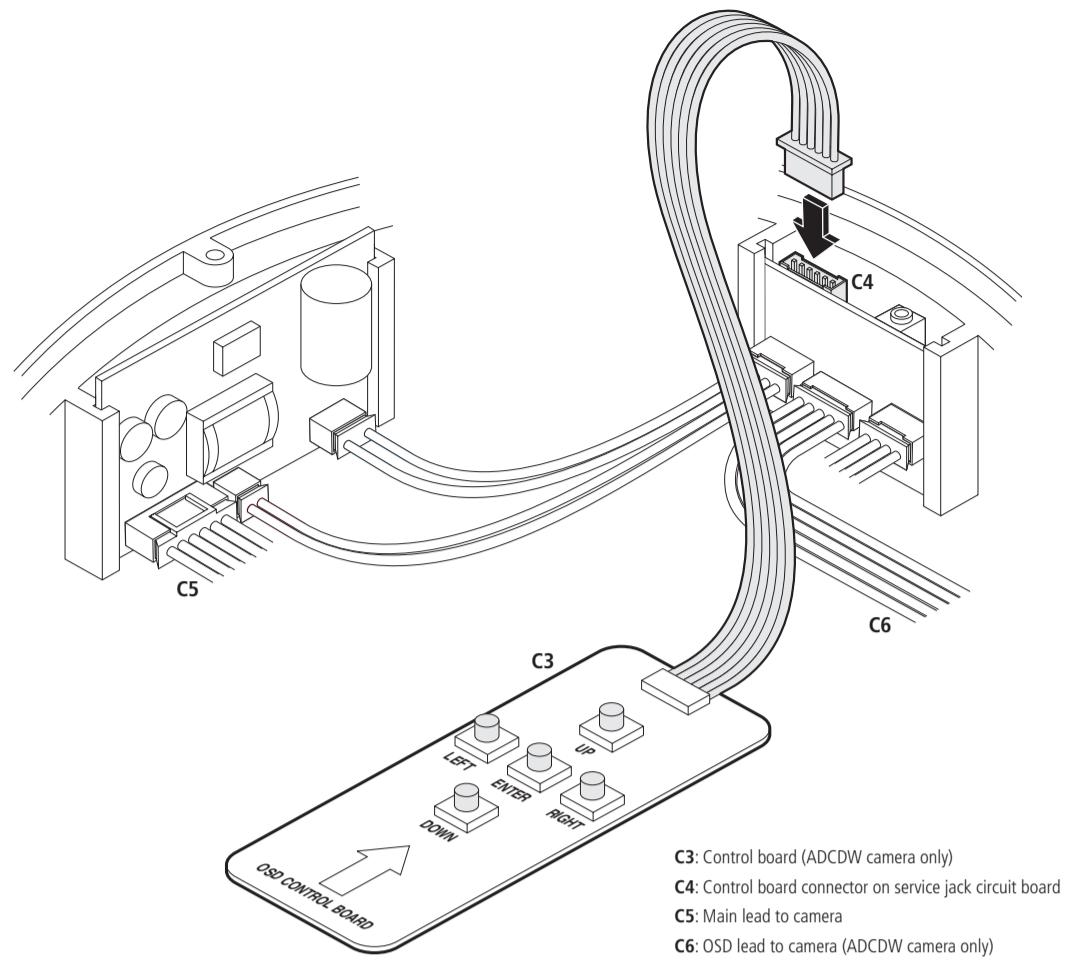
- C1: Focus adjuster
- C2: Field of view adjuster

Camera adjustments and programming for the ADCDW series

With the exception of the focus and field of view adjustments (made using levers **C1** and **C2**) all settings for the ADCDW series camera are made using its on screen menu display. A working video monitor and a separate plug-in control board (**C3**) are required to view and select options.

- 1 Within the dome enclosure, attach the control board connector to the socket (**C4**) at the top of the service jack interface board. Ensure that the OSD lead (**C6**) is connected between the middle socket of the smaller circuit board and the camera.
- 2 With power applied to the camera and a video monitor connected, press and hold the ENTER key for three seconds to access the top level menu. A map of the menu options are shown below.
- 3 To navigate through the menus, use the arrow keys on the control board and use the ENTER key to select the required menu field.

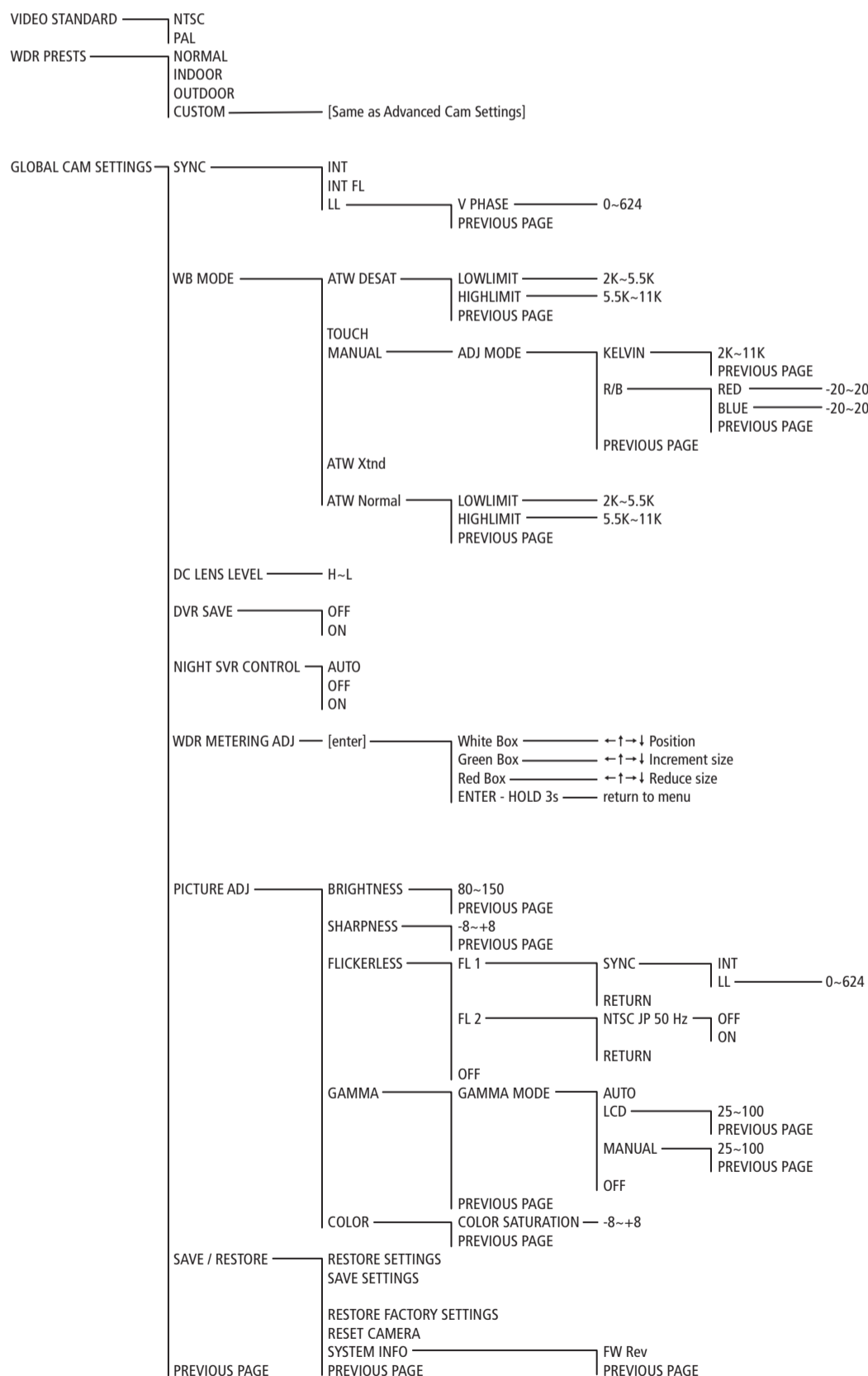
IMPORTANT: When you make changes to the camera configuration, you MUST save them using the "SAVE SETTINGS" option in the "SAVE/RESTORE" menu. Otherwise any changes made will be lost when the camera is next reset or has its power cycled.



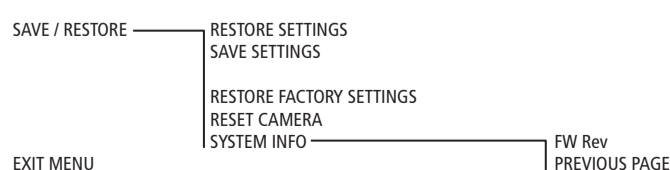
- C3: Control board (ADCDW camera only)
- C4: Control board connector on service jack circuit board
- C5: Main lead to camera
- C6: OSD lead to camera (ADCDW camera only)

ADCDW Menu Map

Press the ENTER button on the control board for three seconds to view the menu.



ADVANCED CAMERA SETTINGS



Menu Description

VIDEO STANDARD Select the video standard the camera should use - NTSC or PAL. (NOTE - If the camera is "Restored to Factory Settings" it will default to NTSC. This is due to it being dual standard.)

WDR PRESETS - These are "factory set" general configurations. Select the preconfigured WDR mode for the camera to use to give the best performance for the specified environment. Pressing the ENTER key on the selected option will display the pre-configured set-up parameters. If adjustment is necessary please go to the "WDR METERING ADJUST" zone in the "GLOBAL CAM SETTINGS" menu.

NORMAL - This should provide the most versatile settings for general purpose applications.

INDOOR or OUTDOOR - These settings are optimized for indoor / outdoor lighting conditions.

CUSTOM - Please refer to WWW.AMERICANDYNAMICS.NET for settings for this menu structure.

GLOBAL CAM SETTINGS: This page contains the standard adjustments needed for camera operation and applies to all WDR preset modes.

SYNC: Select Synchronization mode:

INT - Internally generated sync.

INT FL - Internal Flickerless - Internally generated sync that can reduce flicker under florescent lighting

LL: - Line Lock - Sync is locked to the AC supply cycle and permits adjustment of V-phase to correct for vertical sync picture roll. (Applicable for 24VAC supply only. If a 12 volt DC power supply is used the camera will run in INT or INT FL modes only)

WB MODE: ATW DESAT - When the camera is operating outside its pre-programmed White Balance Range, the chroma content is reduced, to give the resultant image a more natural look. If necessary, the range is configurable with low limit (to help with reds) and high limit (to help with blues) adjustments.

TOUCH - Pressing the enter key sets & fixes the White Balance according to current image content. Once set the white balance will not auto adjust anymore. This is good for static environment applications where the lighting conditions never change, like indoor hallways.

MANUAL (White Balance):

ADJ MODE - allows manual setting of the colour temperature of the image. This can be achieved by using the Kelvin or Red/Blue option and permits two methods of setting color balance, by which ever method the installer is familiar with. This setting is also good for static environment applications where the lighting conditions never change, like indoor hallways

ATW Xtnd - extended Auto White Balance range - use this setting for scenes that may have an extremely wide range of color temperature.

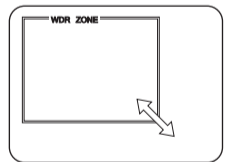
ATW Normal - selects a normal Auto White Balance range, for general operation. If necessary the range is configurable with low limit (to help with reds) and high limit (to help with blues) adjustments.

DC LENS LEVEL - This is to adjust the iris on a DC auto iris lens and is factory set. It should not need adjustment under normal operation.

DVR SAVER - When ON, The DVR-Saver mode feature may be used to reduce storage requirements when connected to a digital video recorder. This feature can also be used to reduce bandwidth requirements when connected to a digital network via an encoder. Note the images may appear slightly "softer" but this will have negligible effect once compressed in the DVR. When Off - Normal operation

NIGHT SVR CONTROL - Day / Night (Color / Monochrome) operation. This feature may be used to improve low light performance by reducing noise from the video signal. **AUTO MODE** - In reduced lighting camera switches automatically to Night (black and white) mode and back to Color once the ambient lighting comes back to normal levels. **OFF** Forces the camera into Day (Color) only mode regardless of lighting conditions. **ON** Force the camera into Night (BW) only mode regardless of lighting conditions.

WDR METERING ADJ - This feature is used to configure the area used for WDR light metering - Tapping the ENTER key reveals a box which is the WDR zone. Repeatedly tapping the ENTER key changes the color of the zone. **White** - Move entire zone's position. **Green** - Used to increase the size of the zone. **Red** - Used to reduce the size of the zone. Use the arrow keys to adjust the zone position or size. Holding the [ENTER] key for 3 seconds returns you to the previous menu. The default setting will provide good general performance. If adjustment is necessary, size according to the area of interest making sure to include all areas of interest. This will dictate how the overall wide dynamic range features operate. Example: An internal scene viewing a doorway and polished floor. Daylight often streams through the doorway. It is required to see people entering the doorway and follow them to the left hand side of the picture. The door way is central to the image. The box should be sized and positioned to cover the doorway and the area to the left where people walk.



PICTURE ADJ. - BRIGHTNESS - Adjusts overall image brightness.

SHARPNESS - Adjusts overall image sharpness.

FLICKERLESS - Used to help reduce flicker or color rolling under florescent lighting.

FL 1 - Standard Setting - *Line Lock sync recommended* (To use Line Lock with FL 1 a 24VAC power supply must be used.)

FL 2 - NTSC/50Hz Setting - Select to overcome flicker in a 50Hz NTSC Environment. Must turn on of off via sub-menu.

GAMMA MODE: Select appropriate gamma mode for type of display. Gamma Correction compensates for a non linear grayscale in a display device or to make non standard luminance.

AUTO - Standard for a CRT based monitor.

LCD - Optimized for LCD monitors. Also has adjustment sub-menu for fine manual control which will display "manual" if set and saved

MANUAL Manual Gamma may be used to enhance detail in low light areas of an image which would normally not be visible with highlights present in the image.

COLOR SATURATION - Adjusts overall color content of the image.

RESTORE SETTINGS - This will undo any changes made since the last "Save Settings"

SAVE SETTINGS - Save any programming changes to ensure they are retained after power loss or reset. If changes are not saved, the camera will revert to the previous settings on power-up.

RESTORE FACTORY SETTINGS - Restore camera settings to factory default - full reset, all previous programming will be lost including video standard which will default to NTSC.

RESET CAMERA - This is a soft reset and has the same effect as cycling the camera power.

SYSTEM INFO - Displays the camera firmware version - This may be required during any call to American Dynamics Technical Support.

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