
D1081A

DSP Color Camera

Operation Manual

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Features

- 1/2" CCD with 380K pixels, produces image with horizontal resolution up to 480 TV lines
- Manual gain control
- Adjustable white balance
- Selectable gamma correction
- Negative image option
- Composite video and S-Video (YC) output
- Includes all necessary cabling and power supply
- MicroImage Support

Unpacking

The MicroImage D1081A camera system for NTSC composite and S-Video consists of:

MicroImage D108A camera module
PP108A or equivalent Wall Plug power supply
CAB11006 6 foot BNC cable
CAB12006 6 foot S-Video Cable
This instruction manual

Unpack all items carefully. Check each item against contents list above.

Inspect unit for shipping damage. If there was shipping damage, call MicroImage Video Systems Immediately. Do NOT plug unit in to power if damaged. Further destruction and/or injury may result.

Precautions

1. Do not touch the surface of the image sensor.
2. Only use the specified power supply. Use of a power supply other than the specified power supply will damage the camera.
3. Do not attempt to aim the camera at the sun. Never attempt to aim the camera at the sun or other extremely bright objects that cause smear to appear irrespective of whether the camera is operating or not. This can damage the CCD.
4. Do not allow the camera to be subjected to strong impacts or shocks.

Connectors and Controls

The D108A camera back panel contains two connectors, two rotary controls, and

one set of four DIP switches. An additional set of switches is located under a narrow panel on the top of the camera body, and may be accessed by removing the two small Phillips screws.

The VIDEO connector provides a composite video signal which may be routed to a monitor via the supplied BNC cable.

The circular 12 pin connector marked DC IN accepts the mating plug on the PP108A power supply. This connector also includes an S-Video (or Y/C) signal which may be routed from the 4 pin mini-DIN connector on the PP108A to an appropriate monitor using the supplied S-Video cable. This is the preferred video connection.

External Controls

Rotary Controls

The control in the lower left corner of the panel labeled GAIN may be used to adjust the level of the video image in either manual or automatic smooth shutter modes.

The control in the lower right corner of the panel labeled COLOR may be used to adjust the red/blue color balance of the image to compensate for different color temperature lighting systems.

DIP Switches

The first two DIP switches on the back of the camera are used to set the level of edge enhancement. This ranges from soft to very harsh vertical edges useful in bringing out details or determining a transition point. Move the switch levers up for ON, or down for OFF. The possible setting combinations are:

Soft Edge	SW1 = OFF	SW2 = OFF	
Normal Edge	SW1 = ON	SW2 = OFF	(DEFAULT)
Moderate Edge	SW1 = OFF	SW2 = ON	
Hard Edge	SW1 = ON	SW2 = ON	

The third and fourth DIP switches are used to set gamma correction. Move the switch levers up for ON, or down for OFF. The possible setting combinations are:

Gamma 1.0	SW3 = OFF	SW4 = OFF	
Gamma 0.6	SW3 = ON	SW4 = OFF	
Gamma 0.45	SW3 = OFF	SW4 = ON	(DEFAULT)
Gamma 0.2	SW3 = ON	SW4 = ON	

Internal Controls

There are eight DIP switches located under a cover plate on the top of the camera body. The first four of these are not used for normal operation and should be set to the OFF position. Switches 5, 6, and 7 are used to set the shutter mode or speed. The available settings are:

Manual 1/60 sec.	SW5 = OFF	SW6 = OFF	SW7 = OFF
Manual 1/1000 sec.	SW5 = ON	SW6 = OFF	SW7 = OFF
Automatic Shutter	SW5 = OFF	SW6 = ON	SW7 = OFF
Smooth Auto Shutter	SW5 = OFF	SW6 = OFF	SW7 = ON (*)

The back panel gain control will function normally in either of the manual modes. When using the automatic (fast) shutter, the camera will override the gain adjustment. In Smooth Auto Shutter mode (*DEFAULT), the control will override the automatic setting.

Switch number 8 allows the camera to display a negative image when in the ON position. The camera produces a normal image when this switch is in the OFF position (DEFAULT).

Technical Assistance

For technical assistance contact:

WORLD VIDEO SALES CO., INC.
P.O. Box 331
Boyertown, PA 19512
Attention: Customer Service
Phone: (610) 754-6800
www.mivs.com
support@mivs.com

Returns

MicroImage Video Systems is a division of World Video Sales Co., Inc. Please call for a RMA Number and shipping address on all repairs.

WORLD VIDEO SALES CO., INC.
625 Hoffmansville Road, Suite 3
Bechtelsville, PA 19505
Attention: [insert RMA number here]
Phone: (610) 754-6800

Note: You MUST have an RMA number for returns & repairs

Specifications

Horizontal Resolution	480 lines
Image Sensor	1/2" CCD, 768 (H) x 494 (V)
Scanning System	2:1 interlace, RS-170
Scanning Frequency	15.734 Khz (H), 59.94 Hz (V)
Chroma Frequency	3.579545 Mhz
Sync System	Internal
NTSC Output	1 Vpp composite video
S-Video (YC) Output	(Y) 1 Vpp, (C) 0.28 Vpp burst
Shutter System	Auto/Manual
Auto Shutter Range	1/60-1/10,000 sec.
Gain	Manual
Negative Image	On/Off
White Balance	Manual
S/N Ratio	better than 50dB (AGC Off)
Minimum Illumination	0.72 Lux/F1.2 (5600 deg K)
Gamma	4 positions, 0.2, 0.45, 0.6, 1.0
Aperture	4 positions
Lens Mount	C-Mount
Connectors	
NTSC	BNC Female
S-Video/Power Out	12 pin Hirose HR10A male
Power	12 Pin connector
Power Requirements	+12VDC +/- 10%, 170mA
Operating Range	-10 ~ +50 deg C, 90% RH max
Dimensions	2" x 2.3" x 2.8"
	51mm x 59mm x 78mm
Weight	6.7 oz. (190g)

Warranty

World Video Sales Co., Inc. warrants that each MicroImage D1081A camera system is free of defects due to faulty materials or improper workmanship. World Video Sales Co., Inc. further warrants that any part which proves defective in materials or workmanship within one year, will be replaced or repaired at no cost to the user. Labor to replace defective parts will be done without charge, provided the equipment is returned to World Video Sales Co., Inc. prepaid, insured and properly packaged. Prior return authorization must be obtained from World Video Sales Co., Inc.

NOTE

This warranty covers the MicroImage D1081A camera and power supply only.

CONDITIONS

This warranty is void if the warranted part has been altered or subjected to abuse or misuse. Defective parts must be returned to World Video Sales Co., Inc.

SOLE WARRANTY

This Warranty is in lieu of all other warranties expressed or implied including, without limitation, any implied warranty or any implied warranty of fitness for a particular purpose. World Video Sales Co., Inc. shall have the final right to determination as to the existence and cause of any defect and its appropriate adjustment in accordance with the terms of this warranty. In no event shall World Video Sales Co., Inc. be liable for any consequential or collateral damages.