

MODEL I RGB
2051 series
INSTRUCTION MANUAL

C2051 series

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UNPACKING AND ASSEMBLY INSTRUCTIONS

The MicroImage Model I RGB consists of :

Color 2/3" High Resolution RGB Camera
Power Supply
RGB Camera to RGB Monitor Video Cable

Unpack all items carefully.

Note the C-mount cover and carefully remove. This cover protects the image sensor from damage and dirt.

Screw in microscope adapter (dealer supplied).

Attach cable from power supply to camera power connector.

Mount camera on microscope.

Camera power cord should face rear of microscope.

Connect camera to a video monitor (NTSC, YC, Monochrome or RGB).

OPERATING INSTRUCTIONS

Plug Power supply into AC outlet.

Turn on video monitor.

Set White Balance (Camera)

The Model I RGB Camera supplies both manual and automatic White Balance. In the AUTO mode, the camera adjusts the White balance of the picture. Auto White Balance works best for most applications. If manual White balance is required, follow the steps below.

Manual White Balance

1. Set WHITE BALANCE Switch on rear of camera to manual position.
2. On rear of camera, note WHITE BALANCE control.
3. Use the White field of the microscope (without a slide) to set White Balance.

4. Turn WHITE BALANCE control to obtain white picture on monitor.

NOTE: Correct setting should be near the center of the control.

NOTE: If color adjustment is necessary to obtain a proper color display of the specimen, turn the WHITE BALANCE control clockwise for more red or counter-clockwise for more blue. The white balance switch must be in the manual position. Do not adjust the monitor to change color. World Video color monitors are factory set and marked accordingly on the color and hue knobs.

AGC

With the AGC switch in the ON Position, the camera will try to compensate changes in light level. With the AGC switch in the OFF position, the gain of the camera is fixed and will not change as the light going into the camera is changed.

LIGHT

The amount of light transmitted through or reflected from the specimen is important. At lower magnifications when the light source on the microscope is generally set at a lower output, a blue filter placed on the light source will give better results. As magnification is increased, more light will be required and the blue filter will probably not be necessary. The blue filter should only be used in extreme cases.

As source light level is changed the automatic light compensation (AGC) feature of the MicroImage Camera will self-adjust to the new light level (AGC switch in the on position). This may appear as a brightness stepping process on your monitor.

NOTE: Best results have been obtained with microscopes utilizing a 60-40, 70-30, or greater beam splitter.

CONNECTIONS

The MicroImage Model I RGB has been designed to provide several common video output standards. A monochrome output is provided for digitizing or when only a monochrome picture is required. A NTSC output is provided as it is compatible with most equipment. The YC output provides a high resolution signal that is compatible with the new S-VHS type VCRs. This connection will provide the best signal quality when used with a YC monitor or S-VHS VCR. An RGB output is provided for a high color resolution.

MONITOR CONNECTIONS

NTSC

Connect a BNC cable from the NTSC OUT connector on the camera to the VIDEO IN connector on the monitor. If this is the only monitor being used, place the TERM switch in the TERM or 75 position.

If a second monitor is being used, connect a BNC cable from the extra VIDEO INPUT jack on the first monitor to the VIDEO INPUT of the second monitor. Place the TERM switch in the high impedance position (not in the TERM or 75 position) on the first monitor (the one with two cables connected to the video input). Place the TERM switch on the second monitor in the TERM or 75 ohm position. If more than two monitors are being used, only the last one connected (the one with only one NTSC cable connected to it) should be placed in the TERM or 75 position.

MONOCHROME

Connect a BNC cable from the B/W out connector on the camera to the Video Input on the Monochrome monitor. If only one monochrome monitor is being used, place the termination switch (TERM) in the TERM or 75 position.

If a second monochrome monitor is being used, connect a BNC from the extra Video Input connector on the first monochrome monitor to the Video Input of the second monochrome monitor. Place the TERM switch in the high impedance position (Not in the 75 or TERM position) on the first monitor (the one with two cables connected to the video input). Place the TERM switch on the second monitor in the TERM or 75 position. If more than two monitors are being used, only the last one connected (the one with only one video cable on it) should be placed in the 75 or TERM position.

NOTE: DO NOT connect monitors or other equipment to the B/W and YC OUT connectors at the same time. A degraded image will result.

YC

Connect a 12 pin to RGBS/YC Adapter cable (optional part # CAB50110), from the RGBS/YC OUT connector on the camera (12 pin) to the YC IN connector on the monitor (4 pin). If only one YC monitor is being used, place the YC TERM switch in the TERM position.

If a YC second monitor is being used, connect a YC cable (4 pin to 4 pin) from the YC LOOP connector on the first YC monitor to the YC IN connector on the second YC monitor. Place the YC TERM switch on the first monitor (the one with two YC cables connected to it) in the high impedance position (Not the 75 or TERM position). Place the TERM switch on the second monitor in the TERM or 75 position. If more than two YC monitors are being used, only the last one connected (the one with only one YC cable) should be in the TERM or 75 position.

NOTE: DO NOT connect monitors or other equipment to the B/W and YC OUT connectors at the same time. A degraded image will result.

RGB

Connect wires as follows:

<u>From Camera</u>	<u>To Monitor</u>
RED	RED INPUT
GREEN	GREEN INPUT
BLUE	BLUE INPUT
YELLOW	SYNC INPUT

If this is the only RGB monitor in the system, then place the RGB Term switch and the SYNC Term switch in the Term or 75 position. If a second monitor is being used, connect four BNC cables from the extra "loop" connectors on the first monitor to the like inputs on the second monitor. Place the RGB and SYNC Term switches on the first monitor in the HI or UNTERMED position. Place the RGB and SYNC Term Switches on the second (or last) monitor in the Term or 75 position. If more than two monitors are connected, only the last one connected should be placed in the 75 ohm or Term position.

NOTE: Some video monitors do not have a TERM switch for video inputs. These monitors are always terminated to 75 ohms. If two or more of this type monitor must be used, then a Distribution Amplifier will be required.

VCR CONNECTIONS

NTSC

Connect a video cable from the NTSC OUT connector on the camera to the VIDEO INPUT connector on the VCR. Then connect a second cable from the VIDEO OUTPUT on the VCR to the VIDEO INPUT on the monitor. If this is the only monitor being used, place the TERM switch in the 75 ohm or TERM position.

If a second monitor is being used, connect a video cable from the extra VIDEO INPUT jack on the first monitor to the VIDEO INPUT of the second monitor. Place the TERM switch in the high impedance position (not in the 75 or TERM position) on the first monitor (the one with two cables connected to the video input). Place the TERM switch on the second monitor in the TERM or 75 ohm position. If more than two monitors are connected, only the last one connected should be placed in the 75 ohm or TERM position.

YC

Connect a 12 pin to RGBS/YC Adapter cable (optional part # CAB50110), from the RGBS/YC OUT connector on the camera (12 pin) to the YC IN connector on the VCR. Then connect a YC (S-Video) cable from the YC out connector on the VCR to the YC input connector on the video monitor. If this is the only YC monitor being used, Place the YC TERM switch in the 75 ohm or TERM position.

If a second YC monitor is being used, connect a YC (S-Video) cable from the extra YC INPUT connector on the first YC monitor to the YC INPUT of the second YC monitor. Place the TERM switch in the high impedance position (not in the 75 or TERM position) on the first YC monitor (the one with two cables connected to the video input). Place the TERM switch on the second monitor in the 75 ohm or TERM position. If more than two YC monitors are connected, only the last one connected should be placed in the 75 ohm or TERM position.

NOTE: Some video monitors do not have a TERM switch for video inputs. These monitors are always terminated to 75 ohms. If two or more of this type monitor must be used, then a Distribution Amplifier will be required.

MONITOR OPERATION

NTSC

1. Place Rec/Mon switch in Mon position (Receiver/Monitor only).
2. All controls are set at the factory and should be approximately in the center of their range.

COLOR AND HUE CONTROLS

NTSC/YC only

World Video Monitors have been factory pre-set for correct Color and Hue. Use the White Balance adjustment on the MicroImage Camera to obtain appropriate coloring of your slides. Do not adjust the monitor to obtain proper colors. (See MicroImage Camera instructions).

VCR OPERATION

1. With the Camera, VCR and Monitor turned on and the VCR in the stop mode, operation should be in real time just as if a VCR is not connected.
2. Pressing RECORD on the VCR will record the camera signal until STOP is pressed or the end of the tape is reached.
3. Pressing PLAY on the VCR will play a video tape. During playback you will not be able to see the camera signal. As soon as STOP is pressed, the camera signal will again be displayed on the monitor.

PRECAUTIONS

Do not point the camera directly into a strong light.

Do not touch the filter and image sensor when mounting the adaptor.

Do not allow dust or moisture to enter camera.

Do not use the camera in a place with strong electric waves or magnetism if possible. Picture distortion may occur.

Do not open camera case.

Do not use camera in areas of high temperatures exceeding 50 degrees centigrade.

Do not wind the power cord, camera cable or monitor cable around camera while in use.

Do not clean camera with any volatile substance or the surface may be damaged.

FOR TECHNICAL ASSISTANCE CONTACT:

WORLD VIDEO SALES CO., INC.

P.O. Box 331

Boyertown, PA 19512

Attention: Customer Service

Phone: (610) 754-6800

Fax (610) 754-9766

Email support@mivs.com

www.mivs.com

WARRANTY

World Video Sales Co., Inc. warrants that each MicroImage Model I RGB Camera and power supply are 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 three years from the date of original purchase 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 Model I RGB 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.

An RMA number is required for all items returned to MicroImage Video Systems. Please call customer service (610-754-6800 or FAX 610-754-9766) for a RMA Number. Send to:

MicroImage Video Systems
div of World Video Sales Co., Inc.
625 Hoffmansville Road, Suite 3
Bechtelsville, PA 19505
Attn: < RMA #>