



Microlmage Video Systems
division of World Video Sales Co., Inc

P.O. Box 331
Boyertown, PA 19512
610-754-6800
Fax 610-754-9766
info@mivs.com

www.mivs.com

CONTENTS

UNPACKING Page 3

CONNECTIONS Page 3

 Power Page 3

 Video Connections Page 3

 S-Video (YC) Page 3

 Video Page 4

OPERATION Page 4

 Power Switch Page 4

 Off Switch Page 4

 On Switch Page 4

 Brightness Page 4

PATTERN STYLES Page 5

IN CASE OF DIFFICULTY Page 5

SPECIFICATIONS Page 6

WARRANTY Page 8

RETURNS Page 8

Version PG311-00 Rev 00 12-15-2010

UNPACKING

The Pattern Generator package includes the following items:

- PG311 Pattern Generator Unit
- Universal 12VDC Power Supply, or equivalent
- This operation manual

Please inspect all items carefully and report damaged or missing items to your dealer or MicroImage Video Systems.

CONNECTIONS

Power

The Pattern Generator uses a 12VDC universal table top power supply. For medical applications, a special low leakage power unit is also available. Connect the power supply to a suitable power source. This product will also operate from an external source of 9 to 20VDC

Video Connections

The MicroImage Pattern Generator will operate with a variety of video signal formats. The PG311 will operate with either composite/B&W or S-Video signals. Only one type of video signal should be connected at a time.

S-Video (YC)

Connect the video source (i.e. camera) to the S-VIDEO IN connector on the Pattern Generator.

Connect the S-VIDEO OUT signal from the Pattern Generator to the video display.

The Pattern Generator uses industry standard mini-DIN connectors for S-Video

Video (NTSC composite or B&W)

Connect the video source (i.e. camera) to the VIDEO IN connector on the Pattern Generator

Connect the VIDEO OUT signal from the Pattern Generator to the video display.

The Pattern Generator uses industry standard BNC connectors for composite video.

Connecting inputs or outputs to both the mini-DINs and the BNC connectors simultaneously will result in a loss of video quality or improper operation.

OPERATION

The Pattern Generator is designed to be easy to operate while also providing maximum flexibility. All the controls are listed below.

- | | |
|---------------------|--|
| Power Switch | The Power Switch and power indicator are located on the right side of the front panel. |
| Off Switch | Depressing the OFF switch will illuminate the LED next to the switch. Video will continue to flow through the unit but the pattern will not be displayed. |
| On Switch | Depressing the ON switch will illuminate the LED next to the switch and overlay the custom pattern onto the video image on the screen. |
| Brightness | Rotating the brightness control clockwise will increase the brightness of the displayed pattern. Rotating the control counter-clockwise will cause the pattern to become darker. The brightness can be adjusted from black to white. |

PATTERN STYLES

The PG311 Pattern Generator unit contains a user defined custom pattern. This pattern is factory programmed and cannot be altered by the user.

IN CASE OF DIFFICULTY

If you are experiencing problems with any MicroImage product, you can contact MicroImage Support using the following methods:

Phone	610-754-6800
Fax	610-754-9766
Email	support@mivs.com
Web	www.mivs.com

SPECIFICATIONS

Main Unit

Available Patterns	One, user defined, plus off (no pattern display)
Front panel switches	(3) - Pattern Select, Pattern Off, and Power
Line resolution	640 x 480 (NTSC) or 768x576 (PAL)
Sync system	NTSC (RS-170) or PAL (CCIR)
Genlock	Precision Phase Locked Loop (PLL)
Input levels	
Composite	1.0 Vpp composite, 75 Ω
S-Video	1.0 Vpp (Y), 0.286 Vpp burst (C), 75 Ω
Output levels	
NTSC, S-Video	Same as respective input $\pm 5\%$ into 75 Ω
Bandwidth	Greater than 30 MHz
Connectors	
NTSC	BNC Female
S-Video	4 pin mini-DIN Female (Std. S-Video conn.)
Temperature	
Operating	0° ~ 40° C (32° ~ 104° F)
Storage	-40° ~ 60° C (-40° ~ 140° F)
Humidity	
Operating	10% ~ 90% (non-condensing)
Storage	5% ~ 95% (non-condensing)
Power	9 - 20 VDC, 3W max
Size	5.6" (142 mm) x 4.4" (112 mm) x 1.2" (41 mm)
Weight	11 oz. (312 g)

Manufactured in Bechtelsville, PA USA by MicroImage Video Systems

Power Unit - table top with universal input

Part Number	ETS120125UC-P5P-SZ
Input	Universal, 100-240VAC, 47-63Hz, 0.4A, 3wire
Output	12VDC, 2A (1.5A), regulated
Type	Switching
Leakage	about 100uA
Size	4.25" (108mm) x 2.18" (56mm) x 1.4" (36mm)
Weight	14 oz. (184g) with power cord Includes 120V US 3 wire power cord

WARRANTY

MicroImage Video Systems warrants that each PG311 Pattern Generator is free from defects due to faulty materials or improper workmanship for a period of one (1) year. MicroImage Video Systems further warrants that any part which proves defective in materials or workmanship within one (1) 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 MicroImage Video Systems prepaid, insured and properly packaged. Prior return authorization must be obtained from MicroImage Video Systems.

NOTE

This warranty covers the PG311 MicroImage Pattern Generator 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 MicroImage Video Systems

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. MicroImage Video Systems 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 MicroImage Video Systems be liable for any consequential or collateral damages.

RETURNS

All returns MUST have an RMA number. Please call, fax or email for an RMA form. The RMA form will have the proper shipping address for returns.

Phone	610-754-6800
Fax	610-754-9766
Email	service@mivs.com