

## WARRANTY

MicroImage Video Systems warrants that each PG314 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 MicroImage PG314 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 techsupport@mivs.com

## Pattern Generator Operation Manual

**Model PG314N**

**Model PG314P**

**With Four Custom Patterns**

**MicroImage Video Systems**

division of World Video Sales Co., Inc

PO Box 331  
Boyertown, PA 19512  
Phone 610-754-6800  
Fax 610-754-9766  
sales@mivs.com

**www.mivs.com**

## CONTENTS

UNPACKING .....	3
CONNECTIONS.....	3
Power .....	3
Video Connections .....	3
S-Video (YC) .....	3
Video (NTSC composite or B&W).....	4
OPERATION .....	4
Power Switch.....	4
Off Switch .....	4
Patterns 1-4 .....	4
Brightness.....	4
PATTERN STYLES.....	5
IN CASE OF DIFFICULTY .....	5
SPECIFICATIONS .....	6
WARRANTY.....	8
RETURNS.....	8

## SPECIFICATIONS

### Main Unit

Available Patterns	Up to four user defined, plus off (no pattern display)
Front panel switches	Pattern Selects (5) 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 $\Omega$
S-Video	1.0 Vpp (Y), 0.286 Vpp burst (C), 75 $\Omega$
Output levels	
NTSC, S-Video	Same as respective input $\pm$ 5% into 75 $\Omega$
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	DTS120200UC-P5P (or DTS120150U/AC1-P5)
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

## UNPACKING

The Pattern Generator package includes the following items:

PG314 Pattern Generator Unit  
Universal DTS series 12VDC Power Supply  
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 PG314 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.
- Patterns 1-4**        Depressing a pattern switch will illuminate the LED next to the switch and display the related pattern 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 PG314 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	<a href="mailto:techsupport@mivs.com">techsupport@mivs.com</a>
Web	<a href="http://www.mivs.com">www.mivs.com</a>