

## WARRANTY

MicroImage Video Systems warrants that each VP300/ VP400 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 VP300/ VP400HD Video Pointer 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](mailto:techsupport@mivs.com)

## Video Pointer Operation Manual

**Model VP300**

**Model VP400**

**For NTCS and PAL Video**

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## FACTORY DEFAULT SETTINGS

The VP300 and VP400 Video Pointers can be easily set to their factory default mode. Use the following procedure to reset the unit to the factory default mode.

1. Make sure the unit is OFF.
2. Press and hold down the SIZE switch and then press the POWER switch. Keep the SIZE button held down.
3. After the unit powers up, release the SIZE switch.
4. The unit should now be set to the default factory settings.

## 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	techsupport@mivs.com
Web	www.mivs.com

## APPLICATIONS AND ADDITIONAL INFO

Please visit the MicroImage Video Systems web site at [www.mivs.com](http://www.mivs.com) for additional information about this product line.

time. Note that when used in PAL mode, the unit will only display shades of gray, not colors.

### Outline

This switch will change the outline color of the symbol, cycling through the eight colors and transparent. Note, if the fill color is set to transparent, this switch will skip over the transparent selection. Outline and fill colors cannot both be transparent at the same time. Note that when used in PAL mode, the unit will only display shades of gray, not colors.

### Flash

Enabling flash will cause the symbol to turn off and on a couple times per second making it much more visible.

### Joystick

The joystick positioner is the control that moves the symbol image around the screen. The symbol moves in the same direction as the joystick movement.

## SETTING COLOR OR B&W MODE

The VP300 Video Pointer is compatible with both color and B&W signals. However it must be set to work with the proper signal type. The unit ships from the factory in the color mode. To set to B&W mode, follow this procedure:

1. Make sure the unit is OFF.
2. Press and hold down the COLOR switch and then press the POWER switch. Keep the COLOR button held down.
3. The blue LED will blink rapidly to indicate color/B&W set mode
4. The red LED will indicate whether the unit is in color or B&W mode. If it is illuminated, the unit is in color mode.
5. Release the COLOR switch to allow the unit to save the mode and operate normally.

To change the mode back to color, repeat this procedure

## SPECIFICATIONS

Input level	(Y, Video) 1 Vpp Composite, 75 $\Omega$ (RGB) 0.714Vpp Non-Comp, 1 Vpp Composite, 75 $\Omega$ (Chroma) 0.286 Vpp burst level, 75 $\Omega$ (S) 5.0 Vpp max 75 $\Omega$
Output level	Same as respective inputs $\pm$ 3% into 75 $\Omega$
Connectors	(Video) BNC female, (S-Video) 4 pin mini-DIN female (RGBS) 9 pin D-Sub female
Bandwidth	Greater than 20Mhz
Symbols total	40
Symbol types	arrows (24), box (4), corner (4), circle (4), cross (4)
Arrow symbol directions	8
Sprite Colors	9 foreground and 9 outline including transparent - gray scale only in PAL mode
Non-Volatile Memory	EEPROM
System Processor	16/32 bit
Display Controller	Custom MicroImage Video Integrated Display Controller
Image Resolution	640x480 (NTSC), 768x576 (PAL)
Sprite Size	32x32, 64x64, 96x96, 128x128 pixels
Color Bars	8 bar full field. Gray Scale only in PAL mode.
Remote Interface	RS-232, Factory Optional
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	
Voltage	+12VDC (10-20VDC)
Consumption	approximately 230mA at 12VDC
Size	9.00" (W) x 7.63" (D) x 2.88" (H) 229 mm (W) x 194 mm (D) x 73 mm (H)
Weight	1 lb, 14 oz (851g)

Manufactured in USA by MicroImage Video Systems

## UNPACKING

The Video Pointer package includes the following items:

VP300 or VP400 Video Pointer Unit  
DTS120150 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 VP300/VP400 use an external +12VDC power supply. A universal power supply is included that accepts an input from 120 to 230VAC. Connect the power module to the Video Pointer and to an appropriate power source.

### Video

Connect the video source (i.e. video camera) to the appropriate INPUT connector on the rear of the Video Pointer unit. Use the BNC connector for composite or B&W (VP300), the 4 pin connector for S-Video (VP300) or the 9 pin D-sub connector for RGB (VP400).

Connect the OUTPUT signal from the Video Pointer unit to the video displays as required. Each output can only have a single 75 ohm termination. You must use the same signal type and connector for output that was used for input.

If the signal must drive multiple monitors or other devices, please see the documentation for those devices for multiple unit connections. A Video Distribution Amplifier may be required, especially for S-Video signals. MicroImage Video Systems offers a variety of units for these applications (VDA series).

### NTSC/ PAL Operation

Units later than serial number 30117 or 40102 have the capability to automatically detect either NTSC or PAL video source. There are no switches to set or other adjustments to make. The Video Pointer will measure the number of scan lines used and determine the signal type from that information. Note that the pointer and bar image will be displayed in B&W on PAL units.

## OPERATION

The Video Pointer has 9 switches and a Joystick controller on the front panel. All functions are controlled by these controls. Following is a description of each switch and the joystick.

### Power

The power switch is used to turn the Video Pointer unit on or off. When off, the unit draws minimal power. When on, the power light will illuminate (green) and the pointer will be ready to use.

### Bars

The internal color bar generator may be turned off or on with this switch. When the color bars are on, the red indicator next to the switch will be illuminated. Note that when color bars are on, you will not be able to see the video input signal (i.e. camera). Color bars will only operate properly when an input signal is connected to the Video Pointer, such as a video camera. When using a PAL video signal, the bars will be displayed in gray scale only.

### Display

The display switch allows you to turn the symbols on and off without affecting the background image. When the symbol display is turned on, the blue indicator will be illuminated.

### Shape

This switch steps through the different symbols (shapes).

### Size

This switch steps through each available size, four sizes except arrows which only have three.

### Rotate

This switch steps through the eight directions of arrows and has no effect with other symbols.

### Color

This switch will change the fill color of the symbol, cycling through the eight colors and transparent. Note, if the outline color is set to transparent, this switch will skip over the transparent selection. Fill and outline colors cannot both be transparent at the same