

Model SWA5141  
Model SWA5241  
Active Video Switch

**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
Product Overview .....	Page 3
Power .....	Page 3
Video Connections .....	Page 3
Serial Control Connector .....	Page 3
OPERATION .....	Page 4
Power Switch .....	Page 4
Switches A-D .....	Page 4
.....	Page 4
Remote Control .....	Page 4
REMOTE CONNECTIONS .....	Page 4
IN CASE OF DIFFICULTY .....	Page 5
SPECIFICATIONS .....	Page 6
Main Unit .....	Page 6
Standard Power Unit .....	Page 6
Option UP Power Unit .....	Page 6
WARRANTY .....	Page 8
RETURNS .....	Page 8

Version SWA5141 Rev 0 6-01-2009 JWS

## UNPACKING

The Active Video Switch package includes the following items:

SWA5141/SWA5241 Active Video Switch Unit  
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

### Product Overview

The MicroImage Active Video Switch model SWA5141 is designed for use with Composite Video and/or B&W video signals, while the SWA5241 is for S-Video signals. Each is capable of selecting between up to four video sources, either at the press of a button or by remote serial control. An LED beside each switch indicates the current active video source.

### Power

The Active Video Switch uses a 12VDC wall plug power supply or an optional 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 16VDC

### Video Connections

The SWA5141 uses standard BNC connectors for all video inputs and the video output. The SWA5241 utilizes standard 4-pin mini-DIN connectors for S-Video (YC) inputs and output.

### Serial Control Connector

An 8 pin mini-DIN serial connector labeled **REMOTE** allows the user to interface the Active Video Switch with a serial port on a computer or other control device.

Note that a special cable may be necessary in order to use remote serial control. The SWA5141/5241 can use an 8 pin mini-DIN serial connector with industry standard pin connections, but only requires Rx/D, Tx/D, and Ground.

The computer or device on the other end of the serial cable may require a different type of connector. Contact your dealer or MicroImage Video systems for the proper cable or pinout information.

## OPERATION

### Power Switch

The Power Switch and power indicator LED are located on the right side of the front panel.

### Switches A-D

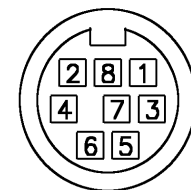
These are unused at this time. The SWA5141/SWA5241 use the front panel or the serial port to control the unit. Future versions may include other control features which will use this switch.

SELECT/SERIAL MODE (Factory Default) - Switches A through D select the corresponding video inputs as in mode 1, and the serial port may also be used.

**Remote Control** EIA232/RS232 Serial Commands should be transmitted in the form 8 data bits, no parity and one stop bit (8N1) at 2400 baud. The ASCII characters "A", "B", "C", and "D" are recognized by the unit and are used to select the corresponding video input. Sending a "Q" to the unit will return the currently selected input. ASCII A, B, C or D will be returned. Note that all commands are in upper case.

## REMOTE CONNECTIONS

The SWA5141/5241 Has numerous connections on the 8 pin mini-DIN connector. At the present time, the four select lines are reserved for future use and should be left unconnected.



SERIAL/EXT  
PINOUT

- 1 – SELECT 1
- 2 – SELECT 2
- 3 – Tx/D
- 4 – GROUND
- 5 – Rx/D
- 6 – POWER SW
- 7 – SELECT 3
- 8 – SELECT 4

## 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

Front panel switches	A, B, C, D input selects and Power
Sync system	RS170A, NTSC, EIA, PAL
Input levels	
NTSC	1.0 Vpp composite, 75 $\Omega$
S-Video	1.0 Vpp (Y), 0.286 Vpp burst (C), 75 $\Omega$
TTL level remote	Not used
RS232 remote	EIA232 standard, 2400 baud, 8N1
Output levels	
NTSC, S-Video	Same as respective input $\pm 3\%$ into 75 $\Omega$
Gain matching	Typically withing 2%
Bandwidth	Greater than 30 Mhz
Synchronization	None
Connectors	
NTSC (SWA5141)	BNC Female
S-Video (SWA5241)	4 pin mini-DIN Female (Std. S-Video connector)
Remote	8 pin mini-DIN Female
Power	2.1mm coaxial barrel connector
Temperature	Operating 0°~50° C (32°~122° F), Storage -40°~60° C (-40°~140° F)
Humidity	Operating: 10% ~ 90%, Storage 5% ~ 95% (non-condensing)
Power	9 - 16 VDC, +12VDC typical, neg ground, 3W max
Size	5.50" (140 mm) x 4.00" (102 mm) x 1.60" (40 mm)
Weight	11.5 oz. (326 g)

Manufactured in Bechtelsville, PA USA by MicroImage Video Systems

### Standard Power Unit - Wall Plug

Part Number	DPD120050-P5 or equivalent
Input	120VAC, 60Hz, 9W
Output	12VDC, 500mA non-regulated
Type	Linear, very low leakage
Size	3.2" (78mm) x 1.9" (48mm) x 1.3" (32mm)
Weight	8 oz. (227g)

### Option UP Power Unit - Table Top with Universal Input (Optional)

Part Number	DTS120150U/AC1-P5 or equivalent
Input	Universal, 100-240VAC, 47-63Hz, 0.4A, 3wire
Output	12VDC, 1.5A, regulated
Type	Switching, leakage about 160uA typical
Size	3.9" (99mm) x 1.9" (48mm) x 1.4" (36mm)
Weight	6.5 oz. (184g) without power cord Includes 120V US 3 wire power cord

## WARRANTY

MicroImage Video Systems warrants that each Active Video Switch 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 Active Video Switch 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