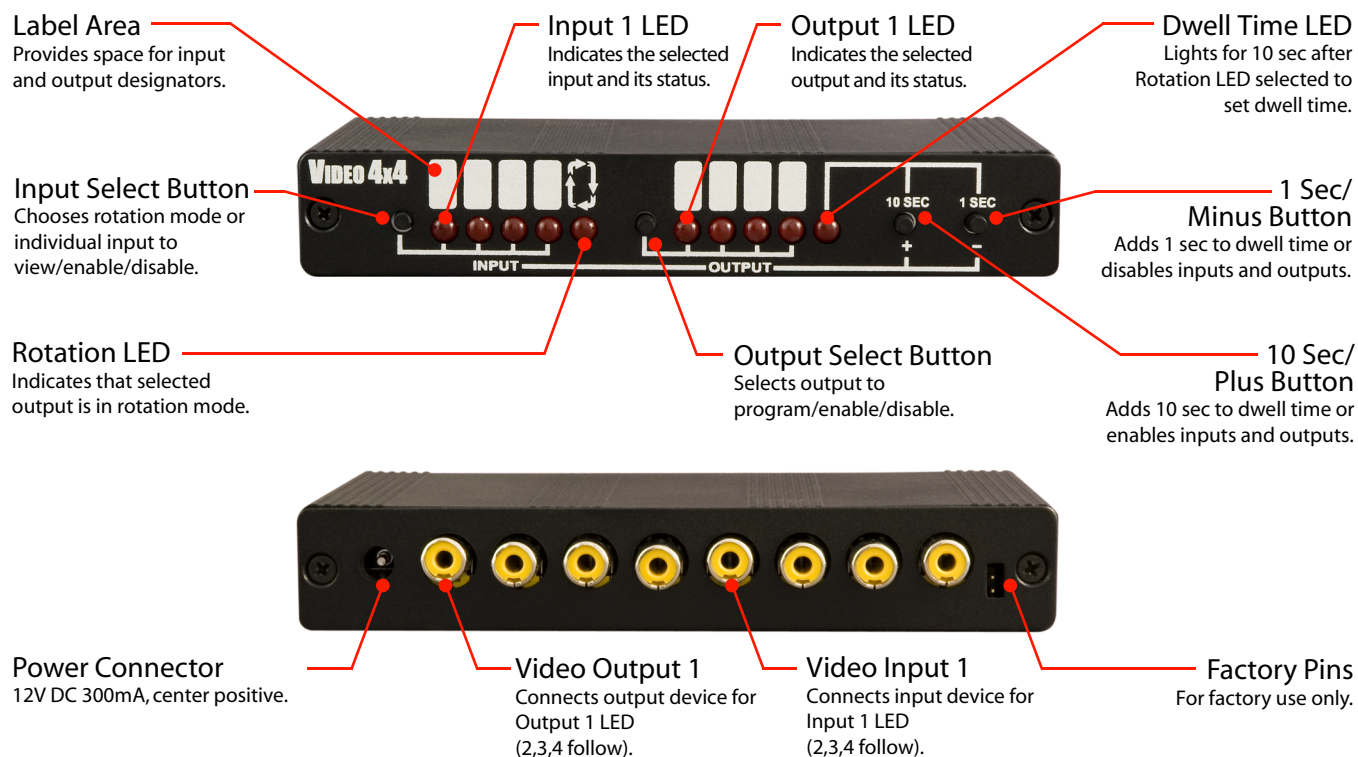# VS4X4

Video Matrix Switcher
4 inputs with 4 programmable outputs

The NetMedia VS4X4 Video Matrix Switcher sends 4 video inputs to 4 different outputs. Each output can show a single input or a rotating combination of inputs. The selected inputs and combinations may be the same or different for each output. To use as a 4-way video distribution amplifier, setup Input 1 as the only source for all 4 outputs. To setup one or more outputs as a sequencer, enable multiple inputs and select rotation mode. To setup one or more outputs as a manual switcher, deselect rotation mode and choose the desired input.

Product Includes:
1. Video Switcher Assembly (4 Video Input Connectors, 4 Input LED's, Input Select Button, Rotation LED, 4 Video Output Connectors, 4 Output LED's, Output Select Button, Dwell Time LED, 10 Sec/Plus Button, 1 Sec/Minus Button, Label Area, Power Connector, Factory Pins).
2. 12V DC 300mA Power Transformer (Center Conductor Positive).

Label Area
Provides space for input and output designators.

Input 1 LED
Indicates the selected input and its status.

Output 1 LED
Indicates the selected output and its status.

Dwell Time LED
Lights for 10 sec after Rotation LED selected to set dwell time.

Input Select Button
Chooses rotation mode or individual input to view/enable/disable.

1 Sec/Minus Button
Adds 1 sec to dwell time or disables inputs and outputs.

Rotation LED
Indicates that selected output is in rotation mode.

Output Select Button
Selects output to program/enable/disable.

10 Sec/Plus Button
Adds 10 sec to dwell time or enables inputs and outputs.

Power Connector
12V DC 300mA, center positive.

Video Output 1
Connects output device for Output 1 LED (2,3,4 follow).

Video Input 1
Connects input device for Input 1 LED (2,3,4 follow).

Factory Pins
For factory use only.

FEATURES

Selects 1-4 inputs for 1-4 separate outputs

Works as video switcher or splitter

Manual or automatic switching

Microprocessor controlled

Supports NTSC or PAL in color and B/W

Setup retained during power outage

Tough aluminum housing

Includes power supply

1 year limited warranty

SPECIFICATIONS

Dwell Time:	1 to 255 seconds
Video Bandwidth:	12MHz
Video Crosstalk:	-70 db
Video Output Connectors:	4 - Female RCA, 75 Ohm
Video Input Connectors:	4 - Female RCA, 75 Ohm
Power Requirement:	12V DC, 300mA
Power Connector:	5.5mm OD, 2.1mm ID, center positive
Housing Size:	5.5" long x 3.5" wide x 0.9" high
Weight:	8.5 oz.

(subject to change without notice)

VS4X4

Installation Procedures:

1. Connect video sources to Video Input Connectors (Input 4 is furthest from Power Connector).
2. Connect video destinations to Video Output Connectors (Output 1 is closest to Power Connector).
3. Connect the 12V DC 300mA power supply to an AC outlet.
4. Press Output Select Button until desired Output LED is lit. Press 10 Sec/Plus Button to enable output (LED on). Press 1 Sec/Minus Button to disable output (LED flashes).
5. Press Input Select Button until desired Input LED is lit. Press 10 Sec/Plus Button to enable input (LED on). Press 1 Sec/Minus Button to disable input (LED flashes). Repeat for each input.
6. To enable rotation mode, press Input Select Button until Rotation LED is lit. To set/change dwell time, press 10 Sec/Add or 1 Sec/Remove Buttons while Dwell Set LED is lit (time starts from 0 once programming begins). To disable rotation mode, press the Input Select Button until desired Input LED is lit.
7. Repeat steps 4 - 6 for each output. Settings are automatically saved every 10 seconds after a change (all lit LED's quickly flash once).
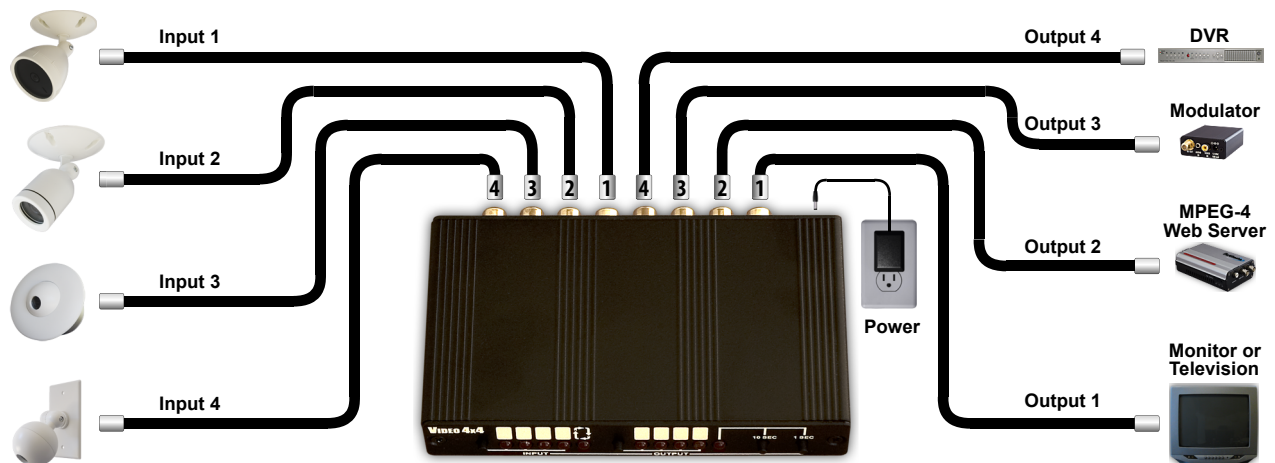

Figure 1 - Connecting the switcher to 4 video sources and 4 video destinations. Each destination can view any manually switchable input or different automatically sequencing combinations of inputs.
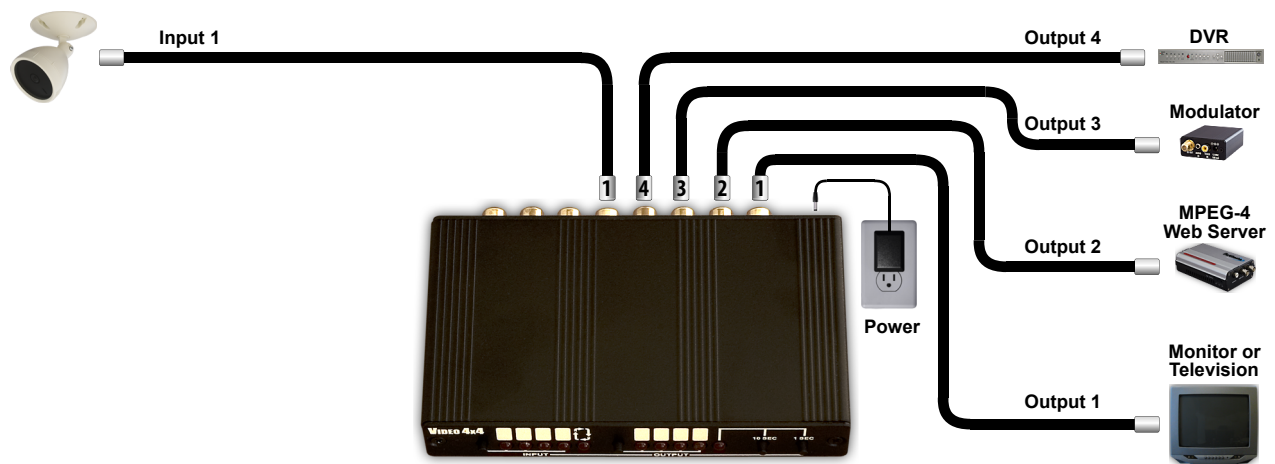

Figure 2 - Connecting the switcher to 1 video source and 4 video destinations. Switcher performs as simple video distribution amplifier.

NetMedia®

MAN-VS4X4   REV0705A

FCC Information (U.S.A.):

Important: This product, when installed as specified below, meets FCC requirements. Modifications not expressly approved by NetMedia may void your authority, granted by the FCC, to use the product. Failure to follow all installation instructions could void your FCC authorization to use the product in the USA.

Modulators:
FCC compliance requires operating the switcher with both end caps securely closed and fastened.

Compliance Information Statement
(Declaration of Conformity Procedure)

We,
NetMedia, Inc.
10940 N. Stallard Pl.
Tucson, AZ 85737
(520-544-4567)
declare under our sole responsibility that the following products,

Type of Equipment: Video Switcher

Model: VS4X4

to which this declaration relates are in conformity with the Title 47
of the US Code of Federal Regulations, Part 15 covering Class B digital devices.

Operation is subject to the following two conditions:
(1) this device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio or television communications. However, there is no guarantee that the interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
* Reorient or relocate the receiving antenna.
* Increase the separation between the equipment and receiver.
* Connect the equipment to a different outlet on a circuit other than the one the receiver is connected to.
* Consult the dealer or an experienced radio/TV technician for help.

One Year Limited Warranty

NetMedia, Inc. warrants this product to be free from defects in materials and workmanship under normal use and service for One Year from the date of purchase or NetMedia will repair or, at its option, replace the defective product. Please keep your purchase receipt. In the unlikely event that you need warranty service, call NetMedia at 1-520-544-4567 for a Return Material Authorization (RMA) number. Then, return the product, with the RMA number clearly marked on the package, by a traceable method with freight pre-paid and accompanied by a copy of the purchase receipt to:

Attn: Customer Service, NetMedia, Inc. 10940 N. Stallard Place, Tucson, AZ 85737-9527

No expressed or implied warranty is made for any defects in this product which result from accident, abuse, failure to operate the product in accordance with relevant instructions, neglect, immersion in or exposure to chemicals or liquid, extreme climate, excessive wear and tear and defect resulting from other extraneous causes such as unauthorized disassembly, repair and or modification. Any implied warranty arising from the sale of this product, including implied warranties of merchantability and fitness for a particular purpose, are limited to the warranty stated above. NetMedia shall not be responsible for any loss, damages or expenses, whether direct, consequential or incidental that arise from the use or inability to use this product. Some states do not allow limitation of incidental or consequential damages, so the above limitations and exclusions may not apply to you. This warranty gives you specific legal rights, and you may have other rights, which vary from state to state.

VS4X4

Frequently Asked Questions

Q- Why isn't there any video on some/all inputs under some/all outputs?

A- **First**, make sure all the connections are correct. The front LED positions are not in line with the rear connector positions (see Figure 3). **Second**, make sure all the Output LED's are enabled (on solid and not flashing); press the 10 Sec/Plus Button to enable each one when lit. **Third**, make sure all the inputs are enabled and rotating under each output. Cycle through every input to verify that it is enabled (on solid and not flashing); press the 10 Sec/Plus Button to enable each one when lit. Then press the Input Select Button until the Rotation LED is lit. Immediately press the 1 Sec/Minus Button twice. **Repeat** this third step for every output. Wait at least 10 seconds if you must unplug the unit. This technique turns all inputs and outputs on with a 2 second rotation. It is good for testing. If there is still a problem then make sure the video sources are powered up and working correctly. Once proper functioning is established you may proceed with your custom setup.

Q- Why is the rotation order scrambled?

A- Make sure all the connections are correct. The front LED positions are not in line with the rear connector positions. Output 1 is nearest the Power Connector. Input 4 is furthest from the Power Connector (see Figure 3).

Q- Why isn't it rotating?

A- Make sure you are programming the same output that you are viewing on your monitor; press the Output Select Button until the correct Output LED is lit. Make sure that the output is in rotation mode; press the Input Select Button until the Rotation LED is lit. If it is already in rotation mode then either there is only one input enabled or the dwell time is too long. Make sure more than one input is enabled (Input LED's solid) and/or reset the dwell time to something short like 2 or 3 seconds.

Q- Why is it still rotating after I deselected the Rotation LED?

A- Make sure you are programming the same output that you are viewing on your monitor; press the Output Select Button until the correct Output LED is lit. Then deselect rotation mode by pressing the Input Select Button until one of the Input LED's is lit (Rotation LED is off).

Q- Why isn't one of my cameras in the rotation?

A- The input is probably disabled under the output you are viewing. Press the Output Select Button until the desired Output LED is lit. Press the Input Select Button until the desired Input LED is lit. If it is flashing then press the 10 Sec/Plus Button to enable the input. If it is not flashing then make sure you have selected the proper output. If you see a blank or black screen instead of the camera then make sure the camera is properly functioning.

Q- Why doesn't the video change after I select a different output with the Output Select Button?

A- The Output Select Button only selects an output for programming; it does not select which output is connected to your monitor. All outputs are always active unless disabled (LED flashes). The only way to see an output's display is to connect to its Output Connector on the back.

Q- How do I decrement the dwell/rotation time?

A- There is no way to move the time down. You can only start over and select a shorter dwell time. The dwell time always restarts at 0 whenever you begin new programming. If it was set for 5 seconds and you want to reduce it to 4 then follow these steps. Press the Output Select Button until the desired Output LED is lit. Press the Input Select Button until the Rotation and Dwell Time LED's are lit. If they were already lit then press the Input Select Button until they are both lit again. Press the 1 Sec/Minus button 4 times. After the Dwell Time LED goes out, you must also follow the same general procedure to increment the time.

Q- Why didn't it remember the settings after it was unplugged?

A- It was unplugged before the settings were saved. Don't unplug the unit for several seconds after making a change. All the lit LED's will briefly flash to indicate that a save was automatically performed.

Front LED Numbering
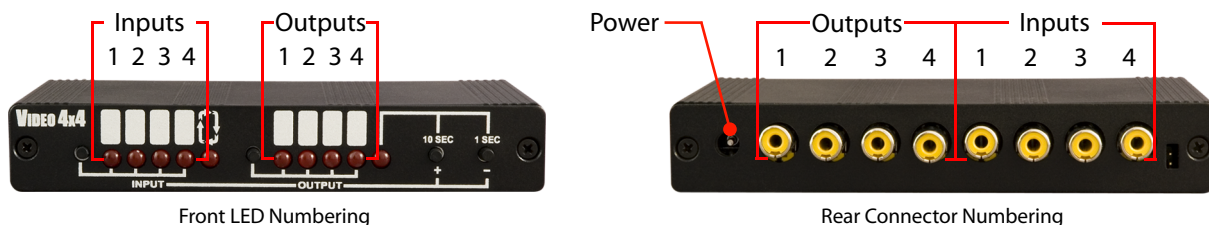
Rear Connector Numbering

Figure 3 - Identifying the correct Input and Output connectors; they are not in the same positions as the front LED's.