



VGA44

4X4 VGA MATRIX SWITCHER INSTALLATION AND OPERATION MANUAL



VGA44 manual.indd

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IMPORTANT SAFETY INFORMATION



- Save the carton and packing material even if the equipment has arrived in good condition. Should you ever need to ship the unit, use only the original factory packing.
- Read all documentation before operating your equipment. Retain all documentation for future reference.
- 3. Follow all instructions printed on unit chassis for proper operation.
- Do not spill water or other liquids into or on the unit, or operate the unit while standing in liquid.
- Make sure power outlets conform to the power requirements listed on the back of the unit.
- Do not use the unit if the electrical power cord is frayed or broken. The power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords and plugs, convenience receptacles, and the point where they exit from the appliance.
- Always operate the unit with the AC ground wire connected to the electrical system ground. Precautions should be taken so that the means of grounding of a piece of equipment is not defeated.
- Mains voltage must be correct and the same as that printed on the rear of the unit. Damage caused by connection to improper AC voltage is not covered by any warranty.
- Have gain controls on amplifiers turned down during power-up to prevent speaker damage if there are high signal levels at the inputs.
- Power down & disconnect units from mains voltage before making connections.
- 11. Never hold a power switch in the "ON" position if it won't stay there itself!
- 12. Do not use the unit near stoves, heat registers, radiators, or other heat producing devices.

- 13. Do not block fan intake or exhaust ports. Do not operate equipment on a surface or in an environment which may impede the normal flow of air around the unit, such as a bed, rug, weathersheet, carpet, or completely enclosed rack. If the unit is used in an extremely dusty or smoky environment, the unit should be periodically "blown free" of foreign matter.
- 14. Do not remove the cover. Removing the cover will expose you to potentially dangerous voltages. There are no user serviceable parts inside.
- 15. Do not drive the inputs with a signal level greater than that required to drive equipment to full output.
- 16. Do not connect the inputs / outputs of amplifiers or consoles to any other voltage source, such as a battery, mains source, or power supply, regardless of whether the amplifier or console is turned on or off.
- 17. Do not run the output of any amplifier channel back into another channel's input. Do not parallel- or series-connect an amplifier output with any other amplifier output. Australian Monitor Inc is not responsible for damage to loudspeakers for any reason.
- 18. Do not ground any red ("hot") terminal. Never connect a "hot" (red) output to ground or to another "hot" (red) output!
- 19. Non-use periods. The power cord of equipment should be unplugged from the outlet when left unused for a long period of time.
- Service Information Equipment should be serviced by qualified service personnel when:
- The power supply cord or the plug has been damaged.
- Objects have fallen, or liquid has been spilled into the equipment
- C. The equipment has been exposed to rain
- D. The equipment does not appear to operate normally, or exhibits a marked change in performance
- E. The equipment has been dropped, or the enclosure damaged.

THIS SAFETY INFORMATION IS OF A GENERAL NATURE AND MAY BE SUPERSEDED BY INSTRUCTIONS CONTAINED WITHIN THIS MANUAL







INTRODUCTION AND CONTENTS

The AMAV VGA44 is an 4x4 VGA Matrix Switcher, supporting resolutions of up to 2048x2048. Designed for the demanding commercial audio-visual market, the VGA44 provides comprehensive video switching in an elegant, rack-mount package. The VGA44 provides four VGA video input sources and four VGA video destination outputs each featuring a 15 pin high density D connector. Any input source is routable to any combination of outputs; controllable by either front panel control, IR remote control or RS232 serial control. The VGA44 offers the flexibility and features demanded by any quality AV application.

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This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the products enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operational and maintenance (servicing) instructions in the literature accompanying the appliance.

Caution:

To prevent electric shock do not use this (polarised) plug with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure. To prevent electric shock, match wide blade of plug to wide slot, fully insert.

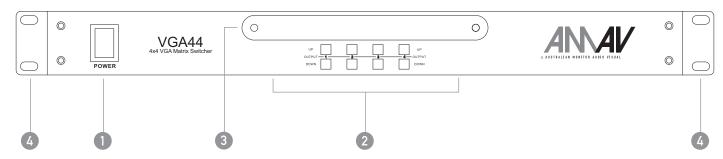
WARNING!

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.



FRONT & REAR PANEL

FRONT PANEL



1 POWER ON SWITCH

This power switch turns the unit on and off. The inbuilt LED will illuminate red to indicate that the switcher is ON and is receiving power

2 SOURCE SELECT BUTTONS

A separate UP and DOWN source select button is provided for each destination output. A 7 segment LED display will indicate the input source number assigned to a destination output. Any input source can be assigned to any number of destination outputs

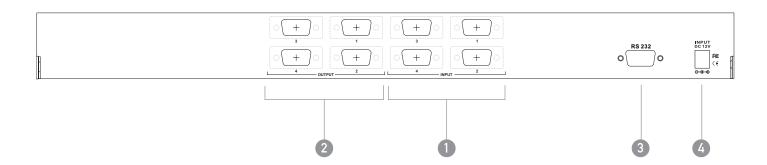
3 IR SENSOR

The IR sensor receives IR commands from the supplied remote control. To use the supplied remote control, point the remote control at the IR sensor

4 RACK EARS

The VGA44 features rack ears for mounting within a 19" Rack

REAR PANEL



SOURCE INPUT CONNECTORS

density D connector

Four source inputs are provided, each featuring:

• One VGA video input on a 15 pin high

2 DESTINATION OUTPUT CONNECTOR

Four destination outputs are provided, each featuring:

• One VGA video output on a 15 pin high density D connector

The selected input source is routed to the respective destination output.

3 RS232

Serial RS232 control port to allow for interfacing to a PC, Crestron or similar third party control system

4 DC POWER INLET

The VGA44 VGA matrix switcher is fitted with a DC power plug-pack input connector. Please ensure that the plug-pack used is of an approved type and is of sufficient current carrying capacity with the correct voltage and connector polarity

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ADVANCED FEATURES

RS232

The AMAV switcher can be controlled via the RS232 serial control port to allow for interfacing to a PC, Crestron or similar third party control system.

The serial communication parameters are 9600 baud, 8 bit, No Parity and 1 stop bit – this is often referred to as 9600 8N1. When the unit recognises a complete command it will perform the requested action – there is no delimiter character required.

The unit does not send out a message when a value is changed from the front panel or by IR control. If the unit needs to be controlled from the front panel in addition to the RS232 control, you would need to regularly poll the units' status to ensure the control system accurately reflected the current settings.

COMMANDS

To Switch Inputs to Outputs

SBIØXOØY Where X is Output Number (1-4) and Y is Input

Number (1-4)

Unit will respond with

SBUDØXOY Where X is Output Number (1-4) and Y is Input

Number (1-4)

Example : Send Input 1 to Output 4 SBIØ10Ø4 - Send SBUDØ104 - Rcvd

STANDBY MODE



Note: Turning the unit System Power Off over RS232 will blank the displays leaving only the Power Switch LED on. Hard resetting the unit when in System Power Off mode will return the unit to normal operation and unlock the front panel.

Even while the unit is turned off by RS232 it will continue to accept and act upon switching commands. This allows you to set up a 'scene' before soft powering on the unit and enabling the video outputs. The unit will still return status and change messages in response to commands sent while in System Power Off mode.

SBSYSMON - Put system into Standby (Soft Power Off)
SBSYSMOF - Bring unit out of Standby (Soft Power On)

Unit will respond with

SBALOFAK - Unit is in Standby

SBALONAK - Unit is no longer in Standby

Example: Put Unit in Standby (Soft Power)

SBSYSMOF - Send SBALOFAK - Rcvd

FRONT PANEL LOCK



Note: Hard resetting the unit will unlock the Front Panel controls.

SBSYSMLK - When front panel is locked, changes can only be

made by RS232

SBSYSMUK - Front Panel Unlock

Unit will respond with

SBSYSLOK - Front Panel has been Locked
SBSYSULK - Front Panel has been Unlocked

Example : Lock Front Panel Buttons SBSYSMLK - Send SBSYSLOK - Rcvd

UNIT RESET

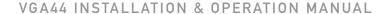
SBSYSMLK - Reset every output to Input 1

Unit will respond with

SBRSTACK - Unit has reset each Output to Input 1

Example : Reset all outputs to Input 1

SBALLRST - Send SBRSTACK - Rcvd





OPERATION

Before making any connections to the VGA44, observe the following:

- > Before making any connections to the VGA44, observe the following:
- > Ensure the mains voltage supply matches the label on the supplied plug-pack (+/- 10%)
- > Ensure that the power switch is OFF
- > Ensure that all system grounds (earth) are connected to a common point. Avoid powering equipment within a system from multiple power sources that may be separated by large distances

OPERATION

- > Connect all audio video sources and destination equipment
- > Power up all source and destination audio-visual sources
- > Power up the VGA44 VGA matrix switcher
- > For each destination output select the appropriate input source by using the front panel UP and DOWN select button, the supplied IR remote control, or through the RS232 serial communications port

REMOTE CONTROL

The AMAV VGA44 matrix switcher ships with a remote control. The remote control has the following functionality:

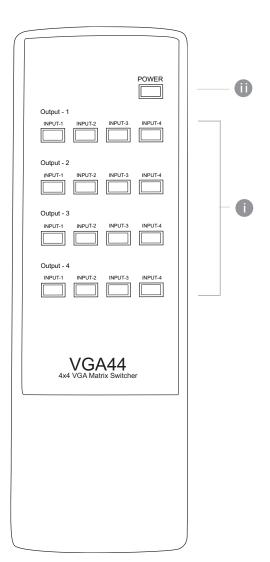
i) Source Select Buttons

Four separate input assignment buttons are provided for each of the four VGA outputs. The last selected input source will be routed to the destination output. Input sources may be assigned to multiple destination outputs

ii) Power Button

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Toggles the unit into, and out of, standby mode. In standby mode the matrix switcher will stop video routing. Standby mode is indicated by the illumination of the front panel power LED only.









SPECIFICATIONS

VIDEO INPUTS	4x VGA video (HD-15 pin connectors)
VIDEO OUTPUTS	4x VGA video (HD-15 pin connectors)
VIDEO BANDWIDTH	>450MHz
VIDEO RESOLUTION	2048x2048 Maximum
VIDEO CROSSTALK	>60dB
CONTROL	Front Panel, IR Remote, RS232
RS232 CONTROL	9600 Baud, No Parity, 8 data bits, 1 stop bit
POWER	+12V DC, centre +ve, outer -ve, 450mA Max
DIMENSION (H X W X D)	44mm x 440mm x 200mm
SHIPPING DIMENSIONS (H X W X D)	98mm x 510mm x 283mm
SHIPPING WEIGHT	2.2 kg





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