5x5 VGA/Component/S-Video/Composite Matrix with Audio

Safety and Notice

The **AV-GM08F3-S1** 5x5 VGA/Component/S-Video/Composite Matrix with Audio has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the **AV-GM08F3-S1** should be used with care. Please read and follow the safety instructions to protect yourself from possible injury and to minimize the risk of damage to the unit.

- Follow all instructions and warnings marked on this unit.
- Do not attempt to service this unit yourself, except where explained in this manual.
- Provide proper ventilation and air circulation and do not use near water.
- Keep objects that might damage the device and assure that the placement of this unit is on a stable surface.
- Use only the power adapter and power cords and connection cables designed for this unit.
- Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.

TABLE OF CONTENTS

INTRODUCTION

The **AV-GM08F3-S1** 5x5 VGA/Component/S-Video/Composite Matrix with Audio receives and amplifies up to 5 VGA inputs, perfectly switches the desired input to the VGA equipped monitor or receiver. This matrix enables the broadcast of multiple computers' audio and video outputs to multiple displays. Any one of the inputs can be broadcasted to any or all of the outputs without introducing noticeable video quality distortion. The matrix supports VGA video bandwidth up to 400MHz and also supports YPbPr component, S-Video, and Composite signals. The re-transmitted video quality is guaranteed and the longest transmission is up to 65 meters (210 feet). Therefore, AV-GM08F3-S1 offers the most convenient and cost effective means for swift switch of high quality PC graphics and HDTV videos with crystal clear audio in the market. With equipped audio matrix, AV-GM08F3-S1 is ready to be as YPbPr matrix with stereo audio and ideally for boardroom, showroom, and exhibition. Through IR remote, RS-232, Ethenet or front panel push button, the control of AV-GM08F3-S1 becomes versatile and easier.

FEATURES

- Broadcasts the audio and video outputs from five computers to five monitors and speakers
- Up to 5 Graphics/Video Inputs*
- Supports video bandwidth up to 400 MHz
- Any one of the inputs can be broadcasted to any or all of the outputs
- Built-in video signal amplifier for up to 65m (210-ft) long transmission for each video output
- 3.5mm audio outputs to drive either speakers or earphones
- Multiple control by IR remote, push button, Ethernet, and RS-232 control
- 1RU rack mountable

> * Appropriate adapters are necessary for video inputs, such as component, composite and S-Video.

PACKAGE CONTENTS

- 1x AV-GM08F3-S1
- 1x Rack-mounting ear set
- 1x Installation CD
- 1x DC 5V 4A in-line with C7 power cord
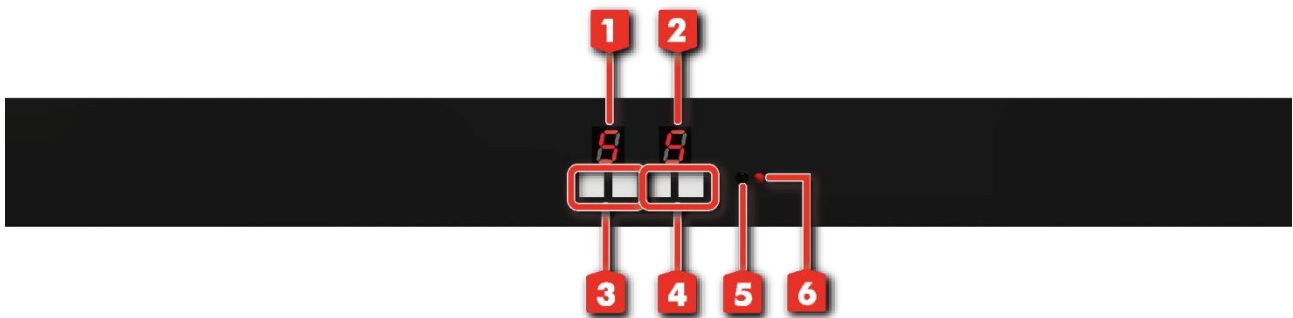- 1x IR remote control
- 1x User Manual

SPECIFICATIONS

Model Name		AV-GM08F3-S1
Technical		
Role of usage		5x5 true matrix switcher
Supported input/output		VGA / Component / S-video / Composite*
Video bandwidth		400MHz
Video support		1080p60, WUXGA [1920x1200@60] & UXGA [1600x1200@60] or even higher
Transmission		UXGA [1600x1200] – 65m [210ft]
Audio support		Analog stereo
Input		5x VGA [component/s-video/composite through adapters] 5x 3.5mm analog stereo audio 1x RS-232
Output		5x VGA [component/s-video/composite through adapters] 5x 3.5mm analog stereo audio
VGA connector		HD-15 [15-pin D-sub female]
RS-232 connector		DE-9 [9-pin D-sub female]
3.5mm connector		Earphone jack for analog stereo audio
RJ-45 connector		WE/SS 8P8C
Input selection		IR remote / push button / RS-232 control / Ethernet
IR remote control		Electro-optical characteristics: ⬚ = 25° / Carrier frequency: 36-40kHz
Mechanical		
Dimensions [L x W x H]	Model	1RU – 440 x 96 x 44mm [1'5" x 3.8" x 1.7"]
	Package	510 x 230 x 70mm [1'8" x 9.1" x 2.8"]
	Carton	510 x 410 x 252mm [1'8" x 1'4" x 10"]
Weight	Model	1341g [3 lbs]
	Package	2100g [4.6 lbs]
Fixedness		1RU rack-mount with ears
Power supply		5V 4A DC
Power consumption		13 Watt [max]
Operation temperature		0~40°C [32~104°F]
Storage temperature		-20~60°C [-4~140°F]
Relative humidity		20~90% RH [no condensation]

> * Component and composite input/output can be done by using the optional accessory VGA-to-Component adapter to connect to the VGA socket. However, for S-Video input/output, please find a VGA-to-S-video adapter available in the market to fulfill you need.
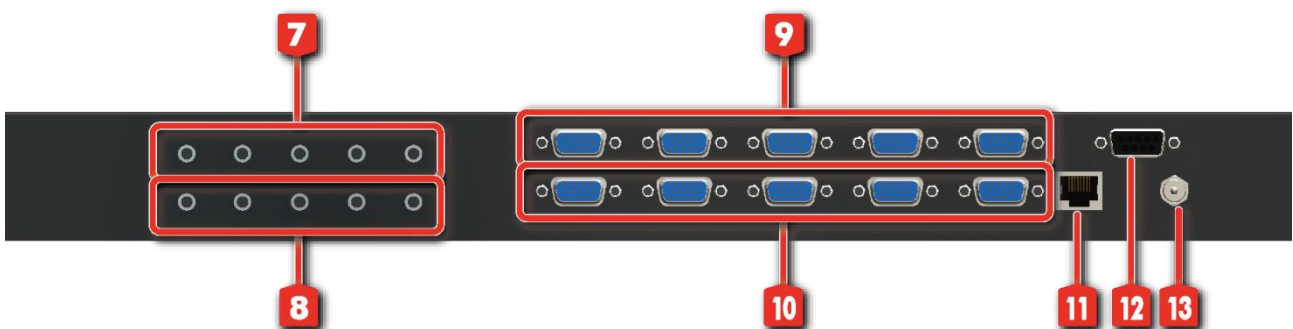
PANEL DESCRIPTIONS

Front Panel

1. Output Display LED
2. Input Display LED
3. Select output

4. Select input
5. Receive IR signal
6. Powe indication LED

Rear Panel

7. Analog audio input
8. Analog audio output
9. VGA input
10. VGA output

11. Ethernet control input
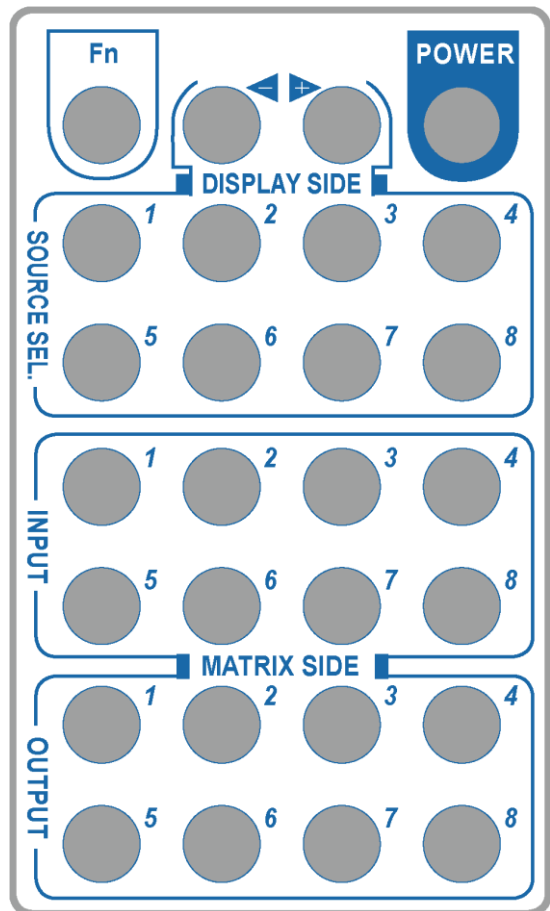12. Serial channel control
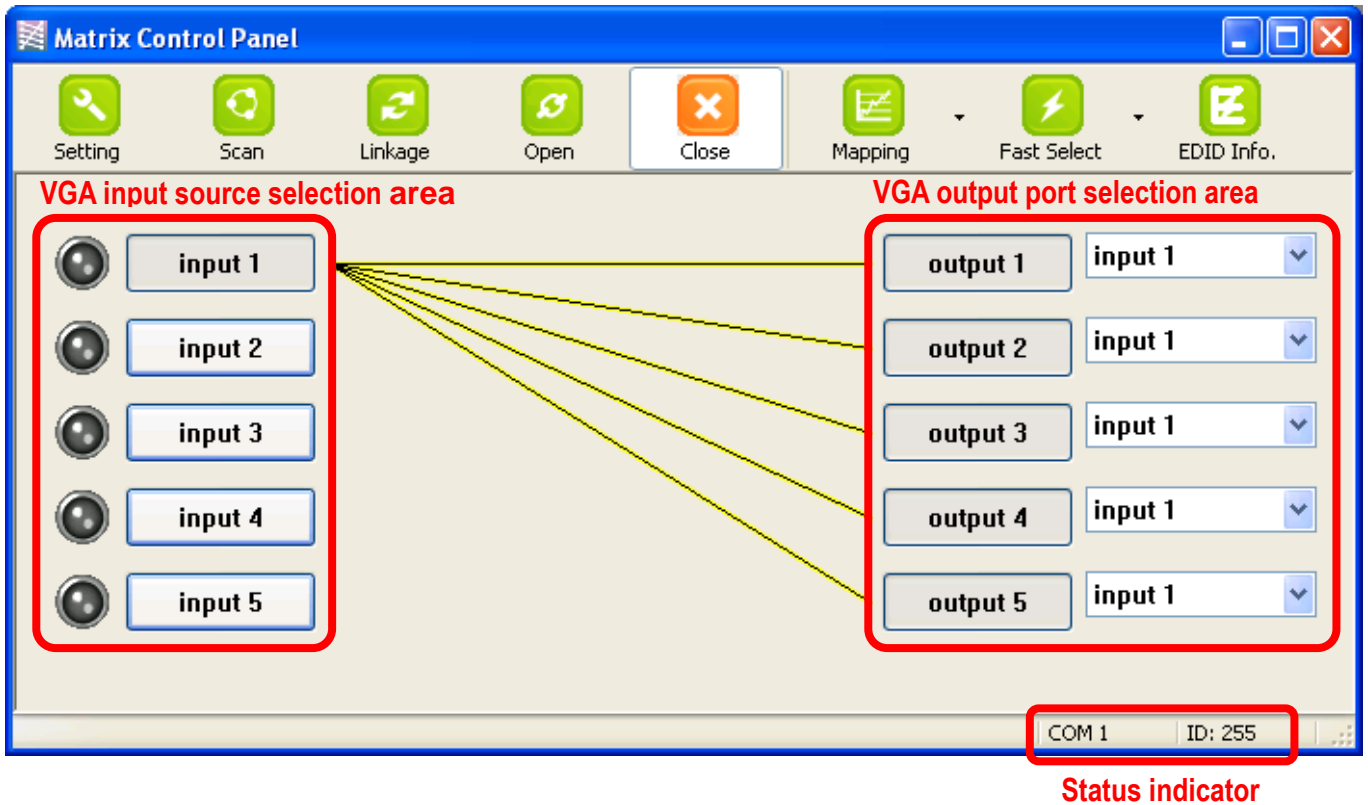13. +5V DC

CHANNEL CONTROL

IR Remote Control

Please push one of the INPUT buttons to choose which VGA input source you are going to setup. After that, you can have multiple outputs playing the same content from the selected **INPUT 1 – INPUT 5** by pushing the corresponding OUTPUT buttons. The setting will be effective in a couple of seconds.

INPUT & OUTPUT MAPPING

INPUT 1	VGA input port #1
INPUT 2	VGA input port #2
INPUT 3	VGA input port #3
INPUT 4	VGA input port #4
INPUT 5	VGA input port #5
OUTPUT 1	VGA output port #1
OUTPUT 2	VGA output port #2
OUTPUT 3	VGA output port #3
OUTPUT 4	VGA output port #4
OUTPUT 5	VGA output port #5

Software Control via the RS-232 or Ethernet port

VGA input source selection area

VGA output port selection area

Status indicator

Software Control Menu

1. Setting button:

Click **Get** button to read back device ID.

Click **Set** button to write device ID.

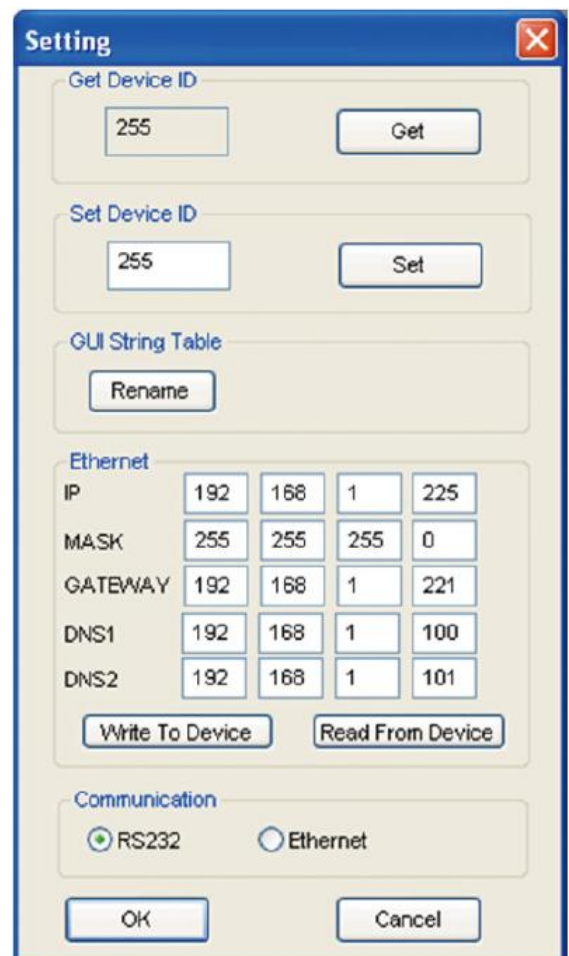Click **Rename** button to open the String Table.

For **Ethernet** 1 group, users have to define Ethernet properties through RS-232 for the matrix. All the parameters for Ethernet have to be saved into the matrix by clicking on **Write To Device** button.

In the **Communication** 2 group, users can choose the control interface between matrix and PC host.

Note

1 *Initial or any change to Ethernet settings, users MUST power cycle VGA matrix in order to get the network settings effective!*

2 *Please notice that Ethernet control has a higher priority than RS-232. If RS-232 and Ethernet controls come from 2 different hosts, commands may coincide and in this case, commands from Ethernet will be effective immediately no matter whether commands from RS-232 are accurately*
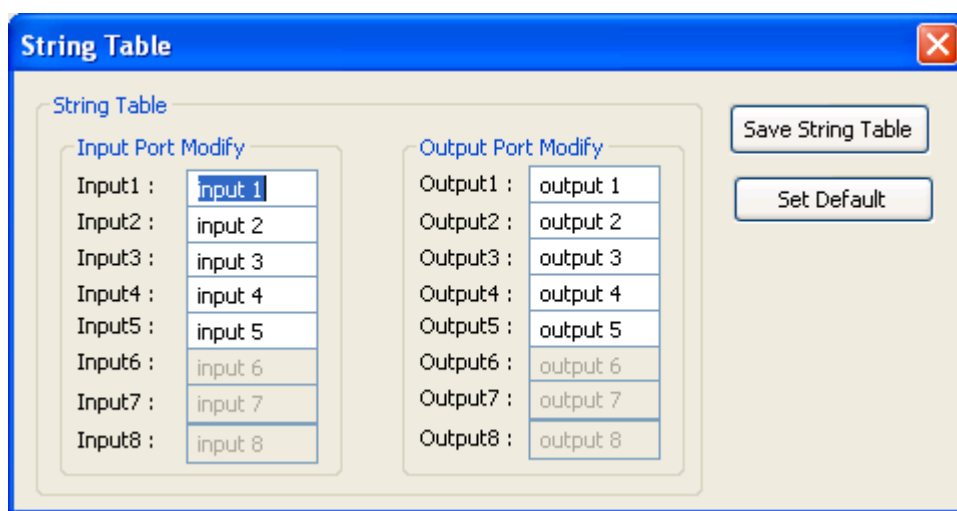
In the **GUI String Table** group, click on "Rename" button and assign the captions for each input and output port for easy recognition.

For example

Rename the Input1 to "Main PC", Input2 to "Sub PC," input3 to "PC-3," … etc., and rename output1 to "Conf. RM1," output2 to "Main monitor," output3 to "Lobby," output4 to "Main projector," … etc.
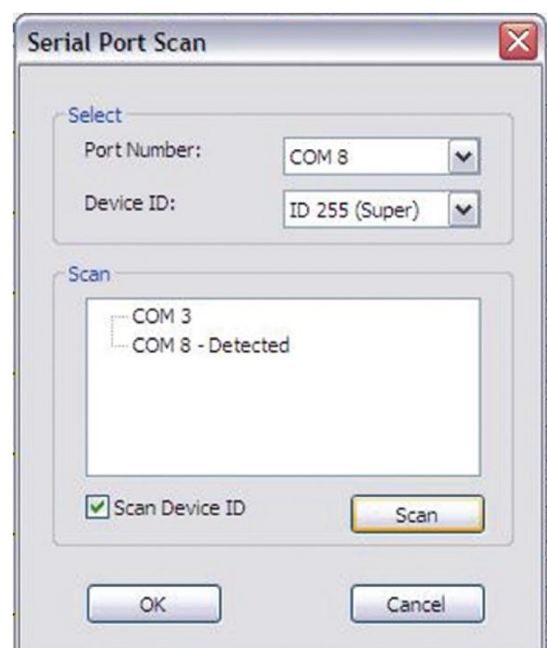

2. Scan button:

Serial Port Scan

Click **Scan** button, the machine will scan the all com port and show them.

Select the RS232 serial port connected to the machine. And set device ID 255 is for all device.

Only the same device id or 255 can get the command you sent.

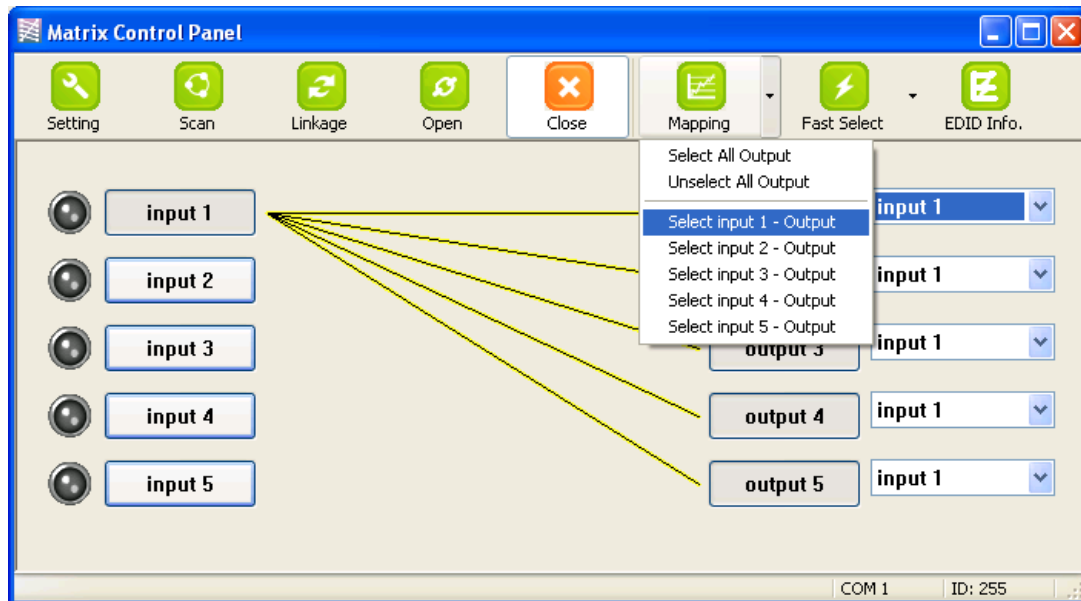Click **OK**. Get the new status from the machine you select.

3. Linkage button:

Click **Linkage** button to read back all status.

4. Open/Close button:

Click this button to close or open COM port.

5. Mapping button:

Select All Output
Select **set all output**, and then select the source on main menu. You can quickly set all output to the same source.

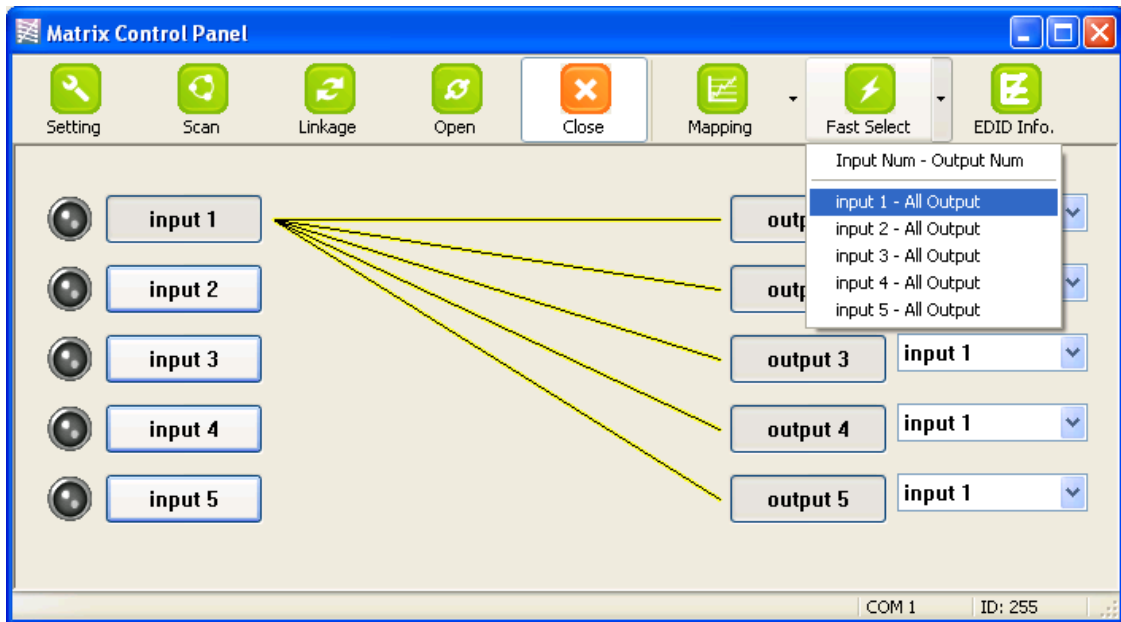### Unselect All Output
Release output selection.

Select Input1~5-Output
Select Input Source. Then select the output port icon.

For example
Select input source 1. Then select output port 1 and 2. The video and audio will be sent to port 1 and 2.

6. Fast Select button:

Click **Fast select** button. Quick setting.
    Input one > Output Port one
    Input two > Output Port two
    .....

Click Fast select pull down menu.
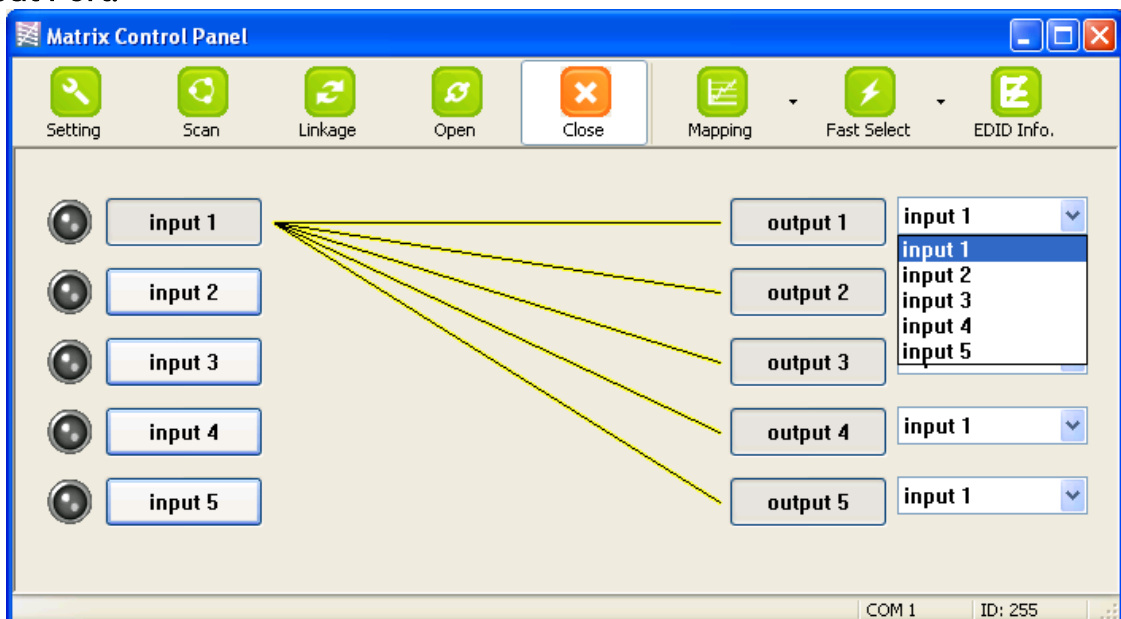Select Input Num-Output Num
    Input source #1 > Output port #1
    Input source #2 > Output port #2   .....

Select Input* - All Output
    Send the same source to all output.

7. **Output Port:**

Pull down menu and select which source to be sent to this output port.

One by one setting

On main menu screen

First select input source. Then select the output ports which you want to send the video and audio from this source. When you select the input source, the source will change to gray. When you select the output port one by one, the selected output port will change to gray.

The linking line will change to yellow.

Group setting

First select output ports one by one. Then select the input source. The selected output ports change the setting at the same time.
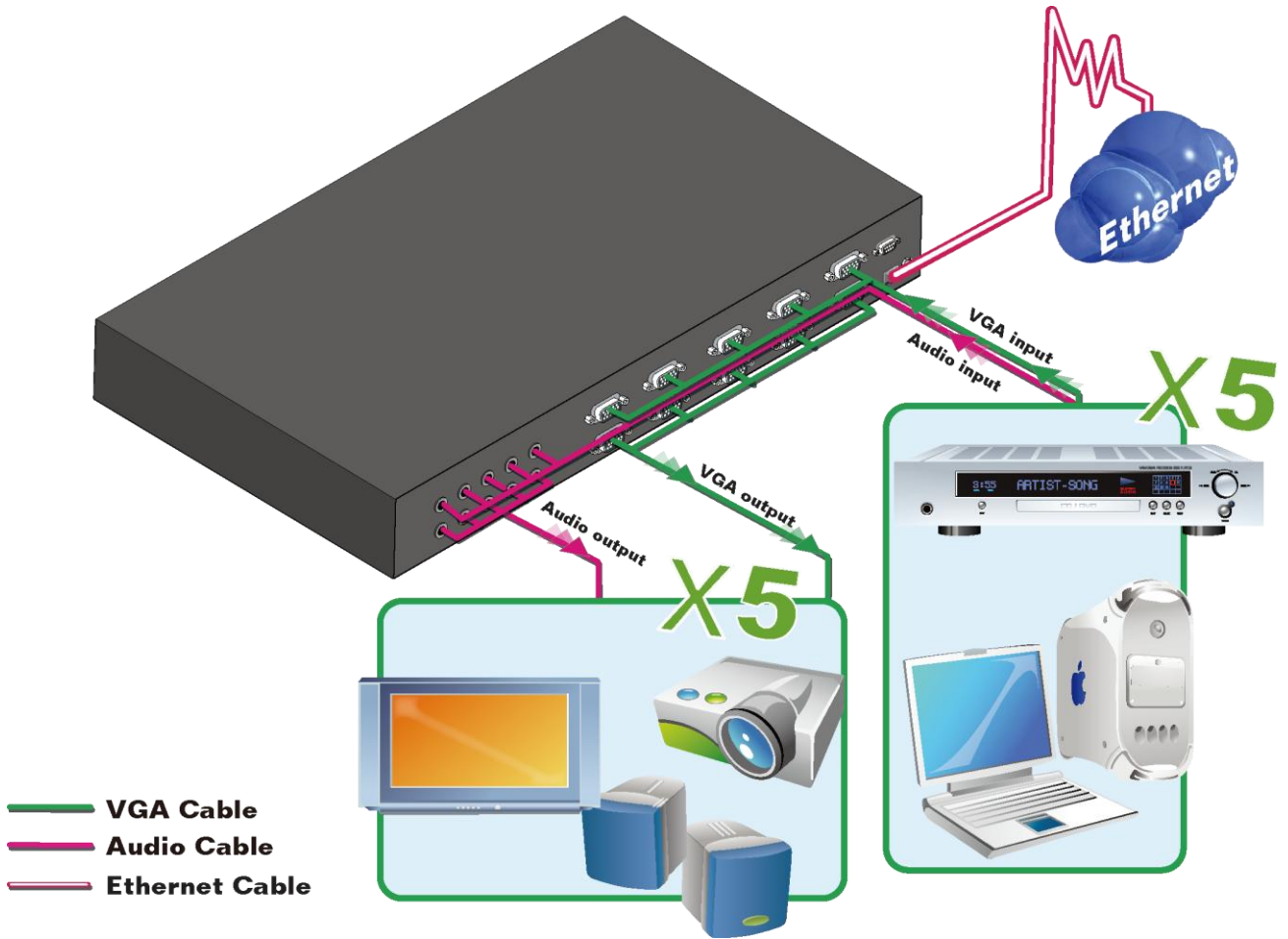
By using Terminal:

Baud rate: 9600
Data length: 8bit
Parity check: No
Stop bit: 1

Command Set:

COMMAND	ACTION	COMMAND	ACTION
ST	System Status	VR	Firmware Version
A1	Output A selects Input 1	D1	Output D selects Input 1
A2	Output A selects Input 2	D2	Output D selects Input 2
A3	Output A selects Input 3	D3	Output D selects Input 3
A4	Output A selects Input 4	D4	Output D selects Input 4
A5	Output A selects Input 5	D5	Output D selects Input 5
B1	Output B selects Input 1	E1	Output E selects Input 1
B2	Output B selects Input 2	E2	Output E selects Input 2
B3	Output B selects Input 3	E3	Output E selects Input 3
B4	Output B selects Input 4	E4	Output E selects Input 4
B5	Output B selects Input 5	E5	Output E selects Input 5
C1	Output C selects Input 1		
C2	Output C selects Input 2		
C3	Output C selects Input 3		
C4	Output C selects Input 4		
C5	Output C selects Input 5		

Ethernet

VGA input

Audio input

X5

VGA output

Audio output

X5

VGA Cable

Audio Cable

Ethernet Cable

HARDWARE INSTALLATION

1. Connect VGA enable equipments to the output of AV-GM08F3-S1.

2. Connect the VGA input sources to the inputs of AV-GM08F3-S1.

3. Plug power adapter cable into 5V DC power jack.

4. Use IR Remote, Ethernet, RS-232 serial commands, or front panel push button to switch between inputs.

WARRANTY

The SELLER warrants the **AV-GM08F3-S1** 5x5 VGA/Component/S-Video/Composite Matrix with Audio free from defects in the material and workmanship for 3 years from the date of purchase from the SELLER or an authorized dealer. Should this product fail to be in good working order within 3 years warranty period, The SELLER, at its option, repair or replace the unit, provided that the unit has not been subjected to accident, disaster, abuse or any unauthorized modifications including static discharge and power surge. This warranty is offered by the SELLER for its BUYER with direct transaction only. This warranty is void if the warranty seal on the metal housing is broken.

Unit that fails under conditions other than those covered will be repaired at the current price of parts and labor in effect at the time of repair. Such repairs are warranted for 90 days from the day of reshipment to the BUYER. If the unit is delivered by mail, customers agree to insure the unit or assume the risk of loss or damage in transit. Under no circumstances will a unit be accepted without a return authorization number.

The warranty is in lieu of all other warranties expressed or implied, including without limitations, any other implied warranty or fitness or merchantability for any particular purpose, all of which are expressly disclaimed.

Proof of sale may be required in order to claim warranty. Customers outside Taiwan are responsible for shipping charges to and from the SELLER. Cables and power adapters are limited to a 30 day warranty and must be free from any markings, scratches, and neatly coiled.

The content of this manual has been carefully checked and is believed to be accurate. However, The SELLER assumes no responsibility for any inaccuracies that may be contained in this manual. The SELLER will NOT be liable for direct, indirect, incidental, special, or consequential damages resulting from any defect or omission in this manual, even if advised of the possibility of such damages. Also, the technical information contained herein regarding the **AV-GM08F3-S1** features and specifications is subject to change without further notice.

April, 2018