



Dual-View Universal Video to DVI-I Scaler (with Audio support)



P/N: AV-GM01Q3-S1A



Safety and Notice

The **AV-GM01Q3-S1A Dual-View Universal Video to DVI-I Scaler(with Audio support)** has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the AV-GM01Q3-S1A 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.



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INTRODUCTION

The **AV-GM01Q3-S1A Dual-View Universal Video to DVI-I Scaler(with Audio support)** offers the highest compatibility among composite, component, DVI, VGA, HDMI and S-Video to VGA and DVI in the market. This unique device supports analog and digital conversion and scaling without loss of quality. With the embedded advanced de-interlacer, interlaced video inputs, such as component, composite and S-Video, can be further improved. The wide range video support in both input and output can be up to WUXGA or 1080p. AV-GM01Q3-S1A supports the insertion of stereo analog audio and S/PDIF inputs into HDMI output! With this advanced feature, users can combine asynchronous video and audio sources into the state-of-art HDMI compliant A/V signal for further long range lossless transmission and high standard A/V experience!

AV-GM01Q3-S1A is designed to ease the conversion among the available video formats to the common VGA, DVI and even HDMI with affordable cost. With AV-GM01Q3-S1A, the bothersome video format issues will not become a bottleneck in your applications and the handy audio support can make the input video and audio become HDMI ready. With versatile IR remote control, AV-GM01Q3-S1A offers a very easy way to convert, switch, adjust videos at your convenience. With PIP and PAP support, users can display two video inputs at the same time!

FEATURES

- DVI 1.0 compliant
- Scales up and down VESA compliant formats (VGA and DVI)
- Scales SD/ED/HD video inputs to VESA compliant formats
- PIP and PAP support
- Advanced video processing supports: noise reduction, color management, fleshtone control, dynamic contrast control, closed caption support for CVBS, 3-D de-interlacing, 3:2/2:2 pull down detection and recovery
- RS-232 Firmware upgradable to guarantee the functionality revised
- Equivalent to 4x1 video switch
- Video output supports up to WUXGA, UXGA or 1080p
- Dual DVI and VGA outputs
- Versatile IR control
- Software controllable & serial protocol available.
- Supports zoom, crop & TV wall application
- Portable size
- Stereo audio / SPDIF audio Supports

PACKAGE CONTENTS

- 1 × AV-GM01Q3-S1A
- 1 × DC 5V 4A in-line with C7 power cord
- 1 × VGA to component breakout cable
- 1 × Composite&S-video breakout cable
- 1 × DVI to VGA adapter
- 1 × IR Remote control
- 1 × Installation software CD
- 1 × User Manual

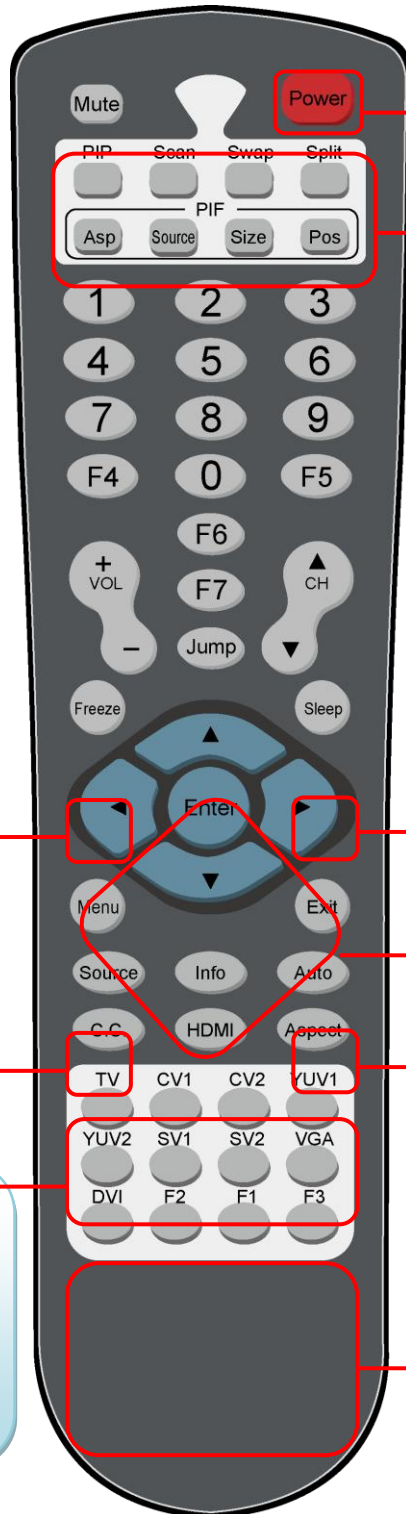
SPECIFICATIONS

Model Name	AV-GM01Q3-S1A	
Technical		
Role of usage	Video scaling & format converter	
HDMI & HDCP Compliance	HDMI & HDCP 1.1	
Audio support	stereo audio	
Digital video bandwidth	4.95 Gbps	
Analog video bandwidth	165 MHz	
Maximum resolution	1080p60 / 1920x1200@60	
Input TMDS signal	1.2 Volts [peak-to-peak]	
Input DDC signal	5 Volts [peak-to-peak, TTL]	
Input	1x HDMI + 1x CVBS + 1x S-Video + 1x VGA + 1x YPbPr + 1x DVI	
Output	1x DVI + 1x VGA	
PIP / PAP	YES	
Audio support	Stereo (24 bit ADC) / S / PDIF	
S/PDIF support	48 KHz	
ESD protection	[1] Human body model — 19kV [air-gap discharge] & 12kV [contact discharge] [2] Core chipset — 2kV	
PCB stack-up	6-layer board [impedance control — differential 100Ω; single 50Ω]	
IR remote control	Electro-optical characteristics: $\pi= 25^\circ$ / Carrier frequency: 38 kHz	
DVI connector	DVI-I [29-pin female]	
RS-232 connector	DE-9 [9-pin D-sub female]	
RCA connector	9 pin S-Video, Composite, and S / PDIF	
3.5mm connector	Earphone jack for analog stereo audio	
DIP switch	2-pin for reset	
Mechanical		
Housing	Metal enclosure	
Dimensions [L x W x H]	Model	125 x 165 x 28mm [5" x 6.5" x 1.1"]
	Package	330 x 200 x 95mm [1'1" x 7.9" x 3.7"]
	Carton	495 x 440 x 380mm [1'8" x 1'5" x 1'3"]
Weight	Model	559g [1.2 lbs]
	Package	1690g [3.7 lbs]
Fixedness	Wall-mounting case with screws	
Power supply	Interlocked 5V 4A DC	
Power consumption	15 Watts [max]	
Operation temperature	0~40°C [32~104°F]	
Storage temperature	-20~60°C [-4~140°F]	

Relative humidity

20~90% RH [no condensation]

IR REMOTE CONTROL



Power

PIP/PAP Menu

Freeze Video

Sleep ON

Menu Control Buttons

Menu On

Exit OSD

Source: Sequential source switch
Info: Display input type and time
Auto: Auto adjustment for VGA input
C.C.: No use in this model
HDMI: No use in this model
Aspect: Aspect ratio change

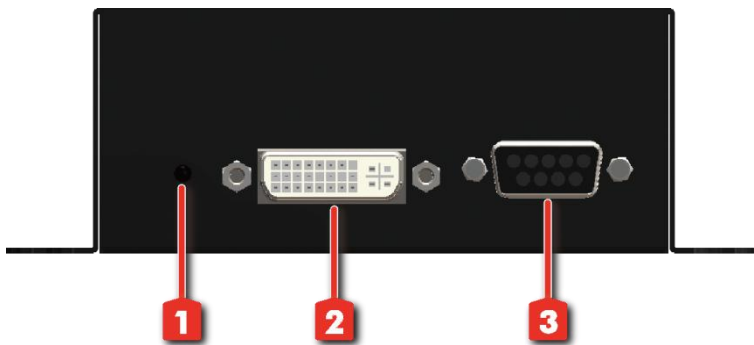
TV: No use in this model
CV1: Composite
CV2: No use in this model
YUV1: No use in this model
YUV2: No use in this model
SV1: S-Video
SV2: No use in this model
VGA: VGA
DV1: DVI / HDMI
F1: No use in this model
F2: Display input timing
F3: Auto color balance



The buttons not listed above are not in use for this model.

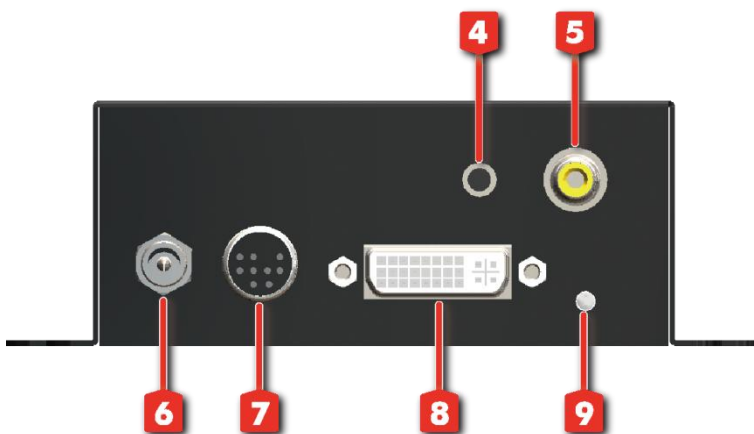
PANEL DESCRIPTIONS

Front Panel



1. **IR:** IR sensor
2. **DVI/HDMI OUT :** Dual output DVI & VGA video signals
3. **RS-232:** Firmware update and future software control

Rear Panel



4. **STEREO IN:** Analog audio from PC or DVD players
5. **S/PDIF IN:** 48KHz digital audio input from PC or DVD players
6. **+5V DC power jack**
7. **S-VIDEO IN:** Input Composite and S-Video by breakout cable
8. **DVI-I IN:** Input HDMI / DVI / Component
9. **POWER:** Indicate power up, idle, no signal

DIP Switch

Switch Position	OFF[↑]-OFF[↑]	ON[↓]-ON[↓]
Input 1	Normal	Reset
Input 2	Normal	Reset

HARDWARE INSTALLATION

1. Connect your video sources to the input connectors.
2. Connect your VGA, HDMI, or DVI enabled monitors into the device's DVI-I output port.
3. Power up the AV-GM01Q3-S1A.
4. Use IR to select the input, setup the output resolution, and adjust your video format

DEFAULT SETTING

1. Power up the AV-GM01Q3-S1A.
2. To reset AV-GM01Q3-S1A back to the factory default values, pull up-and-down the **DIP switch 1 & 2 from OFF to ON** to complete the process. You **NEED** to pull back the DIP switch back to **OFF** in order to get AV-GM01Q3-S1A work normally.

NOTICE

1. As the video formats evolves and expands, AV-GM01Q3-S1A is firmware upgradable for this fashion.
2. PIP and PAP only support digital and analog display or dual display for single input.
3. Analog stereo audio can merely support 2-channel audio. This version does **NOT** support 8-channel analog audio applications.
4. S/PDIF audio input can support 2 out of 8-channel audio input.
5. S/PDIF supports only 48kHz audio sample rate. Other than this rate, the input digital audio should be adjusted to 48kHz in order to get audio signal correctly sent.

IR CONTROL TREE

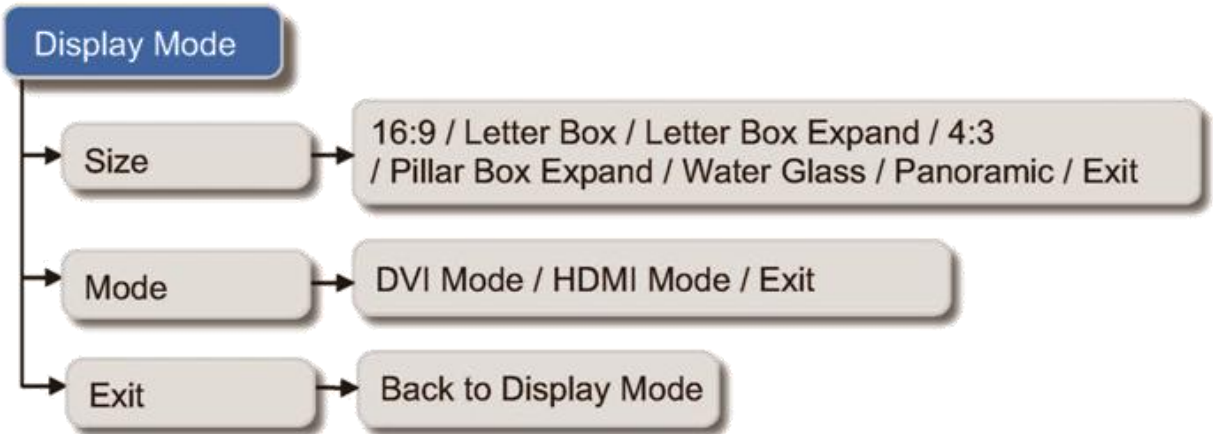
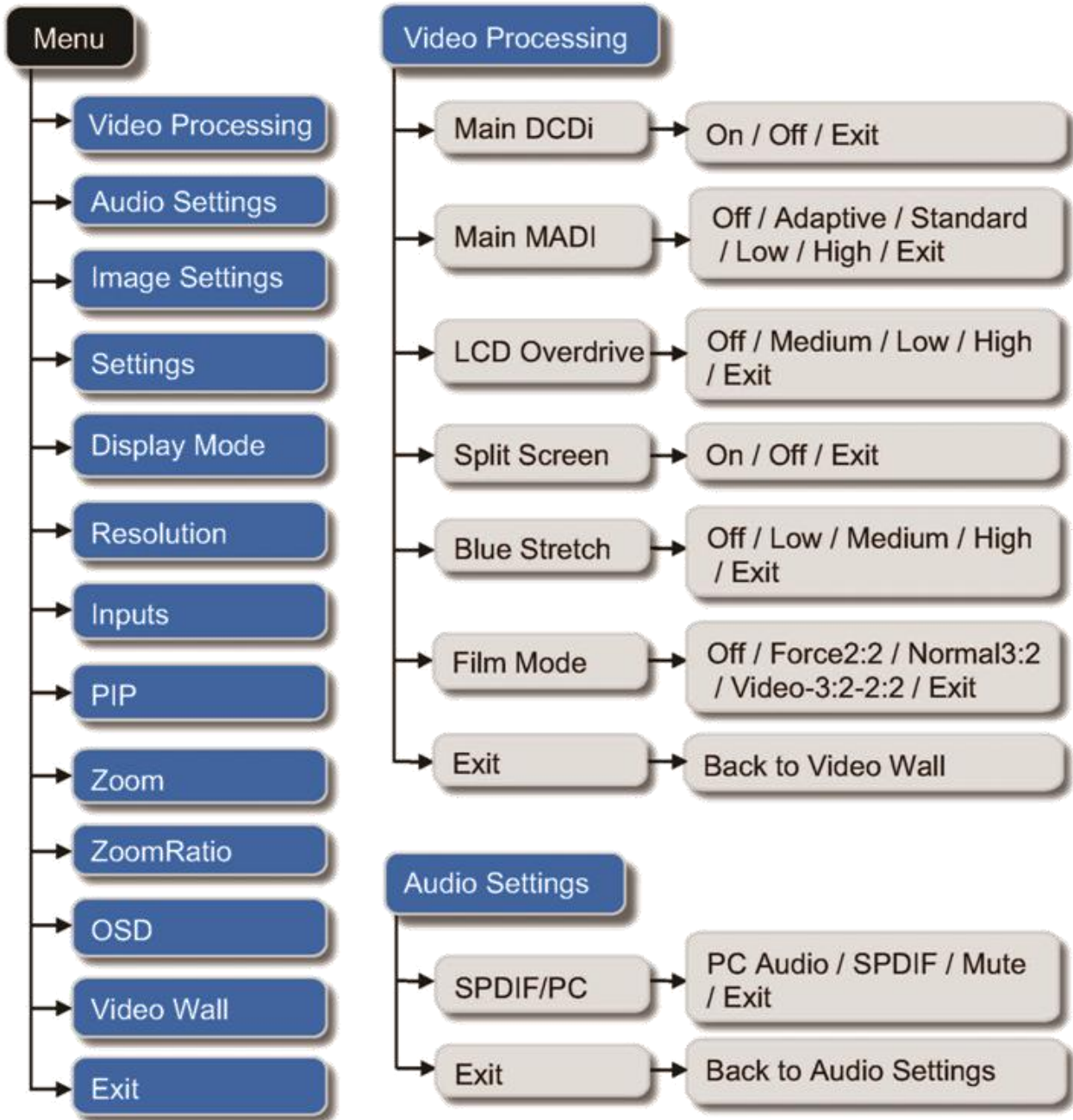


Image Settings

Brightness	Adjust Brightness 0~100
Contrast	Adjust Contrast 0~100
Saturation	Adjust Saturation 0~100
Hue	Adjust Hue 0~100
Red	Adjust Red 0~100
Green	Adjust Green 0~100
Blue	Adjust Blue 0~100
MPEG NR	Adjust MPEG NR 0~63
Temporal NR	Medium / High / Off / Exit
Fleshtone	Low / Moderate / High / Off / Exit
Exit	Back to Image Settings

Settings

IR	On / Off / Exit
Factory Reset	Execute Factory Reset
Information	Show the Input Information
Mode Overlap	480p / 640x480 / Exit
Freeze	Freeze Unfreeze Main Screen
OSD Language	English / 繁體中文 / 简体中文 / Exit
Exit	Back to Settings

Resolution

800x600@60 / 1024x768@60 / 1280x1024@60
/ 1280x720@60 / 1366x768@60 / 1440x900@60
/ 1400x1050@60 / 1920x1080@60
/ 1920x1200@60 / 1600x1200@60

Exit

Back to Resolution

Inputs

VGA / VIDEO1 / SVIDEO1
/ CMPT1 / HDMI(DVI) / Exit

PIP

PIP Mode

No PIP / Large PIP / Small PIP
/ Side-By-Side / Exit

PIP Position

UpLeft / UpRight / DownLeft
/ DownRight / Exit

Inputs

VGA / VIDEO1 / SVIDEO1
/ CMPT1 / HDMI(DVI) / Exit

Blend

PIP Blend Level 0~100

Exit

Back to PIP

Zoom

ZoomInV

Zoom in by Vertical

ZoomInH

Zoom in by Horizontal

ZoomOutV

Zoom out by Vertical

ZoomOutH

Zoom out by Horizontal

Exit

Back to Zoom

ZoomRatio → Zoom Ratio 50~133% only works on Main Full Screen

OSD

- Hpos → OSD Horizontal position
- Vpos → OSD Vertical position 0~100
- Blend → OSD Blend Level 0~15
- OSDTime → OSD Existing Time 7~60 (sec)
- Exit → Back to OSD (sec)

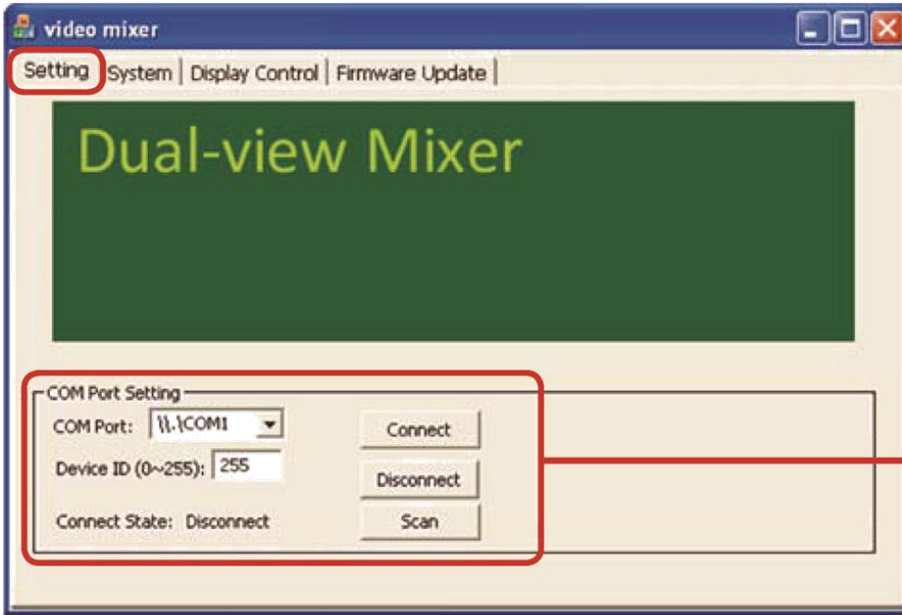
Video Wall

- Divide H by → Divide Horizontal by 1~10
- Divide V by → Divide Vertical by 1~10
- Position → Select Position from 1~H*V
- Masking in Left → Masking in Left -128~127
- Masking in Right → Masking in Right -128~127
- Masking in Upper → Masking in Upper 128~127
- Masking in Bottom → Masking in Bottom 128~127
- Exit → Back to Video Wall

Exit → Exit menu

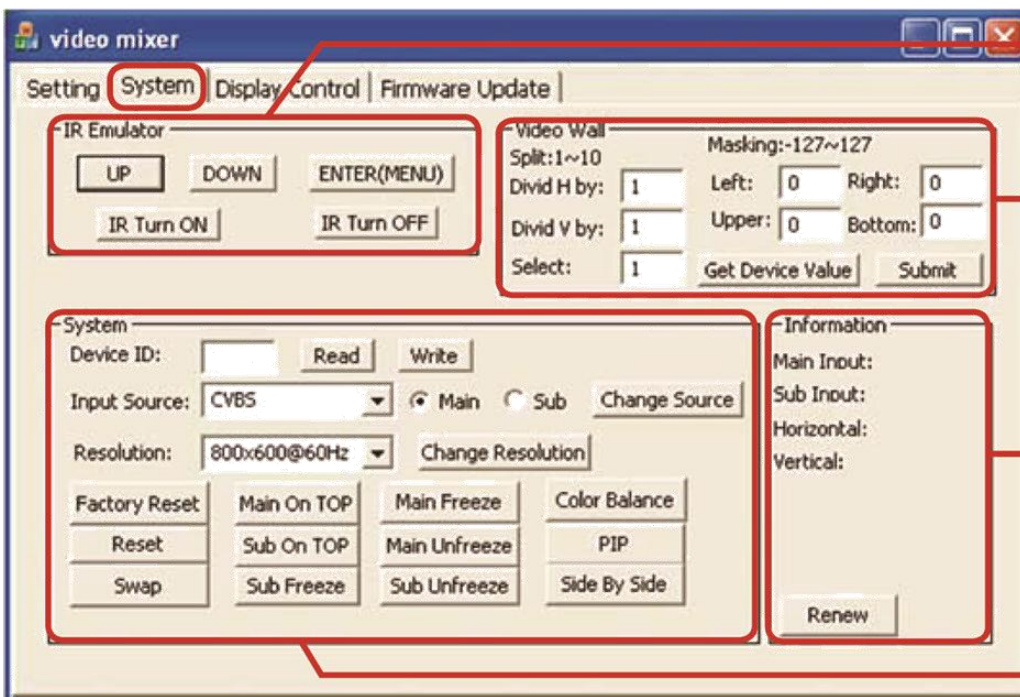
SOFTWARE PROCEDURE

1. Setting



Select the correct ComPort connected to the device. Push "Scan" to start the automatic scan on each.

2. System



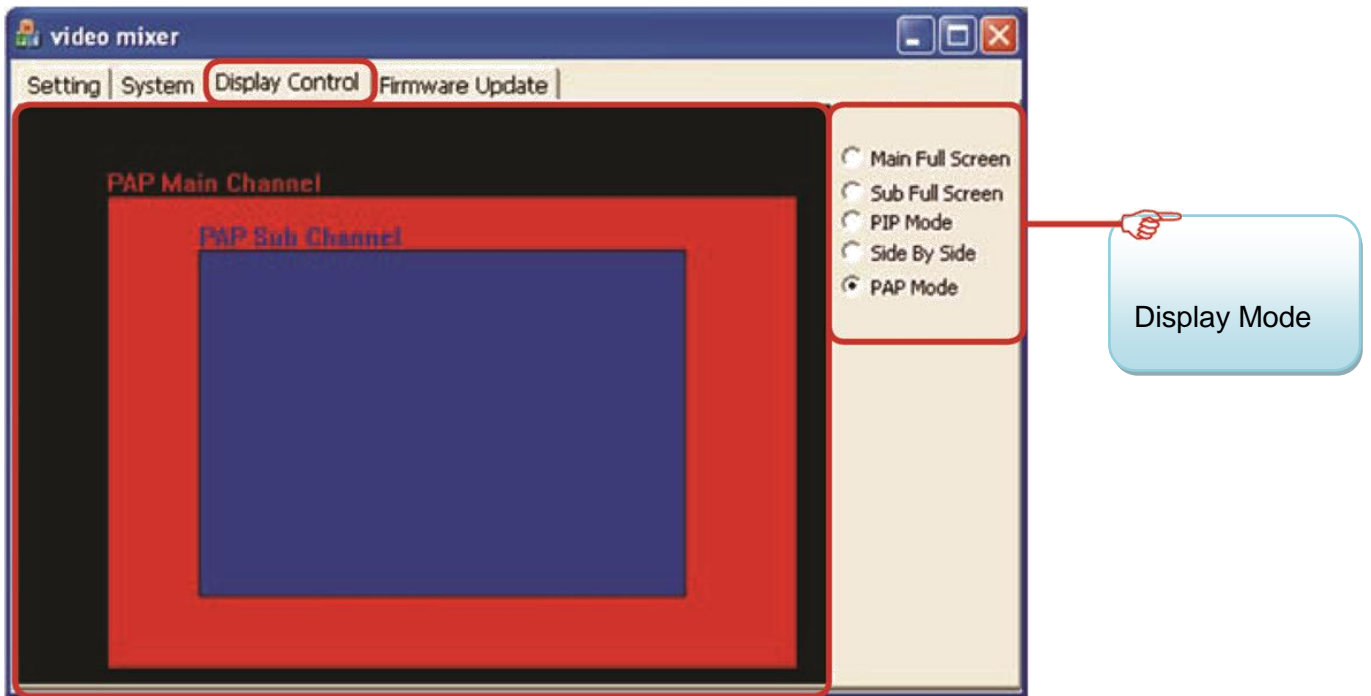
IR Simulation

Cutting Function

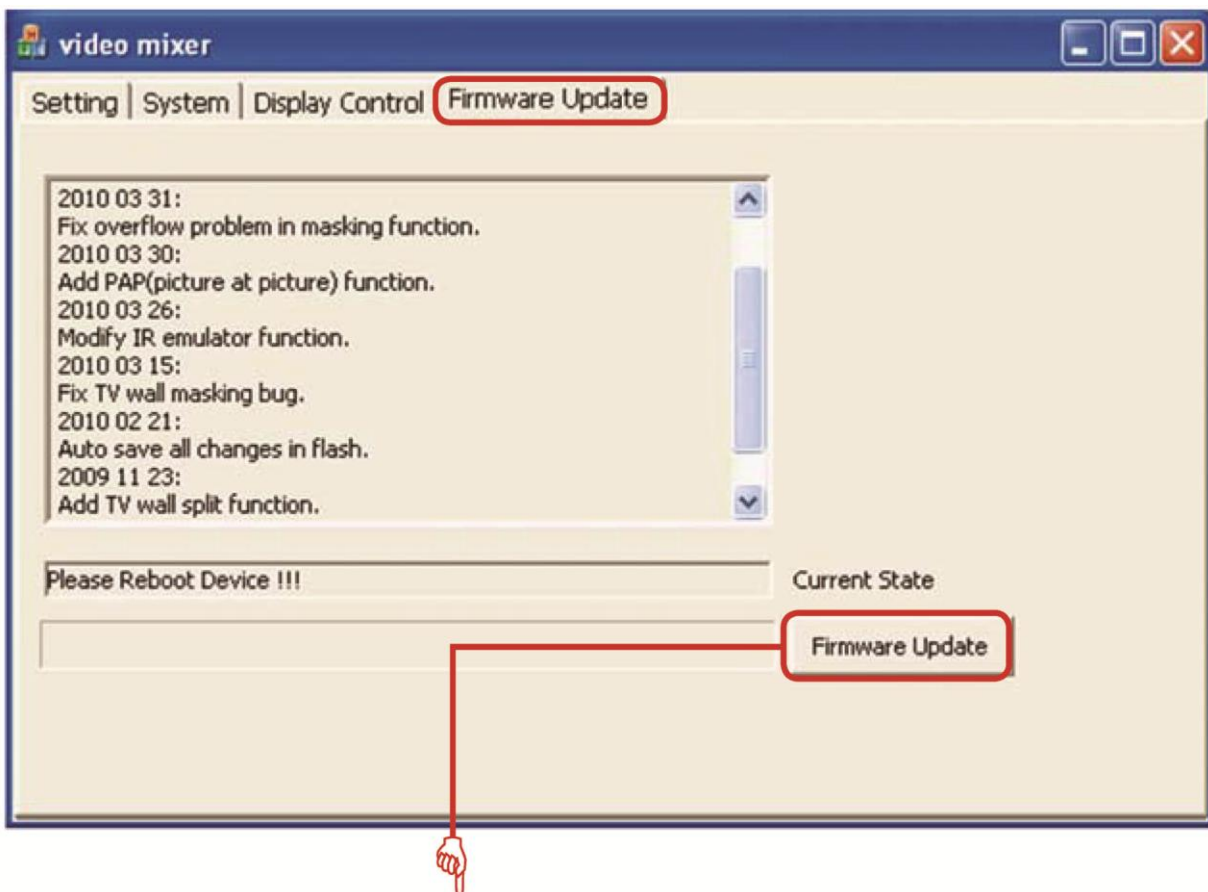
Update the status from the device to software.

Main Function

3. Display Control



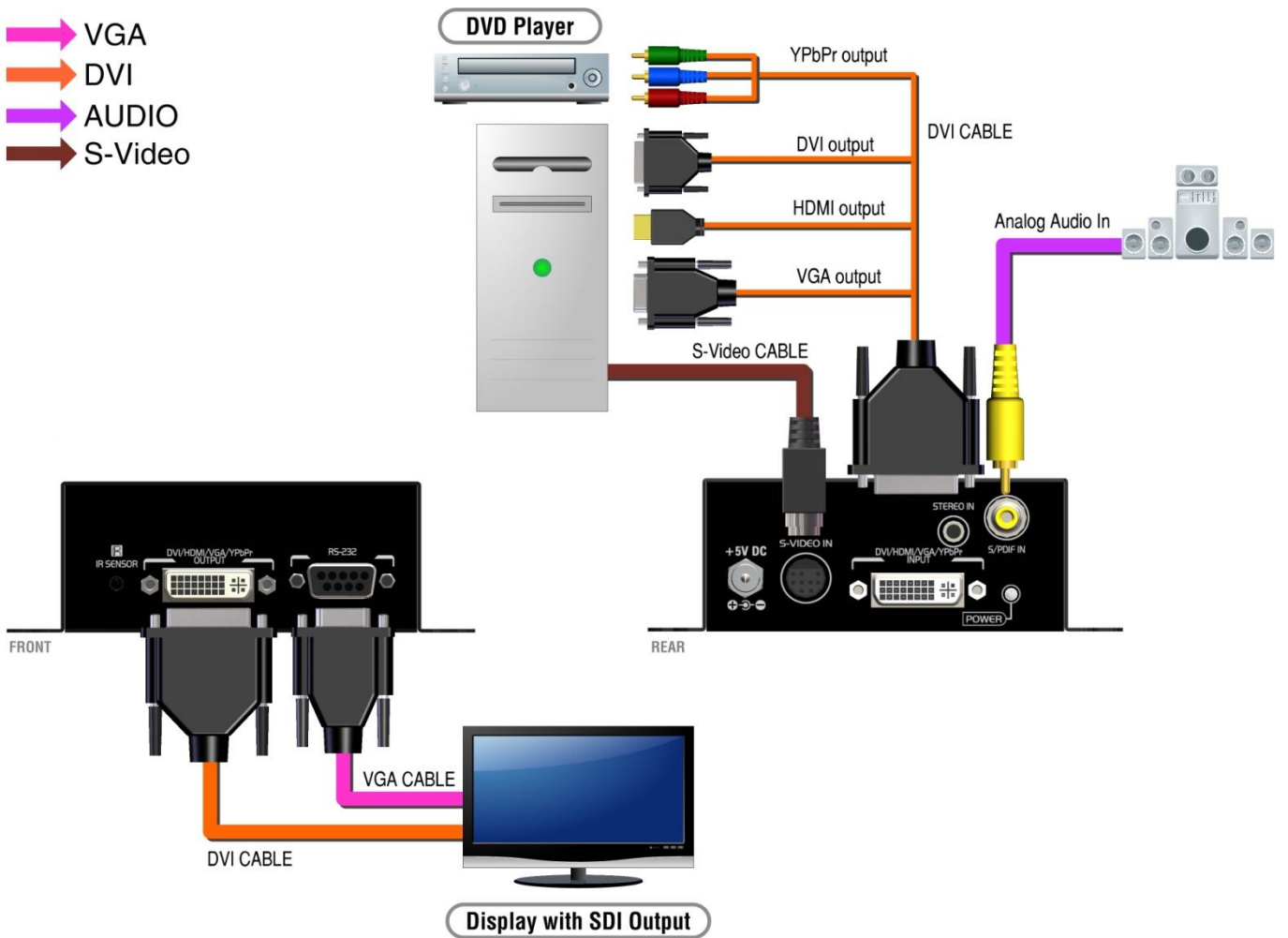
4. Firmware Update



1. Press this button first
2. Reboot the device to proceed firmware updating
3. Reboot the device again

CONNECTION DIAGRAM

- VGA
- DVI
- AUDIO
- S-Video



WARRANTY

The SELLER warrants the **AV-GM01Q3-S1A Dual-View Universal Video to DVI-I Scaler(with Audio support)** 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-GM01Q3-S1A** features and specifications is subject to change without further notice

Support

For more info or tech support
<http://www.siig.com/support>