CV-C03S

HDMI/DP/VGA to 3G/HD/SD-SDI Scaler Converter

User Manual

Safety and Notice

The **CV-C03S** **HDMI/DP/VGA to 3G/HD/SD-SDI Scaler Converter** has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the **CV-C03S** 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 **CV-C03S** **HDMI/DP/VGA to 3G/HD/SD-SDI Scaler Converter** provides a professional way to scale and convert multiple format (HDMI/DP/VGA) to 3G/HD/SD-SDI format. This device supports video conversion and scaling from analog & digital to 3G/HD/SD-SDI. The conversion between HDMI/DP and SDI is pure digital and guarantees no loss transformation for both audio and video. Besides, VGA based devices such as PC with analog stereo audio can readily connect to your SDI TV. The CV-C03S provides low jitter SDI output.

FEATURES

- Supports Input HDMI1.3 /DP1.1/ VGA
- IR remote control
- Button control
- Remote control via Micro-USB
- OSD control interface
- Support two SDI output
- Input maximum pixel rate : 165MHz
- Output bandwidth 2.970Gpbs
- Supports multiple VESA resolutions
- Deinterlacer supported
- Supports video enhancement features
- Over / under scanning adjustable
- Video H/V mirror supported
- Active video area adjustment supported
- Stable and independent output signal quality.
- USB firmware upgradable for expanding compatibility
- Wall-mount housing design for easy installation

PACKAGE CONTENTS

- 1x CV-C03S
- 1x 12V/2A power supply unit
- 1x IR Remote control
- 1x User Manual
- 1x Installation software CD

SPECIFICATIONS

Model Name		CV-C03S
Technical		
Role of usage		HDMI/DP/VGA to SDI Converter
SDI standards		SD-SDI, HD-SDI & 3G-SDI
Input Video Maximum Pixel Rate		165MHz
Output Video bandwidth		2.970Gpbs, 2.970/1.001Gbps
Output Video support		[3G] 1080p @50/59.94/60Hz (4:2:2) [HD] 720p @50/59.94/60Hz, 1080i @50/59.94/60Hz, 1080p @24/30Hz [SD] NTSC @59.94Hz, PAL @50Hz
Audio support		PCM 2 (48KHz Fs sample rate)
ESD protection		[1] Human body model — ±19kV [air-gap discharge] & ±12kV [contact discharge] [2] Core chipset — ±2kV
PCB stack-up		4-layer board [impedance control — differential 100Ω; single 50Ω]
Firmware update		Feasible via USB Port
CEC Channel		N/A
Input		1x HDMI + 1x VGA + 1x DP + 1x stereo(for VGA)
Output		2x BNC [SDI]
BNC connector		3G 75Ω inter-locked socket
HDMI connector		Type A [19-pin female]
USB connector		Micro B
Mechanical		**CV-C03S**
Housing		Metal enclosure
Dimensions [L x D x H]	Model	114 x 113 x 27mm[4.5" x 4.4" x 1"]
	Package	264 x 170 x 77mm[10.3" x 6.7" x 3"]
	Carton	430 x 358 x 291mm[1'4" x 1'2" x 11.5"]
Weight	Model	223g[7.9 oz]
	Package	683g[1.5 lbs]
Fixedness		Wall-mounting case with screws
Power supply		12V 2A DC
Power consumption		6 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]

Front Panel
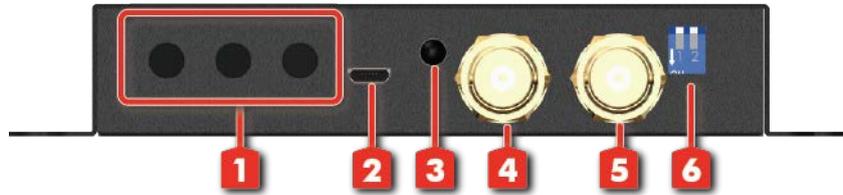
1. **PUSH BUTTON**
   [LEFT]: Down Button
   [MID]: Up Botton
   [RIGHT]: Menu/Enter Button

2. **Micro USB:** Micro-USB port for control port

3. **IR SENSOR:** IR sensor for receiving the IR commands from IR remote
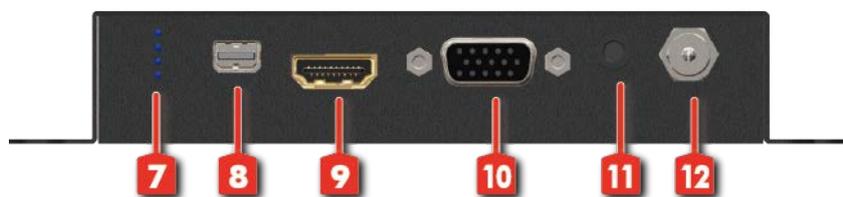
4. **SDI OUT 1:** 3G/HD/SD-SDI output

5. **SDI OUT 2:** 3G/HD/SD-SDI output

6. **DIP SWITCH:** For firmware update

   PIN 1: F/W update

   PIN 2: Reserved

Rear Panel

7. **LED INDICATOR:** Please refer to "Notes"

8. **DP INPUT:** Connect to a DP source

9. **HDMI INPUT:** Connect to a HDMI source

10. **VGA INPUT:** Connect to a VGA source

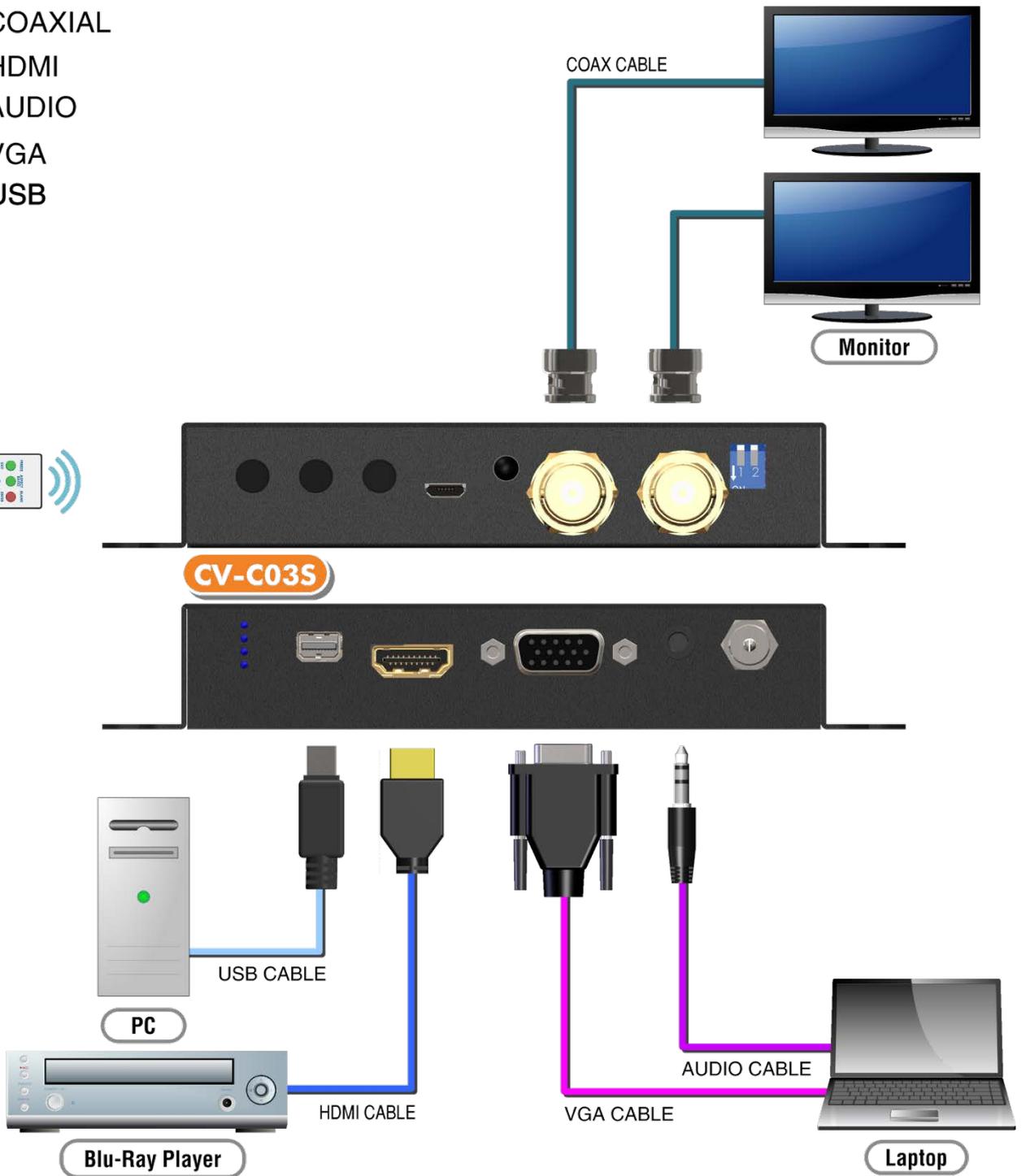11. **STEREO AUDIO INPUT (for VGA):** connect to analog stereo audio source

12. **+12V DC:** Interlocking power jack for 12V DC power supply unit

*Notes: LED INDICATOR

Power Indicator LED	Signal Indicator LED		
Power	DisplayPort	VGA	HDMI

CONNECTION DIAGRAM

COAXIAL
HDMI
AUDIO
VGA
USB

COAX CABLE

Monitor

CV-C03S

USB CABLE

PC

Blu-Ray Player

HDMI CABLE

AUDIO CABLE

VGA CABLE

Laptop

5

1.Output Setup	Output Format	
	Test Pattern	Disable, White, Cross, Hatch, Color, Gray, Windows, H-Ramp, W-HRamp, W-VRamp, Diagonal
	Audio Mute	Off, On
	Input Type	HDMI, VGA, DP
	Return	
2.Image	Contrast	0~255 of Contrast Level
	Brightness	0~255 of Brightness Level
	Saturation	0~255 of Saturation Level
	Hue	0~255 of Hue Level
	Gamma Adjust	Off, 1.1, 1.3, 0.7, 0.9
	Color Tone	Off, Green, Skin
	Edge Enhance	Off, Max, Mid, Min
	Sharpness	0~64 of Sharpness Level
	Return	
3.Adjustment	Under/Over Scan	-50%~50% of Scan Level
	Aspect Ratio	Stretch, 16:9, 4:3
	H-Mirror	Off, On
	V-Mirror	Off, On
	H-Shift	-100~100 of H-Shift Level
	V-Shift	-50~50 of V-Shift Level
	Return	
4. System	Input Format	
	F/W Version	
	Factory Reset	
	Return	
5. Exit		

Method A: Push-in Button

Method B: IR Remote Control

Button	Function
FREEZE	Freeze video
ASPECT RATIO	Aspect ratio change
BLANK	Blank video
EXIT	Exit OSD
ENTER	Enter key
UP	Up key
LEFT	Left key
RIGHT	Right key
DOWN	Down key
MENU	Menu on
INPUT INFO	Source resolution information
1080p60	Select 1080p60 output resolution
1080i60	Select 1080i60 output resolution
720p60	Select 720p60 output resolution
480p60	Not Support
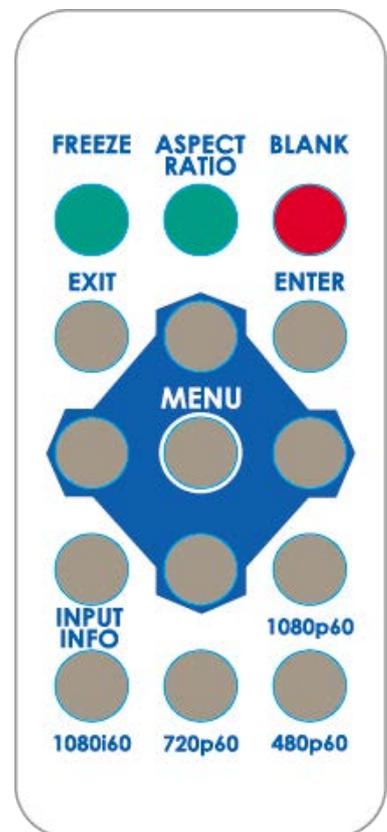
Method C: IR Remote Control through Micro-USB port
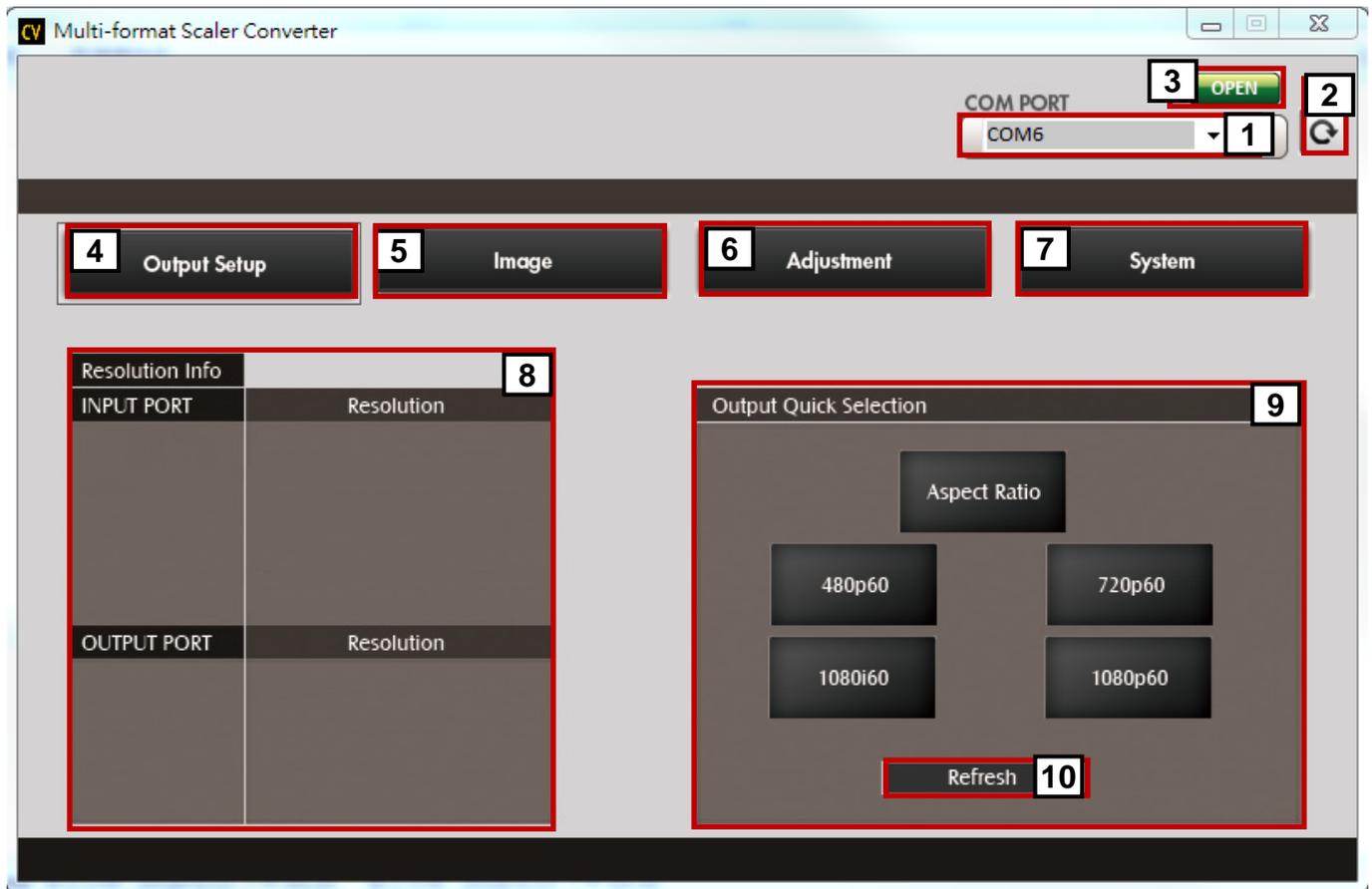
1	COM Port Selection
2	COM Port Detection Button
3	Connect/Disconnect Button
4	Output Setup Button
5	Image Button
6	Adjustment Button
7	System Button
8	Input / Output Resolution Info
9	Output Quick Selection Button
10	Refresh Input / Output Resolution Info Button

1. COM Port Selection

Please select the application COM PORT
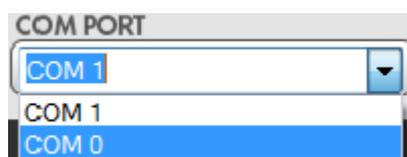
2. COM Port Detection Button

Click this button   ⟳   to detect the COM PORT

3. Connect/Disconnect Button

1) Click this button   **OPEN**   to connect

2) Click this button   **CLOSE**   to disconnect

4. Output Setup Button
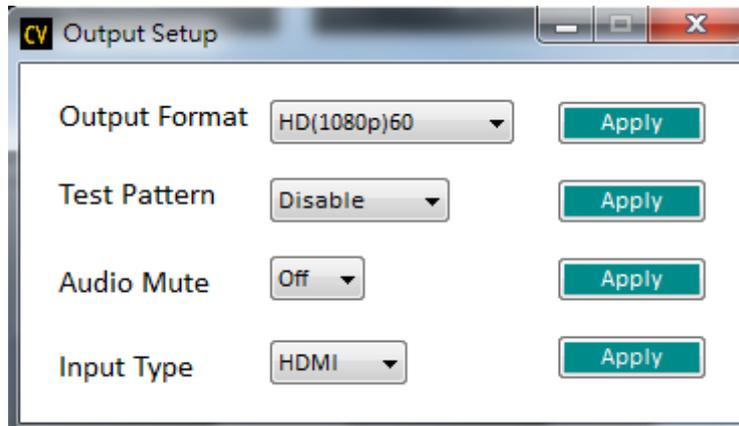
5. Image Button
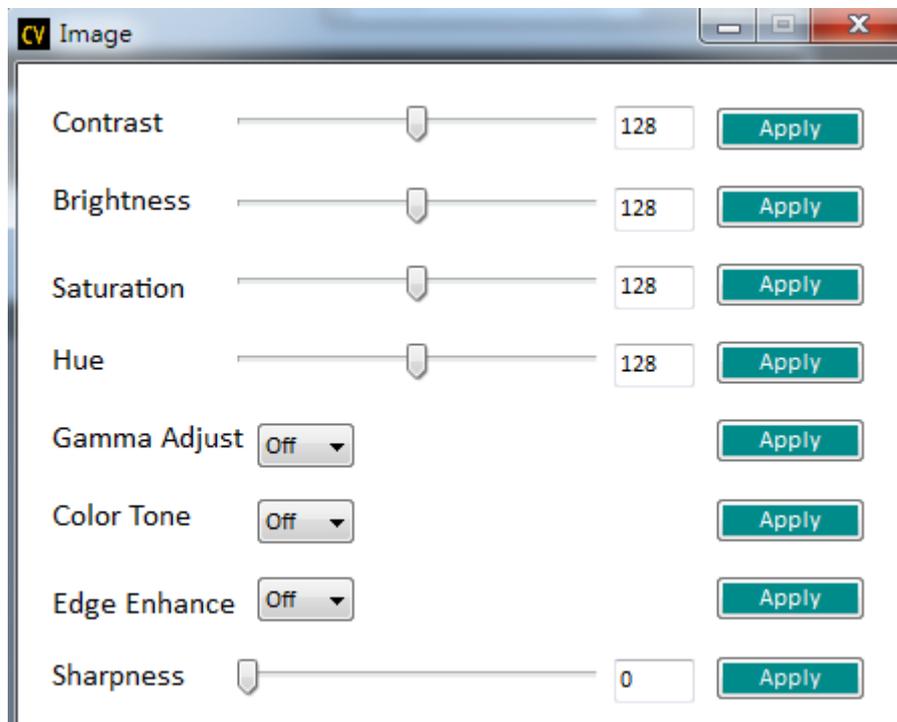
6. Adjustment Button
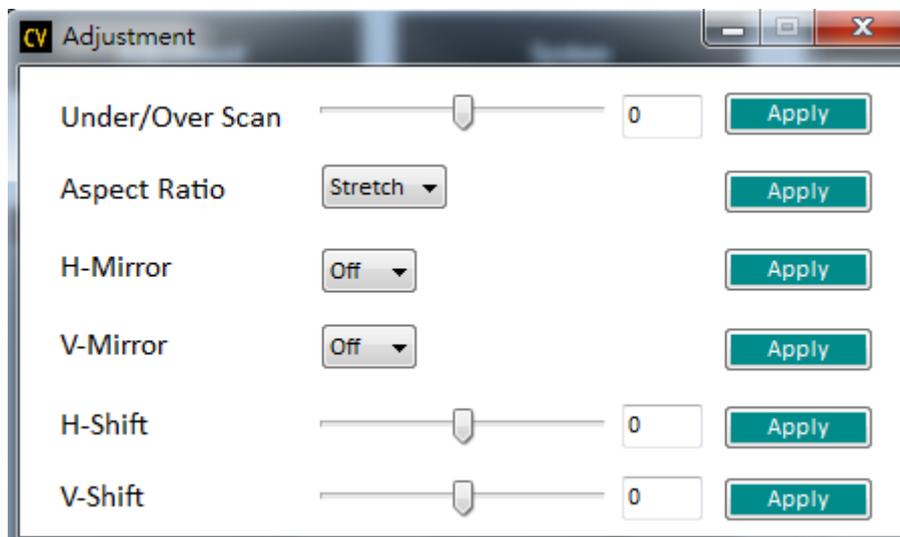
7. System Button
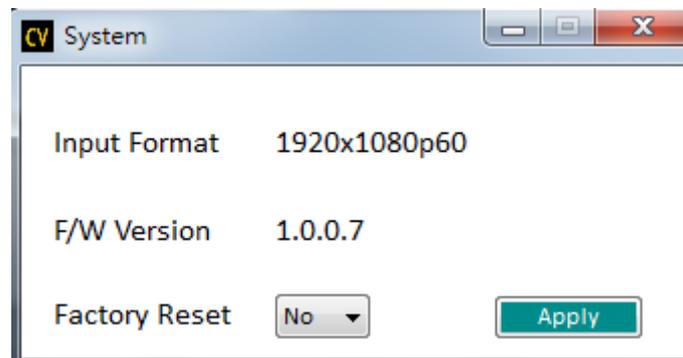
1) Input Format:
   To view the current input resolution

2) F/W Version Information

3) Factory Reset Button

8. I/O Port and Resolution Info
To display the information about the I/O Port and the applied Resolution

9. Output Quick Selection Button
Common functions for quick setting

10. Refresh Button
To refresh the status of the converter

LIMITED WARRANTY

The SELLER warrants the **CV-C03S HDMI/DP/VGA to 3G/HD/SD-SDI Scaler Converter** to be free from defects in the material and workmanship for 1 year from the date of purchase from the SELLER or an authorized dealer. Should this product fail to be in good working order within 1 year 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 surges.

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 are limited to a 30 day warranty and cable 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 CV-C03S features and specifications is subject to change without further notice.**

ESD CAUTION