

# CV-105S

## DVI to HDMI & Audio Scaler Converter

### User Manual



Full HD  
1080

WUXGA  
1920  
x  
1200

 **x.v.Color**  
**HDCP™**  
HIGH-DEFINITION CONTENT PROTECTION

**7.1 CH  
AUDIO**  
CAT-5e/6/7  
**SINGLE  
PATENTED**



rev: 130503  
Made in Taiwan



## Safety and Notice

The **CV-105S DVI to HDMI & Audio 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-105S** 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 .....       | 1 |
| FEATURES .....           | 1 |
| PACKAGE CONTENTS .....   | 1 |
| SPECIFICATIONS.....      | 1 |
| PANEL DESCRIPTION .....  | 1 |
| CONNECTION DIAGRAM.....  | 1 |
| OSD MENU .....           | 1 |
| OPERATION APPROACH ..... | 1 |
| LIMITED WARRANTY .....   | 1 |

# INTRODUCTION

The **CV-105S DVI to HDMI & Audio Scaler Converter** offers an easy and instant approach for converting digital video (DVI-D) and both digital audio (S/PDIF) or analog stereo audio to digital HDMI. With this module, DVI based devices such as PC with S/PDIF or analog stereo audio can readily connect to your HDMI TV.

## FEATURES

- DVI 1.0 compliant
- HDMI 1.3 compliant
- IR remote control
- Remote control via mini-USB
- OSD control interface
- Maximum pixel rate : 165MHz
- Deinterlacer supported
- Supports noise reduction and video enhancement features
- Video enhancement support
- Over / Under scanning adjustable
- Video H/V mirror supported
- Active video area adjustment supported
- Multiple VESA input resolutions available
- USB firmware upgradable for expanding compatibility
- Wall-mount housing design for easy installation

## PACKAGE CONTENTS

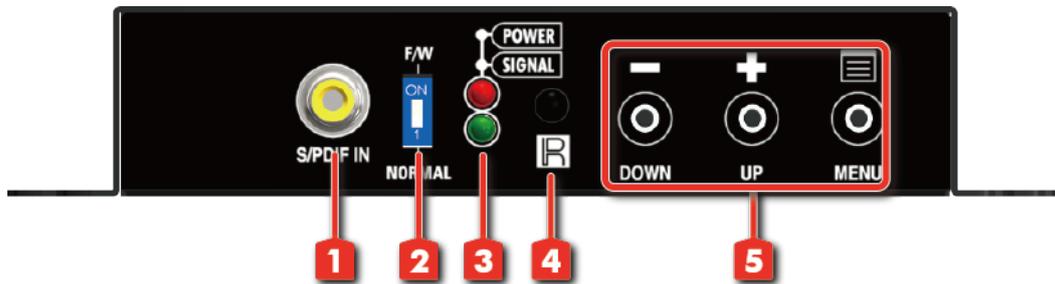
- 1x CV-105S
- 1x 5V/2A power supply unit
- 1x User Manual
- 1x IR Remote control
- 1x Installation software CD

# SPECIFICATIONS

| Model Name                      | CV-105S   |                                      |
|---------------------------------|---|--------------------------------------|
| Technical                       |   |                                      |
| Role of usage                   | DVI to HDMI Converter   |                                      |
| DVI compliance                  | DVI 1.0   |                                      |
| Input Video Maximum Pixel Rate  | 165 MHz   |                                      |
| Output Video Maximum Pixel Rate | 165MHz  |                                      |
| Audio support                   | Stereo PCM (48KHz)  |                                      |
| ESD protection                  | [1] Human body model — ±19kV [air-gap discharge] & ±12kV [contact discharge]<br>[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 DVI+ 1x 3.5mm+ 1x RCA  |                                      |
| Output                          | 1x HDMI   |                                      |
| DVI connector                   | DVI [29-pin female digital only]  |                                      |
| HDMI connector                  | Type A [19-pin female]  |                                      |
| USB connector                   | Mini B  |                                      |
| Mechanical                      |   |                                      |
| CV-105S                         |   |                                      |
| Housing                         | Metal enclosure   |                                      |
| Dimensions<br>[L x D x H]       | Model   | 115 x 82 x 25mm [4.5" x 3.2" x 1.0"] |
|                                 | Package   | 175 x 128 x 134mm [6.9" x 5" x 5.3"] |
|                                 | Carton  | 662 x 366 x 290mm [2'2" x 1'2" x 1'] |
| Weight                          | Model   | 270g [9.5oz]                         |
|                                 | Package   | 520g [18.3oz]                        |
| Fixedness                       | Wall-mounting case with screws  |                                      |
| Power supply                    | 5V 2A DC  |                                      |
| Power consumption               | 10 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]   |                                      |

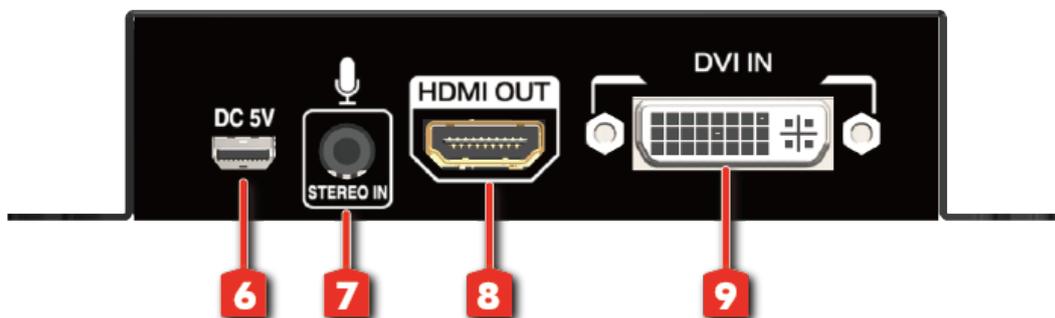
# PANEL DESCRIPTION

## Front Panel



- 1. S/PDIF AUDIO IN:** connect to digital S/PDIF audio source.
- 2. DIP SWITCH:** For firmware update  
ON [↑]: firmware update mode  
OFF [↓]: normal mode
- 3. LED INDICATOR:**  
[green]: signal indicator LED  
[red]: power indicator LED.
- 4. IR SENSOR:** IR sensor for receiving the IR commands from IR remote
- 5. PUSH BUTTON**  
[LEFT]: Down Button  
[MID]: Up Button  
[RIGHT]: Menu/Enter Button

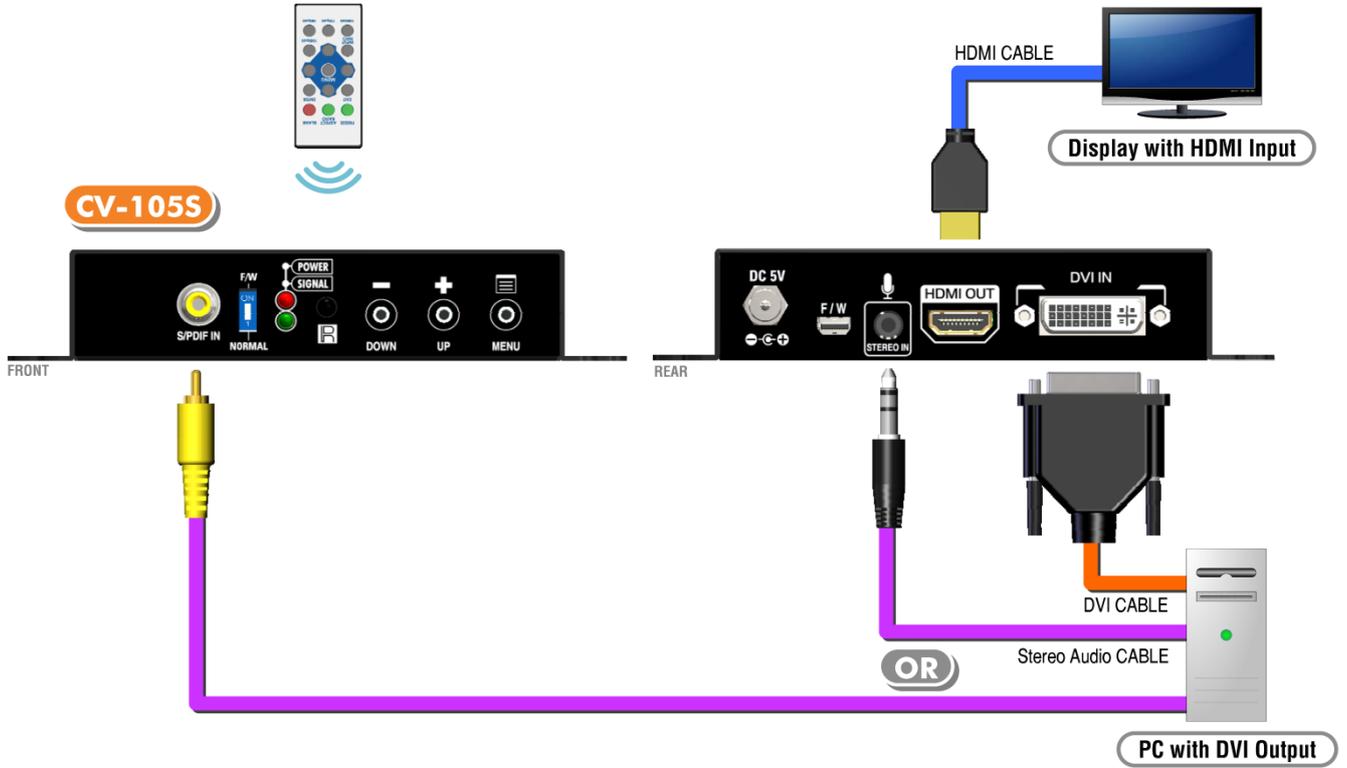
## Rear Panel



- 6. Mini USB:** Mini-USB port for 5V DC & control port
- 7. STEREO AUDIO IN:** connect to analog stereo audio source.
- 8. HDMI OUT:** connect to a HDMI display with a HDMI male-male cable here
- 9. DVI IN:** Connect to a DVI source

# CONNECTION DIAGRAM

- HDMI
- DVI
- AUDIO

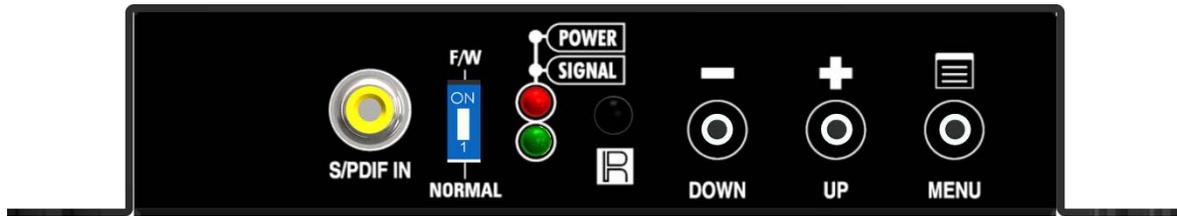


# OSD MENU

|                       |                  |  |
|-----------------------|------------------|--|
| <b>1.Output Setup</b> | Out Res.         |  |
|                       | Output Mode      | RGB, YCbCr444, YCbCr422  |
|                       | Default Pattern  | Disable, White, Cross, Hatch, Color, Gray, Windows, H-Ramp, W-HRamp, W-VRamp, Diagonal |
|                       | Audio Source     | Stereo, SPDIF  |
| <b>2.Image</b>        | Contrast         | 0~255 of Contrast Level  |
|                       | Brightness       | 0~255 of Brightness Level  |
|                       | Saturation       | 0~255 of Saturation Level  |
|                       | Hue              | 0~255 of Hue Level   |
|                       | B/W Extension    | Off, On  |
|                       | Color Tone       | Off, Skin, Green   |
|                       | Edge Enhance     | Typ, Mid, Max, Off   |
|                       | Sharpness        | 0~127 of Sharpness Level   |
| <b>3.Adjustment</b>   | Under/Over Scan  | -50%~50% of Scan Level   |
|                       | Aspect Ratio     | 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  |
| <b>4. System</b>      | Input Res. Info  |  |
|                       | Firmware Version |  |
|                       | Factory Reset    |  |

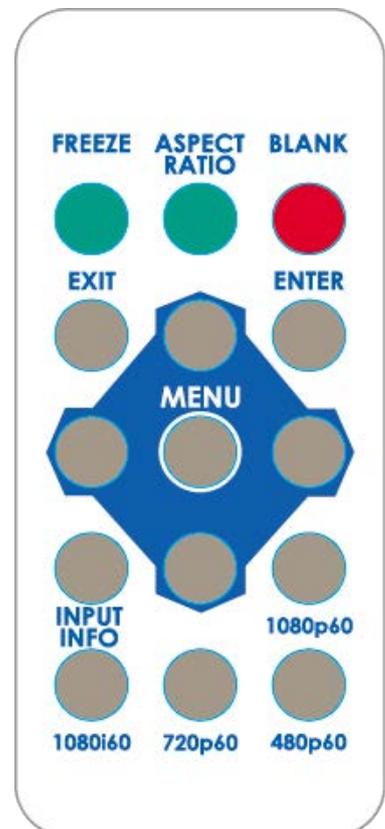
# OPERATION APPROACH

## Method A: Push-in Button

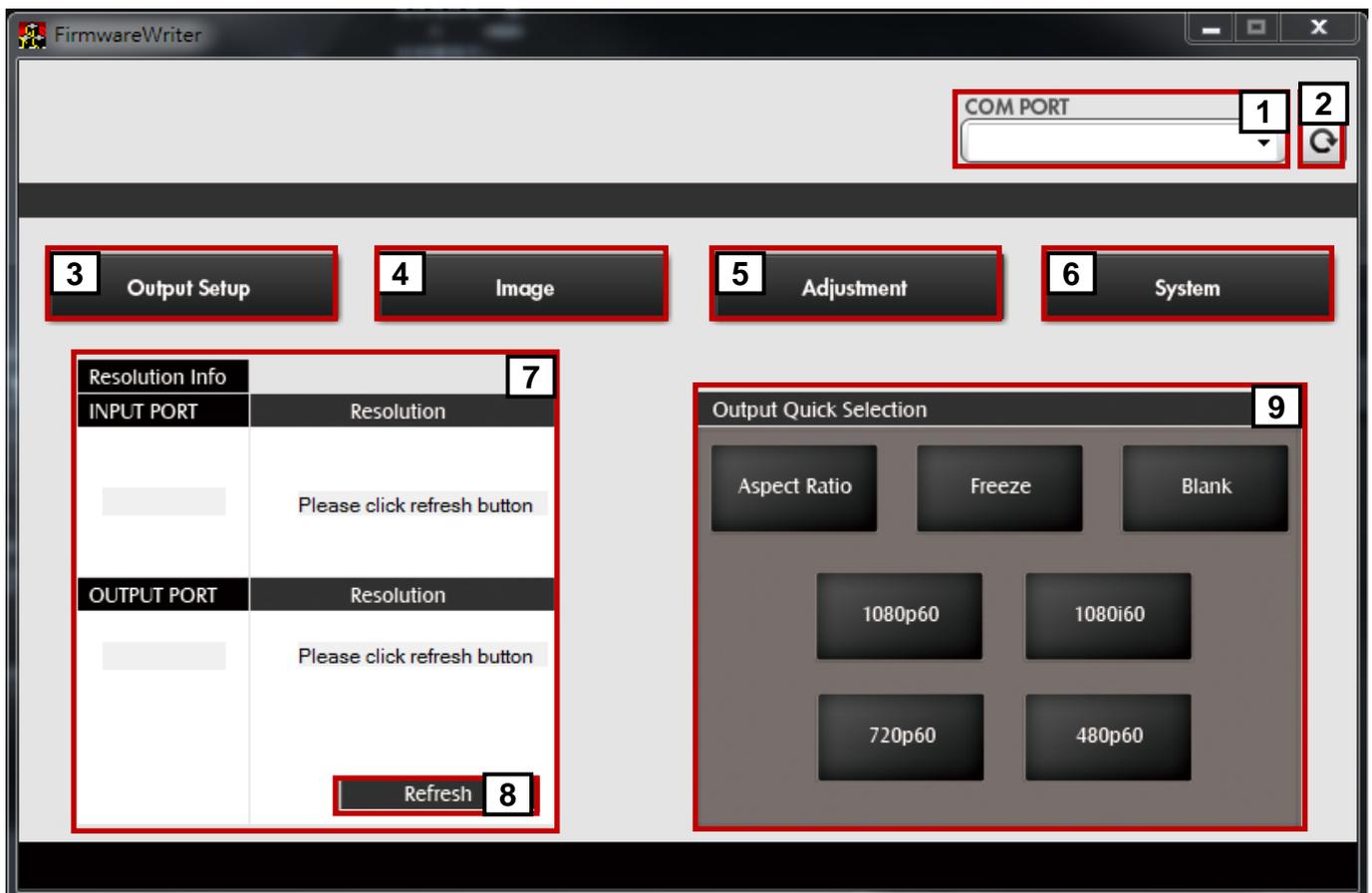


## Method B: IR Remote Control

| Button              | Function                         |
|---------------------|----------------------------------|
| <b>FREEZE</b>       | Freeze video                     |
| <b>ASPECT RATIO</b> | Aspect ratio change              |
| <b>BLANK</b>        | Blank video                      |
| <b>EXIT</b>         | Exit OSD                         |
| <b>ENTER</b>        | Enter key                        |
| <b>UP</b>           | Up key                           |
| <b>LEFT</b>         | Left key                         |
| <b>RIGHT</b>        | Right key                        |
| <b>DOWN</b>         | Down key                         |
| <b>MENU</b>         | Menu on                          |
| <b>INPUT INFO</b>   | Source resolution information    |
| <b>1080p60</b>      | Select 1080p60 output resolution |
| <b>1080i60</b>      | Select 1080i60 output resolution |
| <b>720p60</b>       | Select 720p60 output resolution  |
| <b>480p60</b>       | Select 480p60 output resolution  |



## Method C: IR Remote Control through Mini-USB port



|   |   |
|---|---|
| 1 | COM Port Selection                            |
| 2 | COM Port Detection Button                     |
| 3 | Output Setup Button                           |
| 4 | Image Button                                  |
| 5 | Adjustment Button                             |
| 6 | System Button                                 |
| 7 | Input / Output Resolution Info                |
| 8 | Refresh Input / Output Resolution Info Button |
| 9 | Output Quick Selection Button                 |

### 1. COM Port Selection

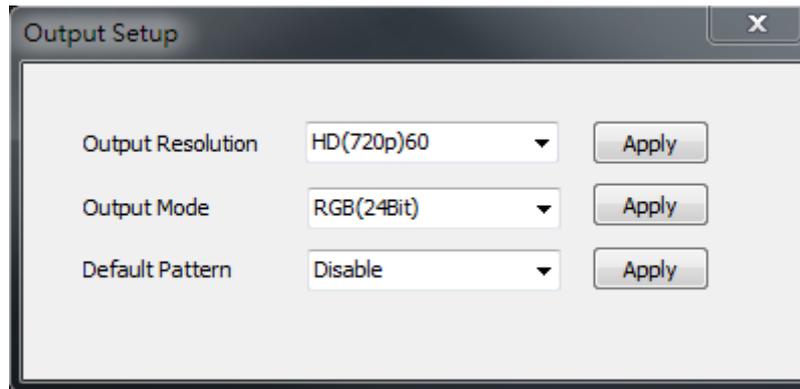
Please select the application COM PORT



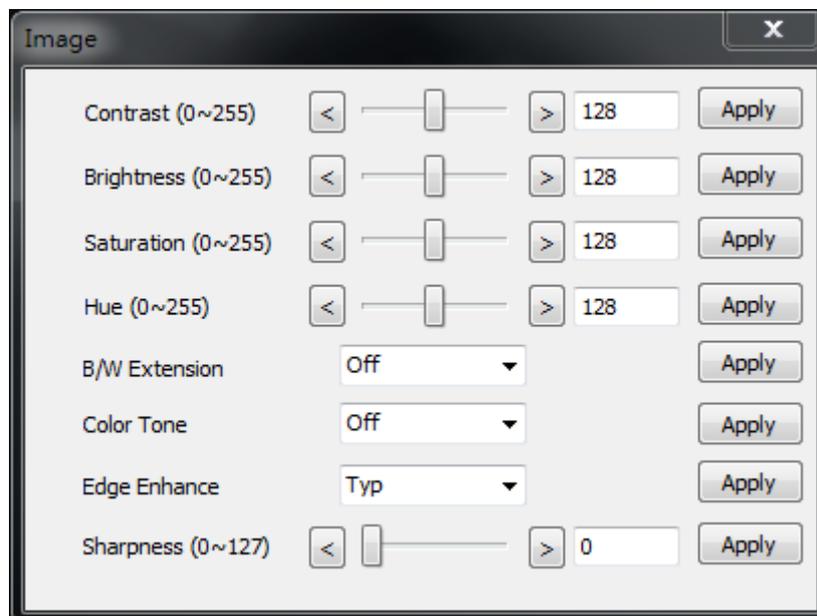
### 2. COM Port Detection Button

Click this button  to detect the COM PORT

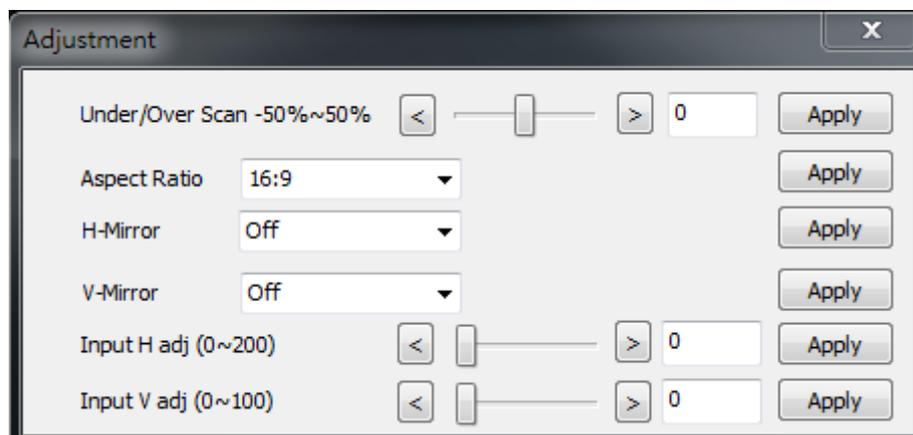
### 3. Output Setup Button



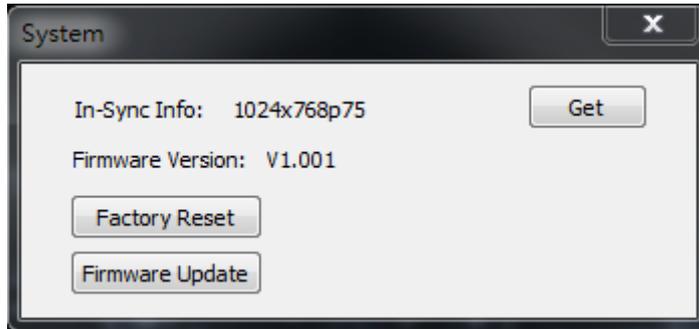
### 4. Image Button



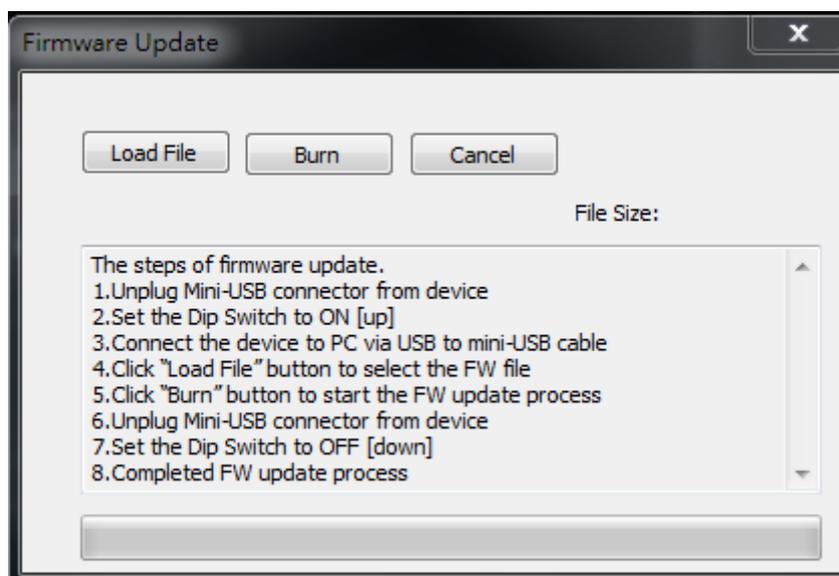
### 5. Adjustment Button



## 6. System Button



- 1) In-Sync Info:  
To view the current input resolution
- 2) Factory Reset Button
- 3) Firmware Update Button



The steps of firmware update:

- a) Unplug Mini-USB connector from device
- b) Set the Dip Switch to **ON [↑]**
- c) Connect the device to PC via USB to mini-USB cable
- d) Click the FW Update button on software
- e) Click "Load File" button to select the FW file
- f) Click "Burn" button to start the FW update process
- g) Unplug Mini-USB connector from device
- h) Set the Dip Switch to **OFF [↓]**
- i) Completed FW update process

## 7. I/O Port and Resolution Info

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

## 8. Refresh Button

To refresh the status of the converter

## 9. Output Quick Selection Button

Common functions for quick setting

# LIMITED WARRANTY

The SELLER warrants the **CV-105S DVI to HDMI & Audio 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-105S features and specifications is subject to change without further notice.**

