HD2SDI-S BOX

User Manual

Ver. 1.1

Content

Feature

- SDI Supports HD formats :
  - 720p50 & 60
  - 1080i50 & 60
  - 1080p24, 25, 30, 50 & 60
- SDI Support 525i & 625i SD D1 format
- Auto 3G/HD/SD-SDI detection
- One HDMI input source can split to two 3G-SDI displays simultaneously.
- Frame rate conversion(1.000/1.001)
- External Button Configuration
- Firmware is upgradable in the field using the integrated USB port
- The converter is Plug-and-Play
- Support VESA Mode
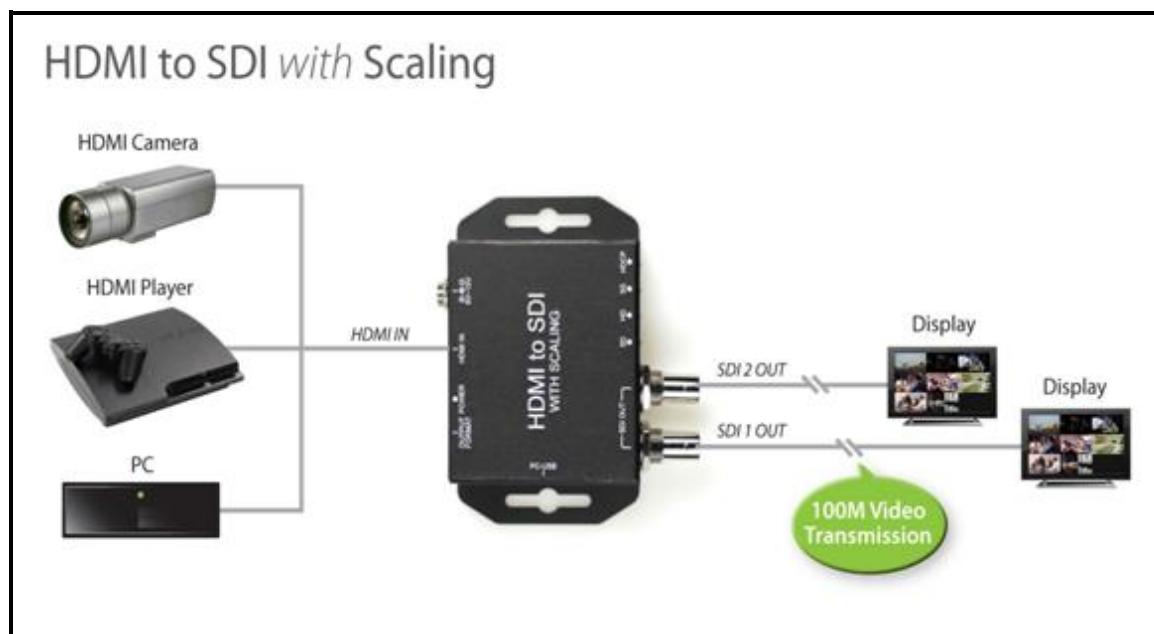
Front Panel
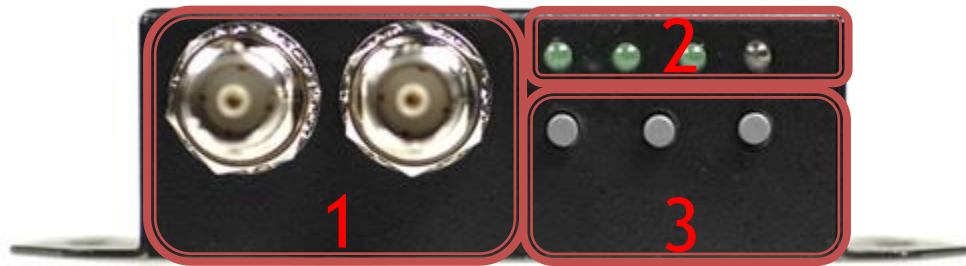
NO	Component	Function
1	SDI Output Port	From your SDI Display Device plug into these ports (Pass Through)
2	LEDs indicate	The LEDs is indicate Output Format (SD/HD/3G/HDCP)
3	Mode Buttons	Select Format/TV Wall/TV Ratio

Rear Panel

NO	Component	Function
1	Power Jack	The Power adapter plug into here.
2	HDMI Input Port	From your HDMI Source plug into these ports
3	Power/Locked LED	The LEDs is indicate Signal indicate

Side Panel

NO	Component	Function
1	USB Connector	Upgrade Firmware/Control Box by PC

Button/LED Indicate

1. Switch Format:

Chick the button 1, the box will be setting to Output Format Mode and change Frame Rate by button 2 and 3.

RES	FRAME RATE	FRACTION
1	2	3
By Pass		
720x480	B -59.94i (BT.656)	C- 59.94i (CEA-861)
720x576	50i	
	60p	59.94p
	50p	
	30p	
1280x720	25p	
	60i	59.94i
1920x1080i	50i	
	60p	59.94p
	50p	
	30p	29.97p
	25p	
1920x1080p	24p	23.98p

[blue box] : is default format at change button 1 after.

1	SD LED	HD LED	3G LED
BY PASS	●	●	●
720 x 480	●	○	○
720 x 576	○	●	○
1280 x 720	●	●	○
1920 x 1080i	○	○	●
1920 x 1080p	●	○	●

● : LED ON

◯ : LED OFF

2. Aspect Ratio Mode:

Check the button 3 , the box will be seting to Aspect Ratio Mode

Mode	Display
16:9 (Default)	
4:3	
1:1 (dot by dot)	

3. Function Button Mode:

Hold on the button 3 until show the Func button Mode

> FUNC BUTTON
> UN-LOCK

LED indicate:

Function	SD LED	HD LED	3G LED	HDCP LED
UN-LOCK (defalt)	🟢	◯	◯	🔴
LOCK	◯	◯	🟢	🔴

4. LED Mode:

   a. Output Mode:

Resolution	SD LED	HD LED	3G LED	HDCP LED
NTSC / PAL	●	○	○	○
720p / 1080i / 1080 [24p, 25p, 30p]	○	●	○	○
1080 [50p,60p]	○	○	●	○
HDCP Content	○	○	○	●

   b. Input Singal Mode:

	POWER/SIGNAL LED
SINGAL LOCKED	●
SIGNAL UN-LOCKED	●

5. FIRMWARE Mode:

Hold on the 3 and 2 button, the display is showed firmware version on display of left upper.

FIRMWARE VERSION
0.1.0.1

6. DEFAULT Mode:

Pull all button (1, 2 and 3) at the same time, the box auto reset to default.

Installation

HD2SDI-S installation consists of the following:

1. Disconnect +12DC adaptor to converter.
2. Connect Video Source (HDMI) to the HDMI Connector.
3. Connect SDI Equipment to the BNCs connector
4. Connect the +12DC adaptor to the converter.

Package Contents

The HD2SDI-S package contains the following items:
- User Manual x 1
- +12 DC Adapter x 1
- HD2SDI-S Converter x 1

Specifications

DESCRIPTION	
SDI Format	SD-SDI, HD-SDI & 3G-SDI
SDI Transition Rate	2.970Gb/s, 1.485Gb/s and 270Mb/s
Audio Support	Stereo 2-Channel
Audio Sample	Auto Ra-sample to 48Khz (For Stereo)
Coaxial Cable Type	RG6/RG59(75Ω)
Cable Equalization	3G: 120m of RG6/ 100m of RG59 HD: 200m of RG6/ 140m of RG59 SD: 400m of RG6/ 280m of RG59 *1 RG6: CANARE L-5CFB Cable / RG59: Belden 9275 Cable *2 Cable Length Performance: Depending on SDI Signal and Cable Quality
Firmware Updates	Via Mini-USB
Input	1 x HDMI
Output	2 x BNC [SDI]
BNC Connector	3G 75 Ω inter-locked socket
HDMI Connector	TYPE A [19-pin female]
USB Connector	Mini-USB
Bottom	Output Format/TV Wall/TV Ratio
Housing	SECC
Dimension	L:104mm x W:63.3mm xH:26mm
Power Source	Power Adapter: AC 100 ~ 240 V/DC (+6 ~ 15 V)
Operation Temperature	0~50°C [32~114°F]
Storage Temperature	-20~+60°C

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◆ Support CEA-861/VESA Format

|			
720x480i60	720x576i50	720x480 p60	720x576 p50
1280x720p60	1280x720p50	1920x1080i60	1920x1080i50
1920x1080p24	1920x1080p25	1920x1080p30	1920x1080p60
1920x1080p50			
640x350p85	640x400p85	720x400p85	640x480p60
640x480p72	640x480p75	640x480p85	800x600p56
800x600p60	800x600p72	800x600p75	800x600p85
848x480p60	1024x768p50	1024x768p59	1024x768p60
1024x768p70	1024x768p75	1024x768p85	1152x864p70
1152x864p75	1280x768pRB	1280x768p60	1280x768p75
1280x768p85	1280x800p60	1280x800p75	1280x800p85
1280x960p60	1280x960p75	1280x960p85	1280x1024p60
1280x1024p75	1280x1024p85	1360x768p60	1366x768p50
1366x768p60	1400x1050p50	1400x1050p59	1400x1050p60
1400x1050p75	1440x900p60	1440x900p75	1440x900p85
1600x1200p50	1600x1200p59	1600x1200p60	1600x1200pRB
1680x1050pRB	1680x1050p60	1920x1200pRB	2048x1052p60
2048x1080p50	2048x1080p59	2048x1080p60	

● Firmware is upgradable in the field using the integrated USB port
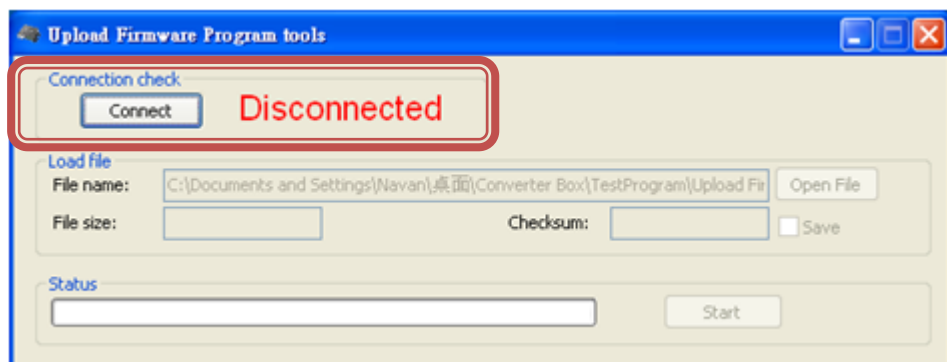
How to Firmware upgrade:

Step 1.

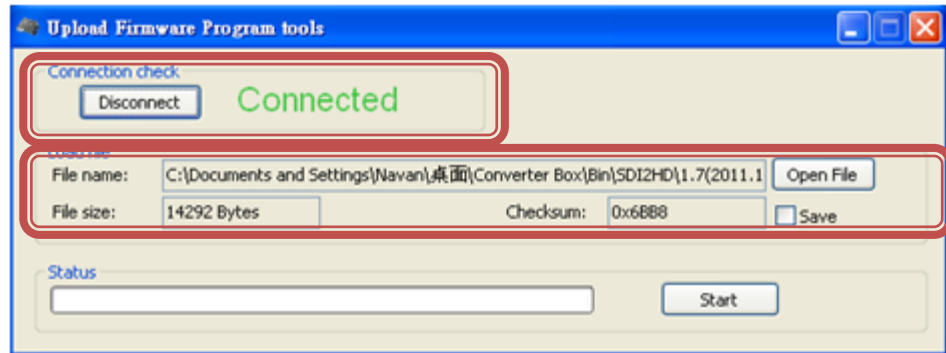Open Upload Firmware Program tools.exe and connect box to PC by USB Cable.
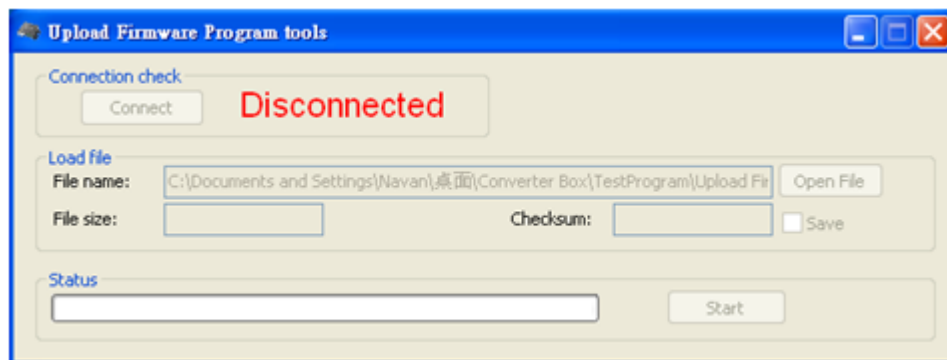
Step 2.

Plug and un-plug "DC adapter" to power on/off the converter box (the connection check status will be changed to "Connect")
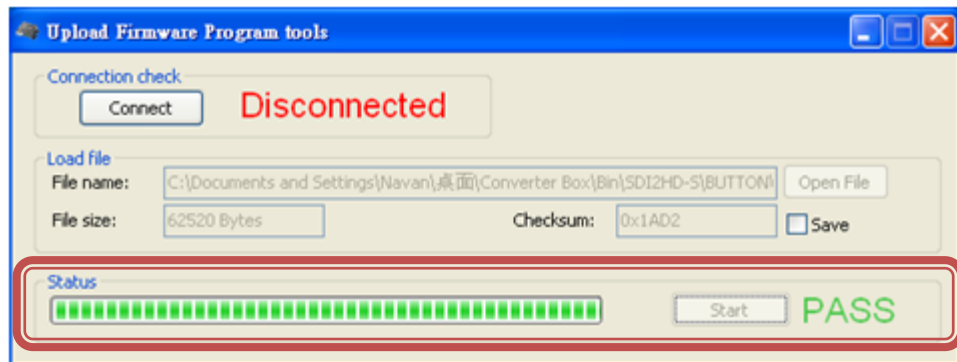
Step 3.

Plug and un-plug "DC adapter" again (the connection check status will be changed to "Connected") and Please click the Open File button to select the firmware bin file.
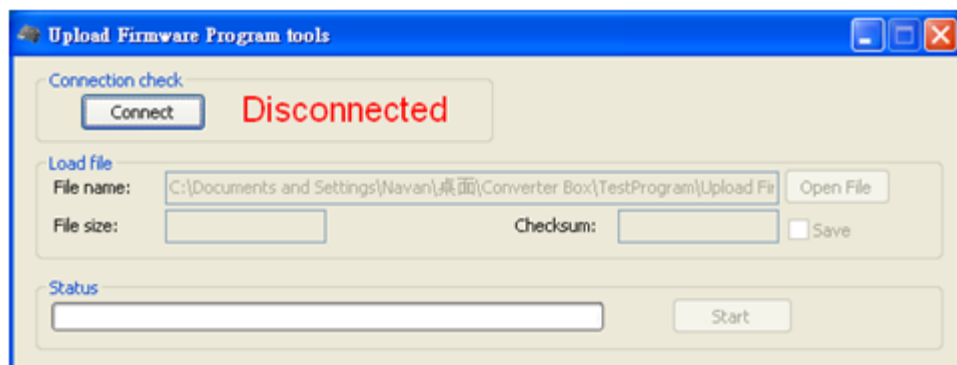

Step 4.

Please click "Start' Button to proceed with new firmware programming. The PASS message will appear when the procedures finished.

Step 5.

Close Upload Firmware Program tools

Update List

Data	Version	Command
2013.12.02	V1.0	1. Release
2015.03.20	V1.1	1. Change Box Pic