



User's Guide


SDI to HDMI Converter

NP-SDI2HD

1. Introduction

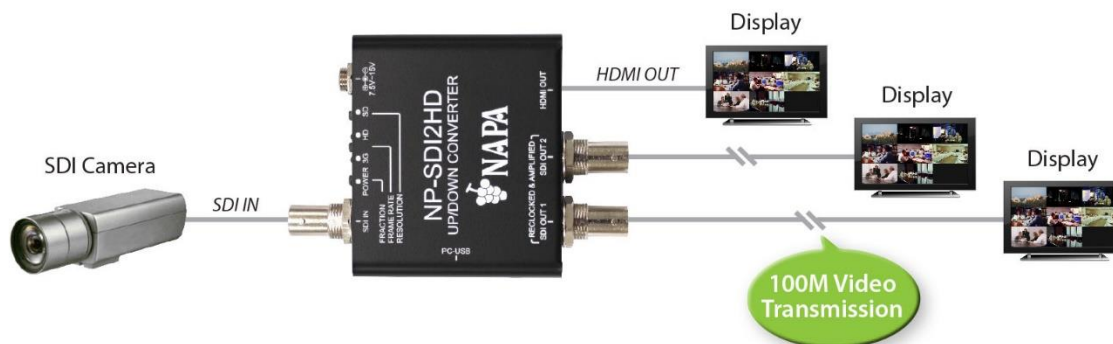
NP-SDI2HD is a high-quality, high-performance converter box which is specially designed for high-definition SDI/HDMI signal conversion applications. It has on-board scaler engine to do video resolution and frame rate up/down conversion. SDI2HD-S converts 1 SDI input signal (up to 3G-SDI) to 1 HDMI output (up to 1080p60) and 2 re-clocked SDI outputs.

2. Specification

Model	NP-SDI2HD
Product Photo	
Description	Convert from SDI to HDMI. Provides two Re-Clocked SDI outputs.
Feature	<ul style="list-style-type: none"> ● Auto source format detection (3G/HD/SD) ● Built-in hardware up/down conversion engine with anti-aliasing ● Simultaneous 1 x HDMI and 2 x SDI output ● Splitter function ● Re-clock function (for SDI output)
Input	SDI x 1
Output	HDMI (v1.2) x 1 SDI x 2
SDI Format	3G-SDI HD-SDI SD-SDI
Supported Video Format	<ul style="list-style-type: none"> ● 3G format <ul style="list-style-type: none"> ➢ 1080p50/60 ● HD format <ul style="list-style-type: none"> ➢ 1080p24/25/30 ➢ 1080i50/60 ➢ 720p50/60 ● SD format <ul style="list-style-type: none"> ➢ 625i (PAL) ➢ 525i (NTSC)
Supported Audio Format	Up to 2 channels, 24bit, 48KHz * SDI Embedded Audio Channel: 1 - 2
Plug & Play	✓
DC In	7.5V ~ 15V

3. Connection Diagram

SDI to HDMI



4. Packing List

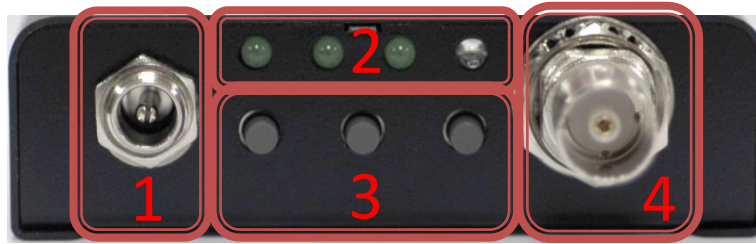
Item	Amount
NP-SDI2HD converter box	1 (piece)
AC/DC Adapter	1 (piece)

5. Misc. Specification

Item	Amount
Dimension	L: 74mm x W: 63.3mm x H: 22mm
Power Consumption	170mA @12V, total 2.04W (at 1080p60 input/output)
Operation Temperature	0 ~ 50°C
Storage Temperature	-20 ~ 60°C
SDI Format	SD-SDI HD-SDI 3G-SDI(Level A)

6. Product View

i. Front View



No.	Components	Function Description
1	Power Jack	Connect to DC 7.5V~15V power source
2	LED Indicator	3G/HD/SD/HDCP indicator
3	Mode Buttons	Mode and Format configurations
4	BNC Connector	3G/HD/SD-SDI Input

ii. Rear View



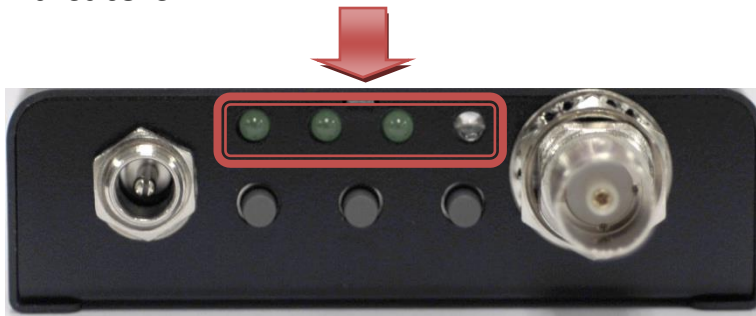
No.	Components	Function Description
1	BNC Connector	3G/HD/SD-SDI Output 1
2	BNC Connector	3G/HD/SD-SDI Output 2
3	HDMI Connector	HDMI output

iii. Side View



No.	Components	Function Description
1	Mini USB connector	Firmware upgrade

7. LED Indicators



Resolution	LED indicators			
	SD	HD	3G	Power
480i / 576i (NTSC / PAL)	●	○	○	●
720p50 / 60 1080i50 / i60 1080p25 / p30 / p24	○	●	○	●
1080p50 1080p60	○	○	●	●
No Signal	○	○	○	●

● / ●: LED ON

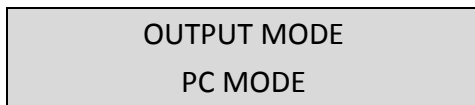
○ : LED OFF

8. Control and Indicators

i. Switch PC/AV Mode



Hold on the Button 2 until show the Output Mode as below:



(In this case current mode is PC Mode)


- PC mode: define output format is based on VESA mode (PC)
- AV mode: define Output format is based on CEA861 mode (Consumer)


On Screen Display	LED indicator			
Output Mode PC mode	SD LED	HD LED	3G LED	Power LED
	●	●	○	○
Output Mode AV mode	SD LED	HD LED	3G LED	Power LED
	○	○	●	●

ii. AV Mode Output Format Configuration




Button 1 = Resolution Configuration ; Button 2 & 3 = Frame Rate Configuration

 1	2	3
Bypass	-	-
720x480	60i	59.94i
	60p	59.94p
720x576	50i	-
	50p	-
1280x720	60p	59.94p
	50p	-
1920x1080i	60i	59.94i
	50i	-
1920x1080p	60p	59.94p
	50p	-
	30p	29.97p
	25p	-
	24p	23.97p

 : default mode after resolution is changed (when button 1 is pressed)

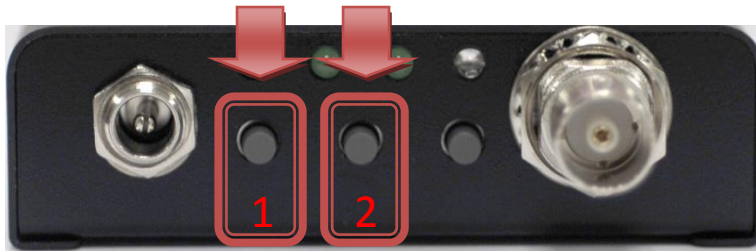
LED Status when changing resolution:

 1	LED			
	SD	HD	3G	Power
Bypass	●	●	●	●
720x480	●	○	○	○
720x576	○	●	○	○
1280x720	●	●	○	○
1920x1080i	○	○	●	○
1920x1080p	●	○	●	○

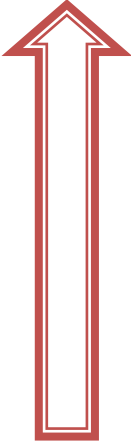
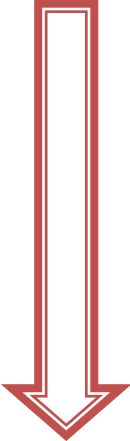
● : LED ON

○ : LED OFF

iii. PC Mode Output Format Configuration



Press Button 1 or Button 2 to change output format

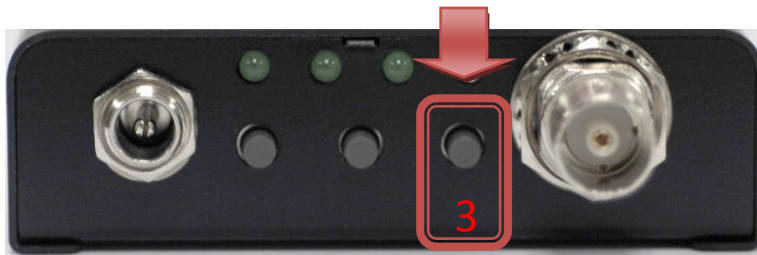
Button 1	Format	Button 2
	1920x1080 p60	
	1680x1050 p60	
	1600x1200 p60	
	1440x900 p60	
	1400x1050 p60	
	1366x768 p60	
	1280x1024 p60	
	1280x848 p60	
	1024x768 p60	
	800x600 p60	

LED Status when changing resolution:

	SD LED	HD LED	3G LED	POWER LED
800x600 p60	○	●	○	●
1024x768 p60	●	○	○	●
1280x848 p60	○	○	○	●
1280x1080 p60	●	●	●	○
1366x768 p60	○	●	●	○
1400x1050 p60	●	○	●	○
1440x900 p60	○	○	●	○
1600x1200 p60	●	●	○	○
1680x1050 p60	○	●	○	○
1920x1080 p60	●	○	○	○


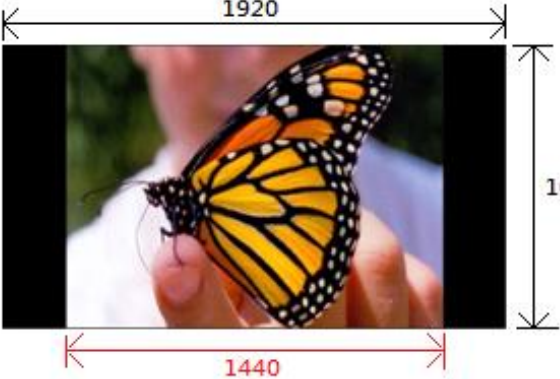
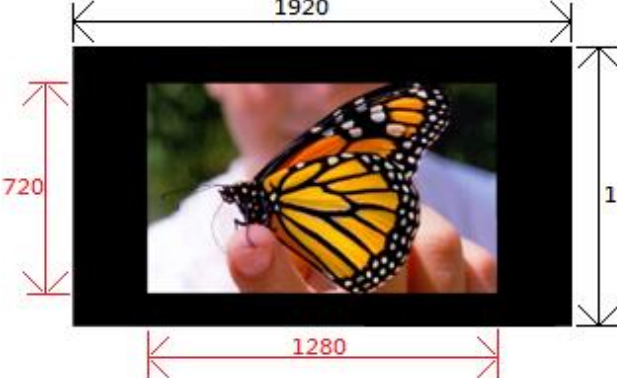
- : LED ON
- : LED OFF

iv. Aspect Ratio Configuration

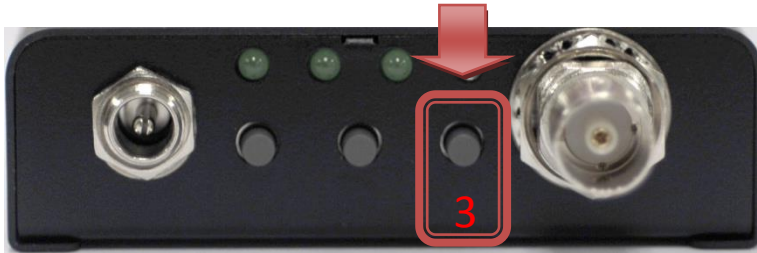


Press the Button 3 to change aspect ratio.

Input format is 1280x720p60, output is 1920x1080p60

Mode	Display
<p>16:9 (Default)</p>	 <p>Image size is 1920x1080</p>
<p>4:3</p>	 <p>Image size change to 1440x1080</p>
<p>1:1 (dot by dot)</p>	 <p>Image size is 1280x720</p>

v. Button Lock / Unlock Configuration



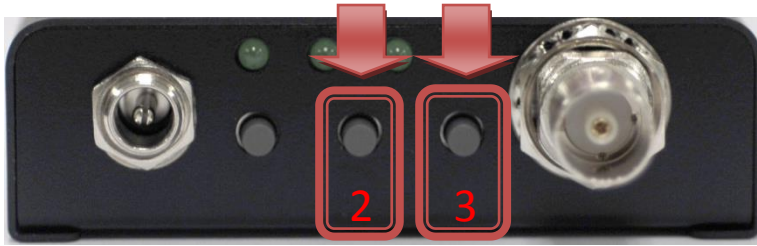
Push Button 3 until below message box appears:

OSD when Function Button Un-Locked:
FUNCTION BUTTON UN-LOCKED
OSD when Function Button Locked:
FUNCTION BUTTON LOCKED

LED Indicator for Button Lock/Unlock status:

Function	SD LED	HD LED	3G LED	HDCP LED
UN-LOCK (default)	●	○	○	●
LOCK	○	○	●	●

vi. Firmware Information



Press button 2 and 3 at the same time to show current firmware version. The firmware window will be displayed on up-left of the video screen as:

```
FIRMWARE VERSION
0.1.0.1
```

vii. Restore to Default



Press button 1, 2 and 3 at the same time to reset to default configuration.