



User's Guide


HDMI to SDI Converter

NP-HD2SDI

1. Introduction

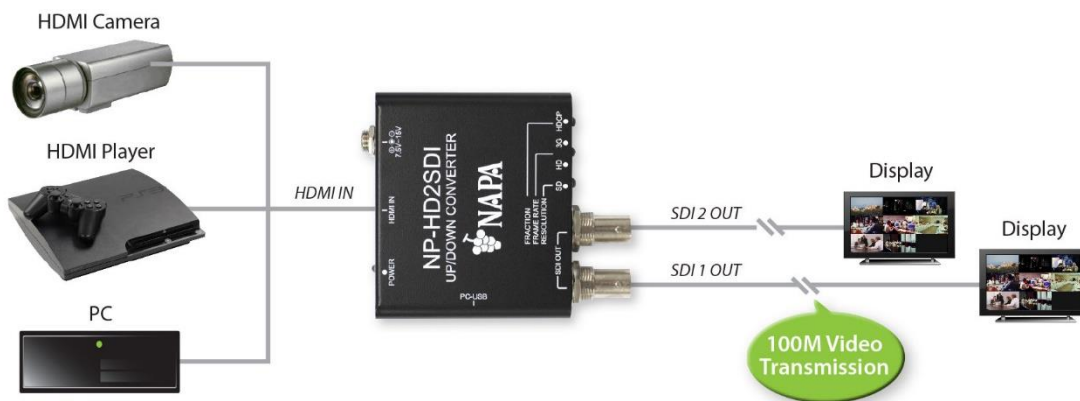
NP-HD2SDI is a high-quality, high-performance converter box which is specially designed for high-definition SDI/HDMI signal conversion applications. It has on-board scaler engine to do video resolution and frame rate up/down conversion. NP-HD2SDI converts 1 HDMI input signal (up to 1080p60) to 2 duplicated SDI output (up to 3G-SDI).

2. Specification

Model	NP-HD2SDI
Product Photo	
Description	Converts from HDMI to SDI. Provides two duplicated 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 ● Splitter function ● Auto audio re-sample to 48KHz 2 channels, Stereo
Input	HDMI (v1.4) x 1
Output	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"> ➢ 1080p 50 / 59.94 / 60 ● HD format <ul style="list-style-type: none"> ➢ 1080p 23.97 / 24 / 25 / 29.97 / 30 ➢ 1080i 50 / 59.94 / 60 ➢ 720p 50 / 59.94 / 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

HDMI to SDI *with* Scaling



4. Packing List

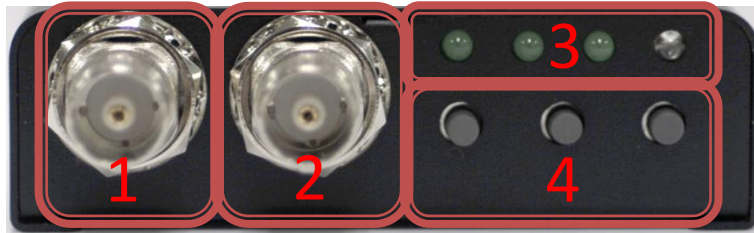
Item	Amount
NP-HD2SDI converter box	1 (piece)
AC/DC Adapter	1 (piece)

5. Misc. Specification

Item	Amount
Dimension	L: 74mm x W: 63.3mm x H: 22mm
Power Consumption	410mA @ 12V, total 4.92W (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	BNC Connector	3G/HD/SD-SDI Output 1
2	BNC Connector	3G/HD/SD-SDI Output 2
3	LED Indicator	3G/HD/SD/HDCP indicator
4	Mode Buttons	Res/Frame Rate/Fraction configurations

ii. Rear View



No.	Components	Function Description
1	Power Jack	Connect to DC 7.5V~15V power source
2	HDMI Connector	HDMI input
3	LED Indicator	Power/ Signal Lock status indicator

iii. Side View



No.	Components	Function Description
1	Mini USB connector	Firmware upgrade

7. LED Indicators

Resolution	LED indicators			
	SD	HD	3G	HDCP
480i / 576i (NTSC / PAL)	●	○	○	○
720p50 / 60 1080i50 / i60 1080p25 / p30 / p24	○	●	○	○
1080p50 / p60	○	○	●	○
Source Content with HDCP	○	○	○	●

● : LED ON




○ : LED OFF


8. Control and Indicators


i. Format Configuration



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

Res	Frame Rate	Fraction
		
Bypass	-	-
720x480	B -59.94i (BT.656)	C- 59.94i (CEA-861)
720x576	50i	-
1280x720	60p	59.94p
	50p	-
	30p	-
	25p	-
1920x1080i	60i	59.94i
	50i	-
1920x1080p	60p	59.94p
	50p	-
	30p	29.97p
	25p	-
	24p	23.97p

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

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

● : LED ON



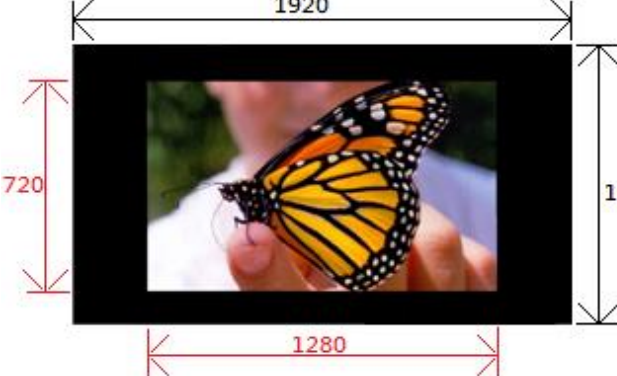
○ : LED OFF

ii. Aspect Ratio Configuration



Press the button 3 to change aspect ratio.

Ex: 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>

iii. 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	○	○	●	●

iv. Firmware Information

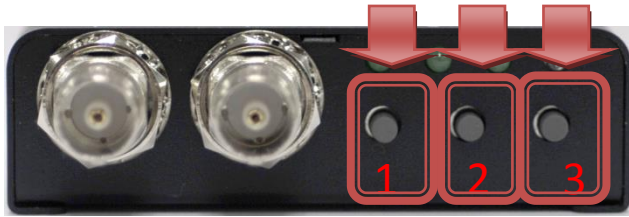


Press button 2 and 3 at the same time to show current firmware version.

The firmware window will be displayed on up-left of the video screen as:

FIRMWARE VERSION 0.1.0.1

v. Restore to Default



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