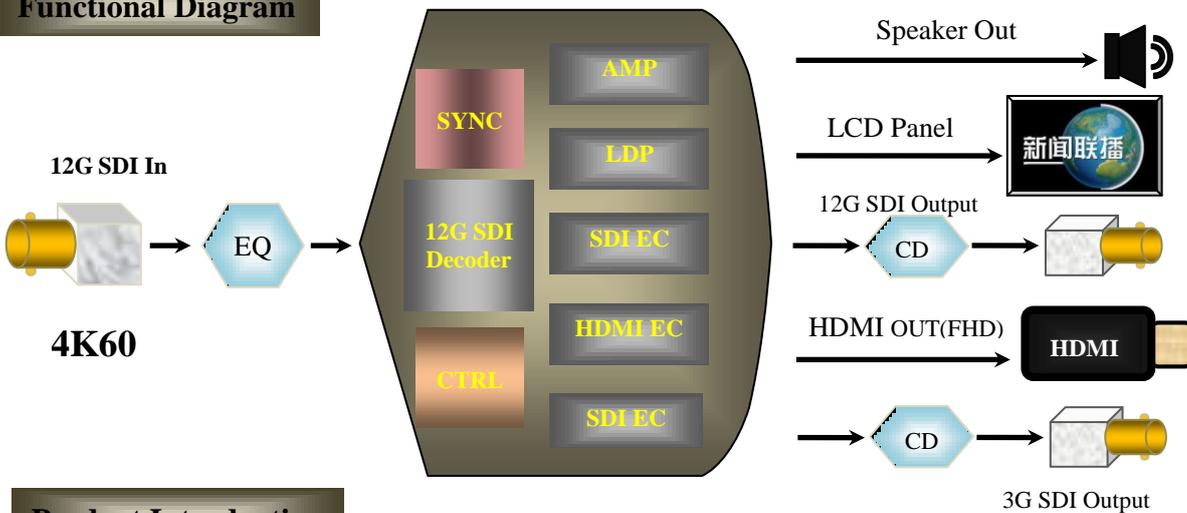




Functional Diagram



Product Introduction

DeviceWell K grade signal converter, a 4K signal conversion device based on broadcast single-link 12G SDI signal. This device input supports up to single-link 12G SDI signals, and is compatible with single-link 6G SDI signals and single-link signals below 3G, has built-in SDI signal equalization, serial clock recovery and line driver, and supports 12G SDI down conversion to 3G SDI signal output. At the same time, the device has built-in HDMI encoder, liquid crystal display driver and audio power amplifier, which can simultaneously realize functions such as SDI to HDMI /SDI video display on LCD, SDI audio de-embedding and audio power amplifier. It supports 4K signal down conversion to full HD HDMI signal output. Its SDI input signal frequency is automatically adapted without additional settings, can be applied to professional SDI video signals such as UHD TV/FHD TV/HDTV/SDTV, and is especially suitable for down conversion applications of broadcast-grade ultra-high definition digital signals.

The device is powered by MicroUSB, which can be applied to the USB device power supply system and supports mobile power supply such as charging treasure.

Product Features

- ◆ 1 single link 6G/12G SDI signal input
- ◆ SDI signal is displayed on the LCD
- ◆ 12G SDI embedded audio output to internal speakers
- ◆ 1 channel 6G/12G SDI signal loop output
- ◆ 1 channel 1.5G/3G SDI signal down conversion output
- ◆ 1 channel full HD 1920*1080P HDMI signal down conversion output
- ◆ Input 3G signal below device automatic through mode output
- ◆ Built-in clock recovery
- ◆ Special features can be customized

Interface Description

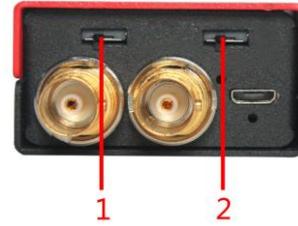


No.	Function	No.	Function
1	12G SDI IN	2	12G SDI OUT
3	Speaker and LCD switch	4	USB power supply and LED indicator
5	3G SDI OUT	6	HDMI OUT

Product Parameters

Product Name	12G SDI Down conversion converter	
Model No.	MD2192	
SDI Signal Input	Input signal	6G/12G Signal
	Bitrate	270MHZ~12GHZ
	Connector	BNC complies with IEC169-8
	Impedance	75Ω
SDI Video Output	Output signal	1.5G/3G SDI Signal
	Bitrate	270MHZ~3GHZ
	Signal amplitude	800mV ±10%
	Connector	BNC complies with IEC169-8
HDMI Video Output	Output signal	HDMI(FHD)
	Bitrate	100MHZ~1.65GHZ
	Connector	Standard HDMI signal
	Impedance	100Ω
LCD Display	LCD Size	2.6 Inch
	Resolution	400 X 240
Built-in speaker	Power	0.5W
	Impedance	8 Ω
General Parameters	power supply	DC 5V(Micro USB)
	Power	5W
	Host size	123*48*30mm
	Control panel	No
	Operating temperature	0°C~50°C non-condensing
	Storage temperature	-20°C~75°C
	Operating humidity	20%~70%RH
	Storage Humidity	0%~90%RH, non-condensing

Parameters Setting



DIP		Resolution
1	2	
Left	Left	Speaker: open, LCD:open
Left	Right	Speaker: open, LCD:close
Right	Left	Speaker: close ,LCD:open
Right	Right	Speaker: close ,LCD:close

Order Model

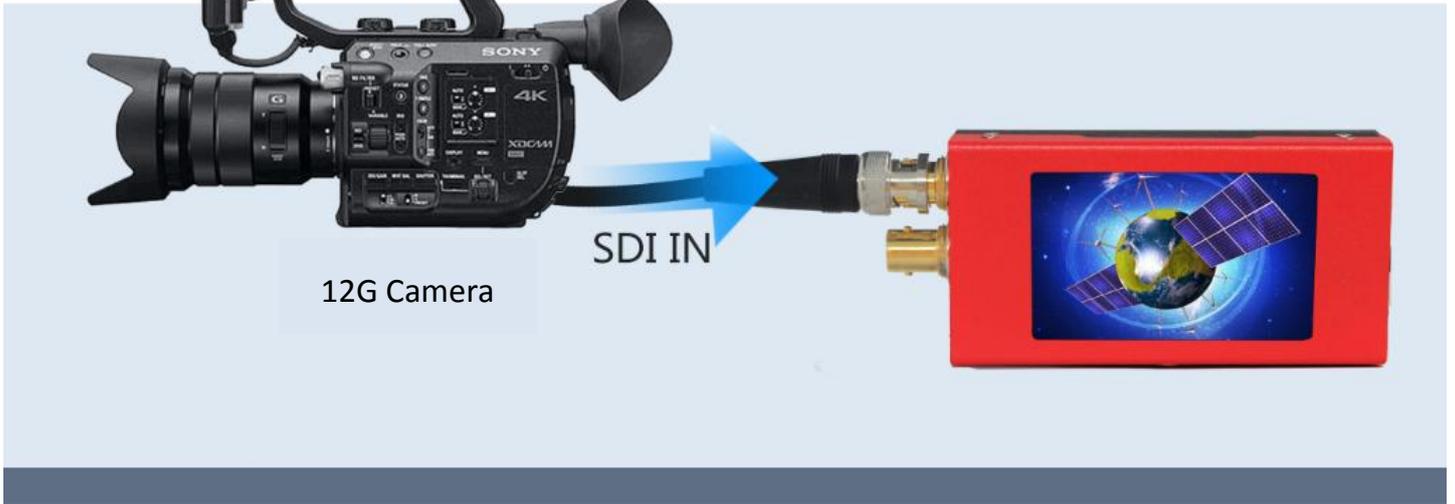
Model	Function	LCD	Speaker	Chassis type	Power type	Other
MD2192	12G SDI to HDMI+SDI	2.6 "	Yes	Mini 2019	Micro USB 5V	SDI/HDMI Down-conversion output: 4K->FHD,12G->3G
MD2092	12G SDI to HDMI+SDI	No	No	Mini 2019	Micro USB 5V	
MD1012	SDI to HDMI	No	No	Mini 2019	Micro USB 5V	
MD1021	HDMI To SDI	No	No	Mini 2019	Micro USB 5V	
MD1003	BIDI SDI/HDMI BIDI	No	No	Mini 2019	Micro USB 5V	
MD1103	BIDI SDI/HDMI BIDI	2.6 "	Yes	Mini 2019	Micro USB 5V	
MD1112	SDI to HDMI	2.6 "	Yes	Mini 2019	Micro USB 5V	
MD1121	HDMI To SDI	2.6 "	Yes	Mini 2019	Micro USB 5V	
MD1103	BIDI SDI/HDMI BIDI	2.6 "	Yes	Mini 2019	Micro USB 5V	

Application:

Application A:

One channel 12G SDI Signal Input

One channel LCD output

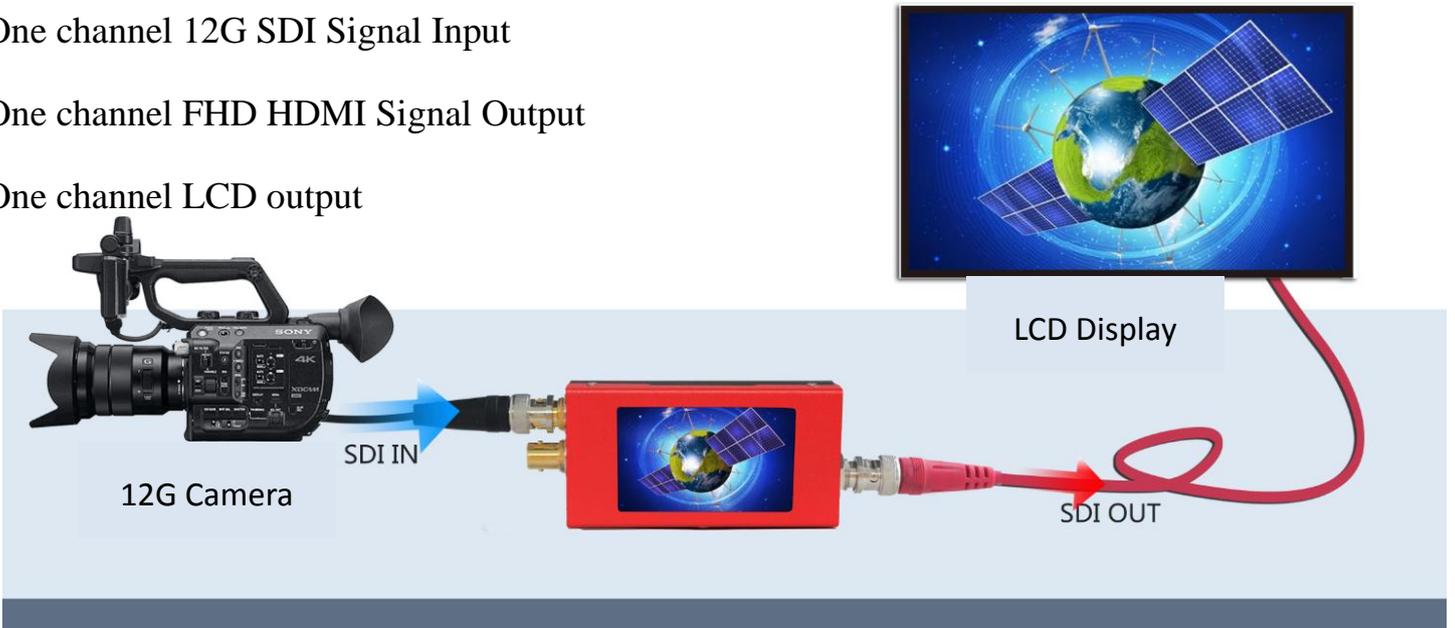


Application B:

One channel 12G SDI Signal Input

One channel FHD HDMI Signal Output

One channel LCD output

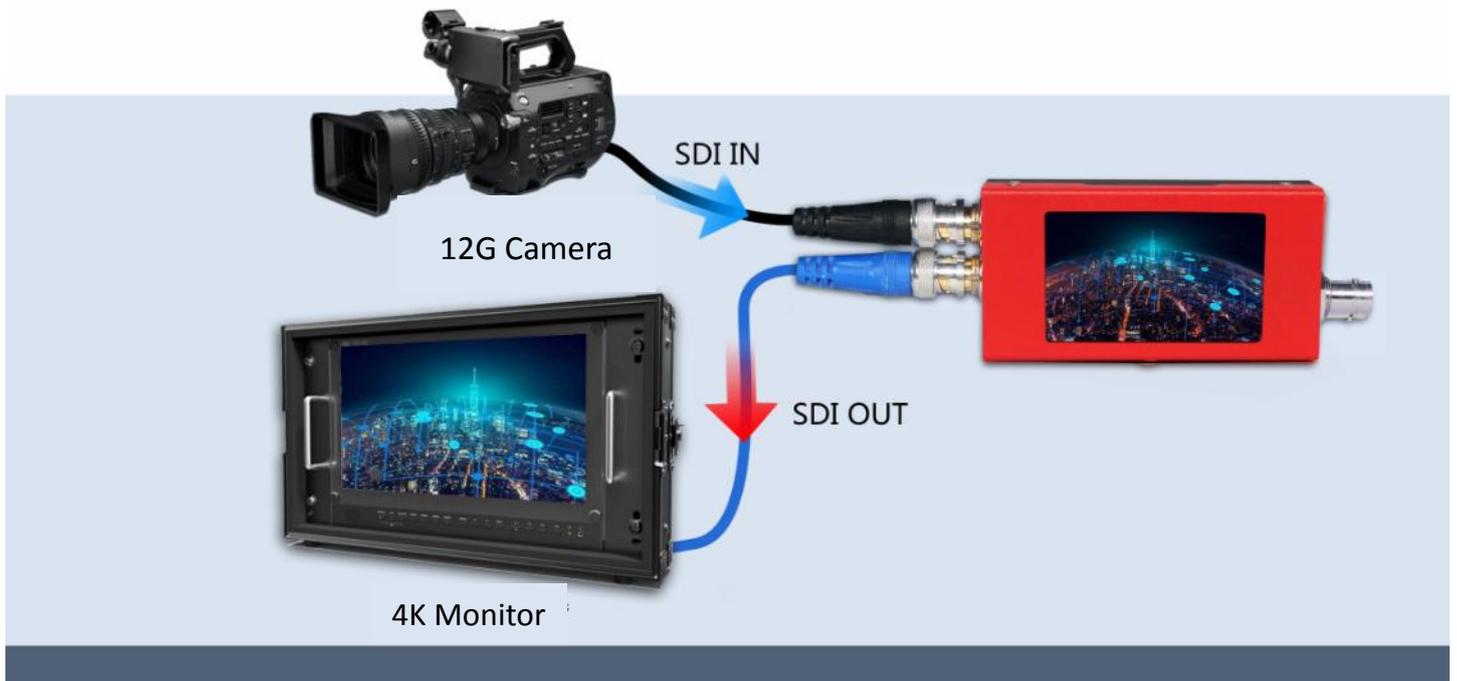


Application C:

One channel 12G SDI Signal Input

One channel 12G SDI Signal Output

One channel LCD output



Application D:

One channel 12G SDI Signal Input

One channel 3G SDI Signal Output

One channel LCD output



Application E:

Input: One channel 12G SDI Signal Input

Output: One channel 12G SDI OUT

One channel 3G SDI OUT

One channel FHD HDMI OUT

One channel LCD Output



Product Size

