

FRONTNICHE

12G - 6G - 3G

12G UHD Pattern Generator & Signal Analyzer

2018



Product Introduction

- 1 12G SDI, HDMI and Quad 3G Input and Output
- 2 LCD Preview and Touch Control
- 3 Analyzer features such as Video/Audio Timing, Info-Frame Parsing and ST352.
- 4 Generator features such as Resolution, Frame Rate, Color Space, Color depth and Chroma Sampling.

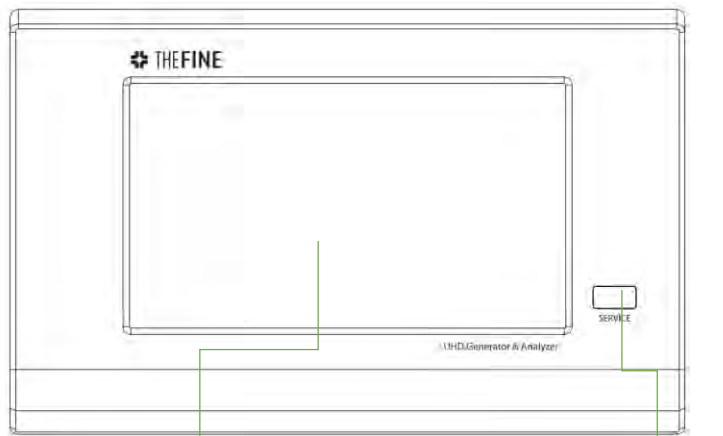
Product View

▪ 12G UHD Pattern Generator & Signal Analyzer

Front View



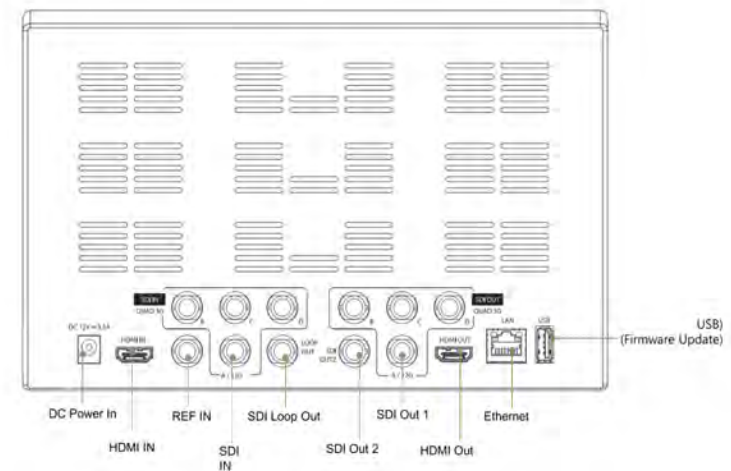
Rear View



LCD Touch

Service Port

- SDI A : 12G SD
- SDI A/B/C/D : Quad 3G SDI



Specification

▪ H/W Specification

Item		Type	Q'ty	Spec
Input	SDI	BNC	4	12G SDI / Quad3G SDI
	HDMI	A	1	HDMI 2.0a
Output	SDI	BNC	5	2 x 12G SDI Quad3G SDI
	SDI Loop Out	BNC	1	12G SDI
	HDMI	A	1	HDMI 2.0a
UI	LCD + Touch		1	7" LCD + Capacitive Touch
	Buttons		4	View, Video, Setting, Back Dial Menu (Right, Left, Up, Down, Select)
Network	Ethernet RJ45		1	10/100Mbps
Power	DC-Jack		1	12V / 3.5A

▪ S/W Specification




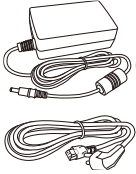


Item	Spec	Notes
Resolutions	720p, 1080i, 1080p, 2160p	
Frame Rate	23.98, 24, 25, 29.97, 30, 50, 59.94, 60	
Up/Down Scaling And Frame Rate Conversion	Any Resolution & Rate -> Any Resolution & Rate	
Marker	Aspect Ratio: 16:9 Safety Region : 80~ 100% Color : White, Red, Green, Blue	
Firmware Upgrade	Yes	Built-in Web Server using Ethernet & USB
Preview Monitoring	Yes	Front 7" LCD
Status Monitoring	Yes	- Built-in Web Server - Front LCD
Control	Yes	- Built-in Web Server - Front LCD GUI

Standard

	Interface	Q'ty	Resolution	Spec
Input	HDMI	1EA	2160p60/59.94 2160p50 2160p30/29.97 2160p25 2160p24/23.98 1080p60/59.94 1080p50 1080p30/29.97 1080p25 1080p24/23.98 720p60/59.94 720p50	HDMI 2.0b
	SDI	1EA	2160p60/59.94 2160p50 2160p30/29.97 2160p25 2160p24/23.98 1080p60/59.94 1080p50 1080p30/29.97 1080p25 1080p24/23.98 720p60/59.94 720p50	SMPTE ST 2082-1 SMPTE ST 424 SMPTE ST 372 SMPTE ST 292

	Interface	Q'ty	Resolution	Spec
Output	HDMI	1EA	2160p60/59.94 2160p50 2160p30/29.97 2160p25 2160p24/23.98 1080p60/59.94 1080p50 1080p30/29.97 1080p25 1080p24/23.98 720p60/59.94 720p50	HDMI 2.0b
	SDI	2EA	2160p60/59.94 2160p50 2160p30/29.97 2160p25 2160p24/23.98 1080p60/59.94 1080p50 1080p30/29.97 1080p25 1080p24/23.98 720p60/59.94 720p50	SMPTE ST 2082-1 SMPTE ST 424 SMPTE ST 372 SMPTE ST 292

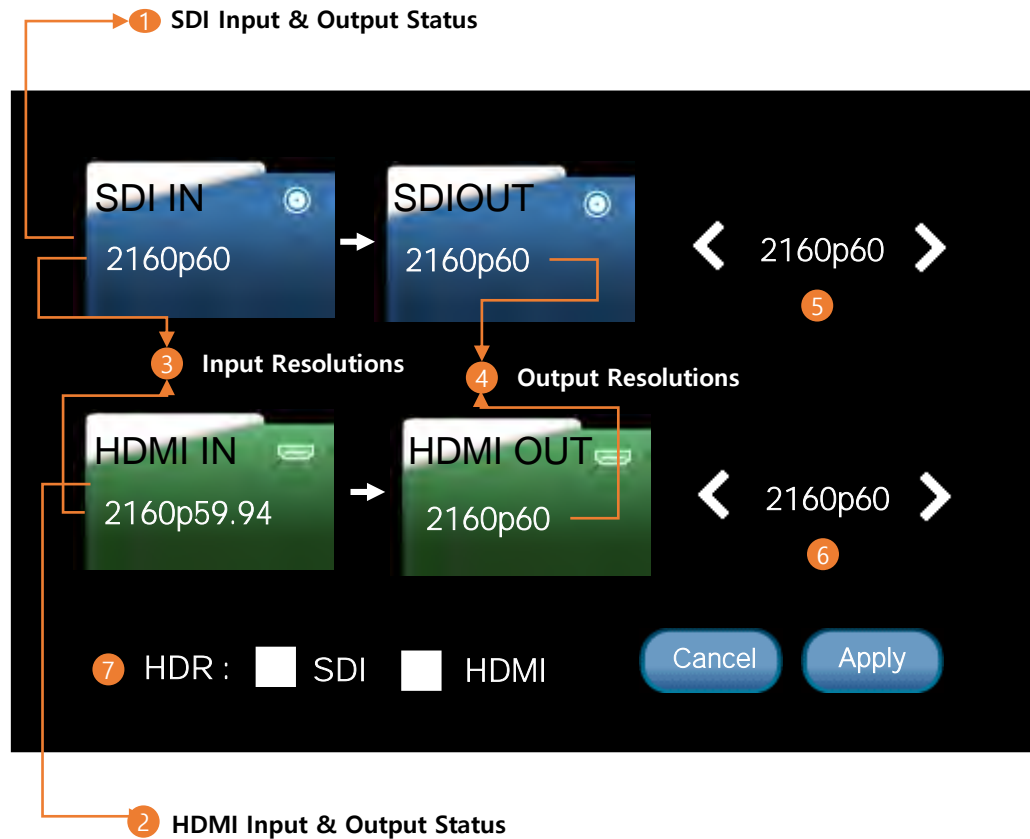
Product & Package

Front	Rear	Contents		
		 <p data-bbox="1640 562 1888 625">UHD Generator & Analyzer</p>	 <p data-bbox="1964 572 2125 668">Adapter & Power Code (Option)</p>	 <p data-bbox="2211 579 2308 639">User Manual</p>
Product Size Information		Package Size Information		
		 <p data-bbox="2091 811 2308 848">Weight: 4.7 KG</p> <p data-bbox="2084 911 2168 933">380mm</p> <p data-bbox="2142 1110 2226 1133">115mm</p> <p data-bbox="1753 1253 1837 1276">380mm</p>		

Supporting 12G SDI & Quad 3G SDI and HDMI2.0a/b

- 12G SDI Input & Output
 - ✓ Support HD, 3G Level A/B, 6G, 12G
- Quad 3G SDI Input & Output
 - ✓ Support HD, 3G Level A/B, 6G, 12G
- HDMI2.0a Input & Output
 - ✓ Support up to 3840 x 2160@60p
- Dual Scaler included
 - ✓ Support SDI and HDMI outputs with independent resolutions
 - ✓ Convert resolutions and frame rates
- Cross Conversion
 - ✓ SDI to HDMI and HDMI to SDI
- LCD Preview and Touch Control
 - ✓ Monitor inputs and outputs
 - ✓ Graphic User Interface and Touch Control
- Analyzer features
 - ✓ Video/Audio Timing, Info-Frame Parsing and ST352.
- Generator features
 - ✓ Resolution, Frame Rate, Color Space, Color depth and Chroma Sampling.

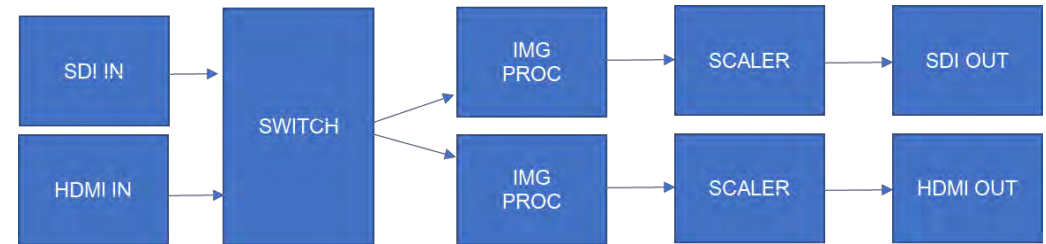
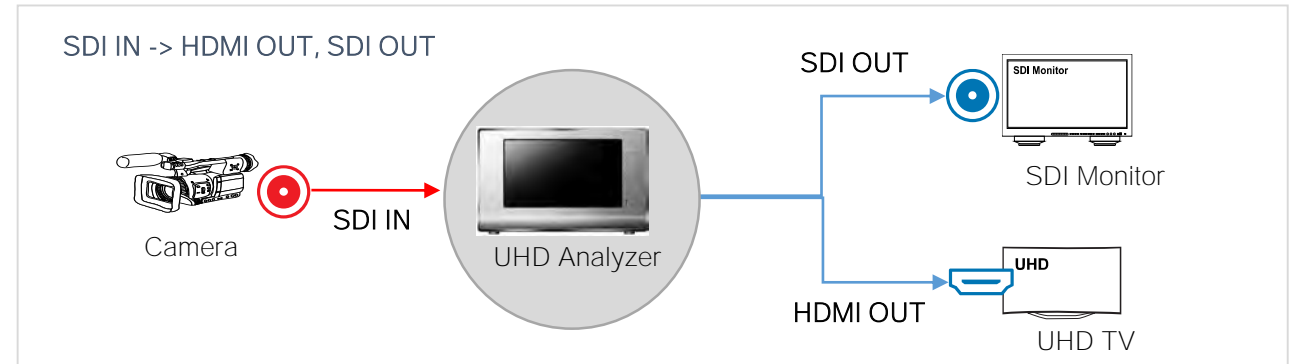
LCD Preview and Touch Control



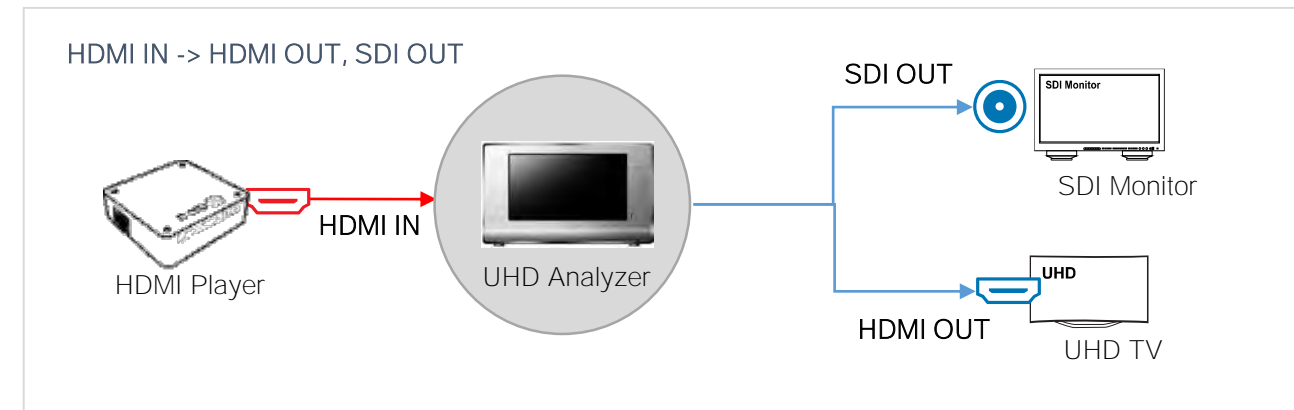
1. SDI Input & Output Status
2. HDMI SDI Input & Output Status
3. Input Resolution View for input Resolution
4. Output Resolution View for output Resolution
5. Possible to select SDI output resolution using by Left and Right buttons
6. Possible to select HDMI output resolution using by Left and Right buttons
7. Possible to select applying HDR or not

Option 1. Switch Operation Mode

SDI signal can be converted to HDMI and SDI signals.
Input SDI signals can be up or down scaled to outputs.
Output resolutions for HDMI and SDI can be set independently.

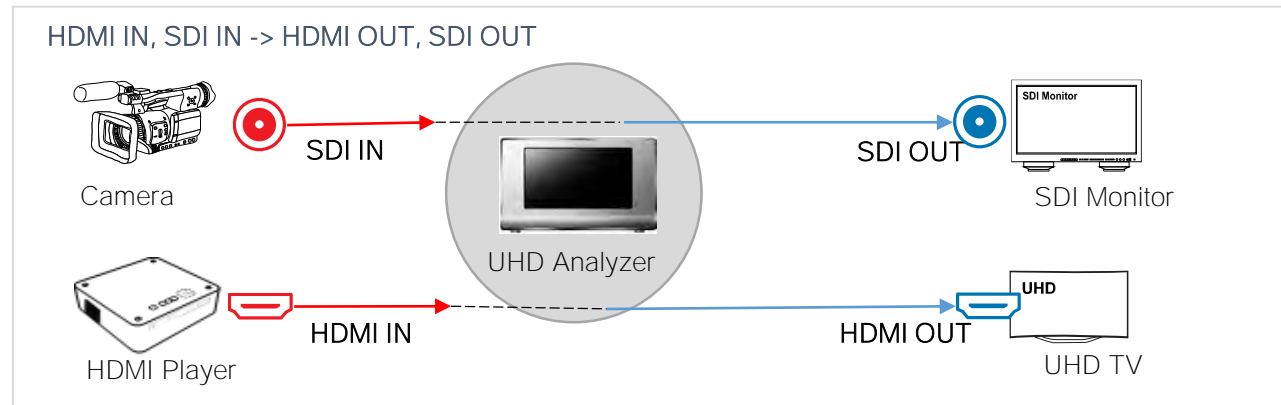


HDMI signal can be converted to HDMI and SDI signals.
Input HDMI signals can be up or down scaled to outputs.
Output resolutions for HDMI and SDI can be set independently.

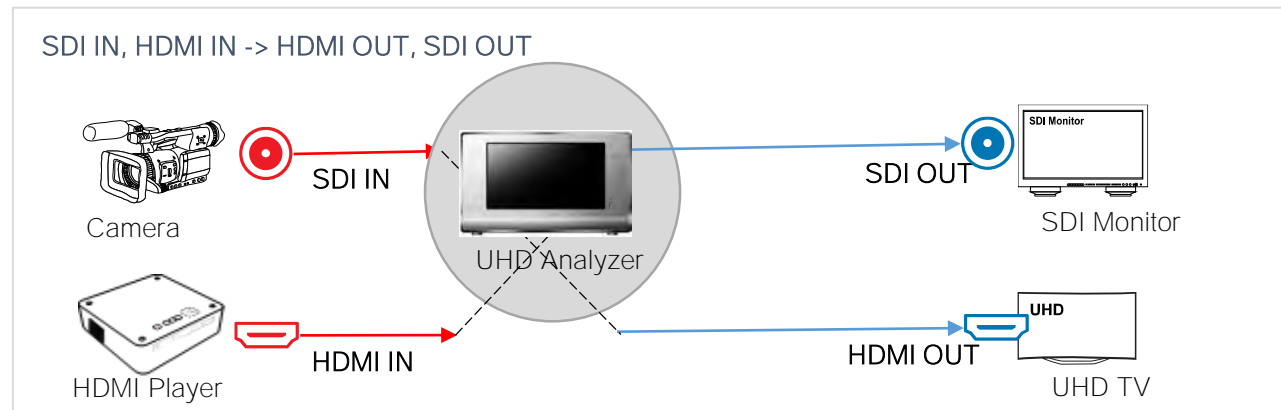


Option 2. Matrix Operation Mode

This mode works as a two separate scaler.
HDMI input signal can be up or down scaled to HDMI output.
SDI input signal can be up or down scaled to SDI output. SDI and HDMI paths are working independently.



This mode works as a two separate scaler. Signal paths are crossed.
HDMI input signal can be up or down scaled to SDI output.
SDI input signal can be up or down scaled to HDMI output. Two separate video paths are working independently.

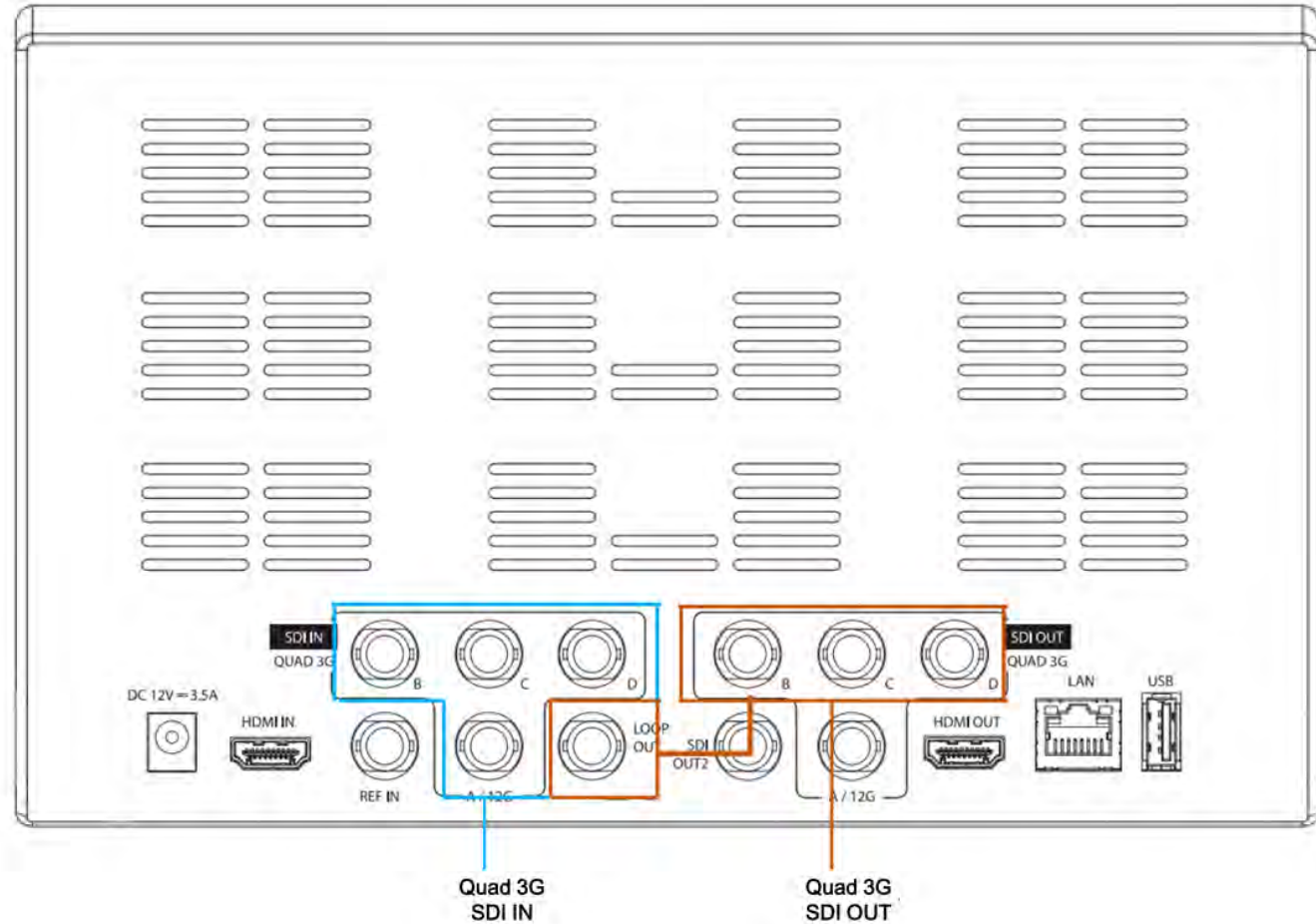


Option 3. Input Mode (Auto Detection Quad-3G)

Quad 3G SDI signal will be activated automatically if SDI input A,B,C and D are connected.

Loop Out is also activated automatically .

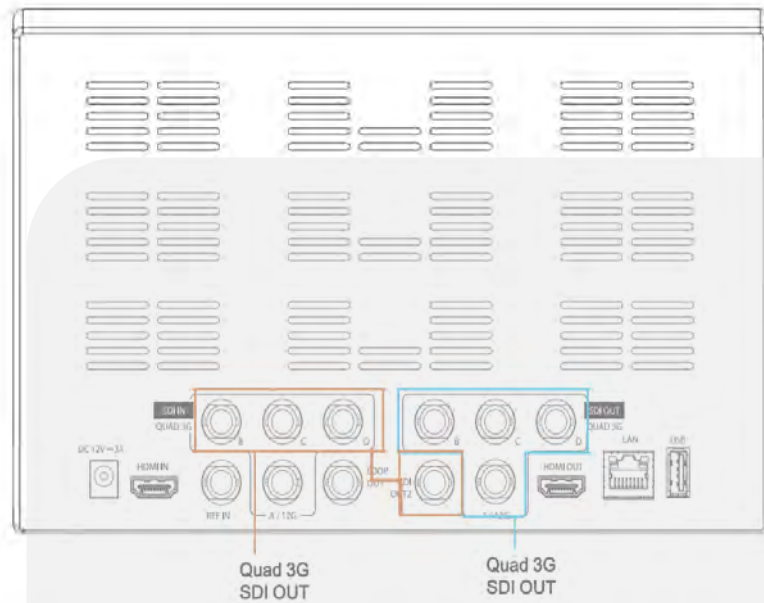
- SDI Input A >> Loop Out
- SDI Input B >> SDI Output B
- SDI Input C >> SDI Output C
- SDI Input D >> SDI Output D



Option 4. Output Mode

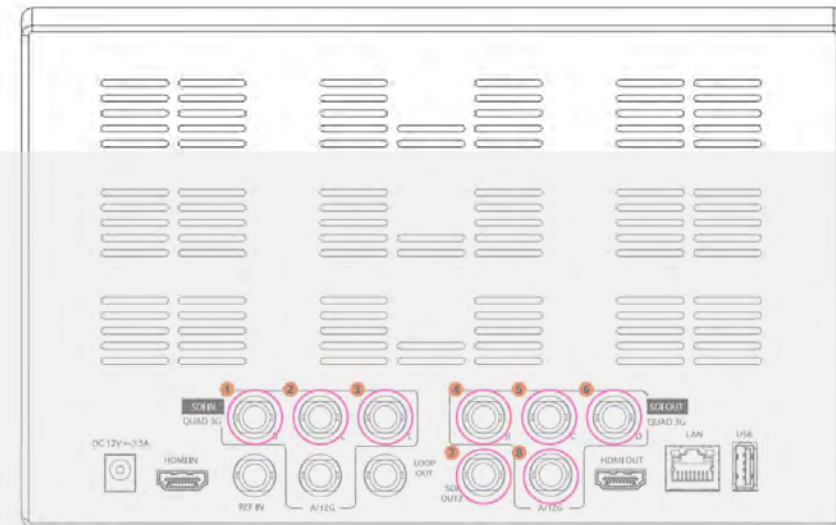
Quad 3G Mode


This mode works as a splitter for Quad 3G.
It can support 2 x Quad 3G SDI outputs.



Splitter Mode (TBD)

This mode works as a splitter for 12G.
It can support 8 x 12G SDI (Single Link) outputs.





Frontniche Ltd, Circuit Bureau Building,
Unit 5 Factory Lane, Beeston,
Nottingham,
NG9 4AA.
Tel: +44 (0)1949851486 Fax: +44(0)709262114 EM:
sales@frontniche.com Web: www.frontniche.com