12G-SDI Distribution Amplifier

AVLINK™

(12S-104)
1 In 4 Out

(12S-108)
1 In 8 Out

USER MANUAL   V1.0
12S-104 / 12S-108

Package Contents-
- 1 12S-104 or 12S-108
- 1 user manual
- 1 power adapter DC 12V with lock
- 4 foot pads
- 2 screws

Any thing missed, please contact with your vendor.

Introduction

Through the 12G-SDI/SDI Distribution Amplifier, you can use one image source to more TV/displays. Featuring four/eight separately buffered 12G-SDI/SDI outputs, all products in this series provides automatic cable equalization to 75Meters and automatically adapts to different data rate.

12S-104/12S-108 is ideal for:
- 4K TV / Monitor production line
- 4K SDI image input devices
- Image transmission devices

Features

- Compliant with SMPTE 2082-1, 2081-1, 424M, 292M, 344M, 259M and DVB-ASI.
- SD/HD/3G/6G/12G-SDI Input Auto Detect data rate with multi color Lock LED Indicator.
- SD/HD/3G/6G/12G-SDI Input signal quality with flash light Lock LED Indicator.
- Micro USB Interface for user firmware update.
- DIP SW Control SDI OUT 1&2, 3&4 output switch and fine-tuning output Swing (for 12S-104).
- DIP SW Control SDI OUT 1&2, 3&4, 5&6, 7&8 output switch and fine-tuning output swing (for 12S-108).
- Inter-locked power plug for DC supply stably.
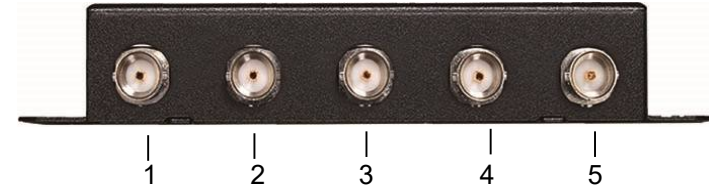
Specifications

Function	12S-104	12S-108
Input serial digital BNC connector	1	
Output serial digital BNC connector	4	8
BNC impedance	75Ω	
Micro USB	1	
Max. Resolution	UHD, 4K@60	
Operation Temperature	0℃~40℃{32℉~104℉}	
Power Adapter (Min.)	DC 12V with lock	
Housing	Metal	
Weight	316g	723g
Dimensions (LxWxH)mm	150x75x25	240x114x25

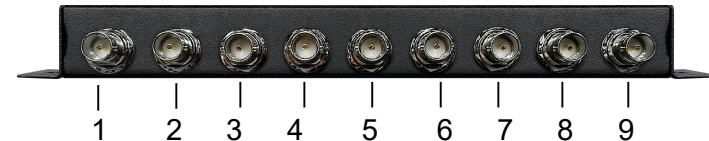## 12S-104/12S-108 FRONT VIEW

1. Micro USB
2. Lock LED
3. DIP SW
4. Power LED
5. Power Jack

12S-104 REAR VIEW

1. SDI OUTPUT 4
2. SDI OUTPUT 3
3. SDI OUTPUT 2
4. SDI OUTPUT 1
5. SDI INPUT

12S-108 REAR VIEW

1. SDI OUTPUT 8
2. SDI OUTPUT 7
3. SDI OUTPUT 6
4. SDI OUTPUT 5
5. SDI INPUT
6. SDI OUTPUT 4
7. SDI OUTOUT 3
8. SDI OUTPUT 2
9. SDI OUTPUT 1

Installation

Before the installation, making sure the 12S-104/12S-108 source and receivers are turning off.

1. Plug the monitor cable into the SDI OUT port connector.

2. Plug the extension cables from video source device (Ex Camcorders or Pattern Generator) into the SDI IN port connectors.
3. Plug the power adapter into the wall socket.
4. Turn on the monitor first.
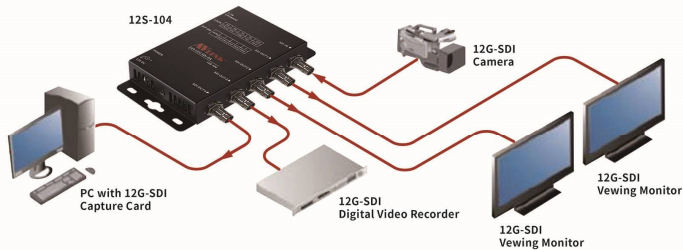5. Turn on the Camcorders or Pattern Generator.

Operation
1. Make sure 'POWER' Led turn on when you plug-in AC adaptor outlet.
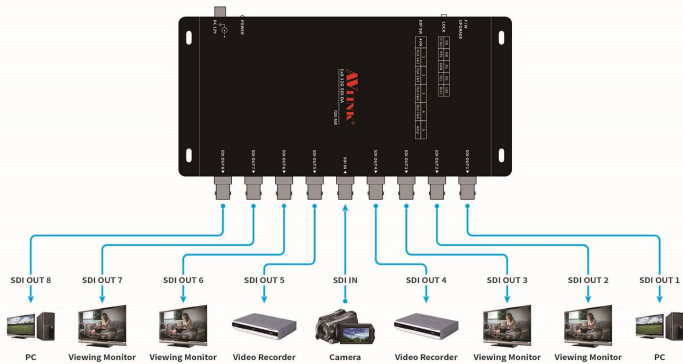2. Make sure 'LOCK LED' turn on when you ready signal source.

Note:
Please check cable/power when you ready everything but LOCK LED is off.

Assembly application diagram:
◆ 12S-104

◆ 12S-108

DIP Switch List of Settings
◆ 12S-104

	1	2	3
ON	OUT1&2 ON	OUT 3&4 ON	OUT Amp ON
OFF	OUT 1&2 OFF	OUT 3&4 OFF	OUT Amp OFF

※Factory Defaults to 1&2 ON.

◆ 12S-108

	1	2	3	4	5
ON	OUT 1&2 ON	OUT 3&4 ON	OUT 5&6 ON	OUT 7&8 ON	OUT Amp ON
OFF	OUT 1&2 OFF	OUT 3&4 OFF	OUT 5&6 OFF	OUT 7&8 OFF	OUT Amp OFF

※Factory Defaults to 1~4 ON.

Lock Led List of Colors

COLOR	SDI IN signal
LIGHT BLUE	SD
PURPLE	HD
GREEN	3G
YELLOW	6G
BLUE	12G

Lock Led List of Flashing Speed

Flashing speed	Always on	250(ms)	500(ms)	1(s)
Input SDI Signal Quality	Excellent	Good	Poor	Worse

SDI Cable Length
(Belden 1694A)
12Gbps - 70m
6Gbps - 110m
3Gbps - 220m
1.5Gbps - 265m
270Mbps - 530m

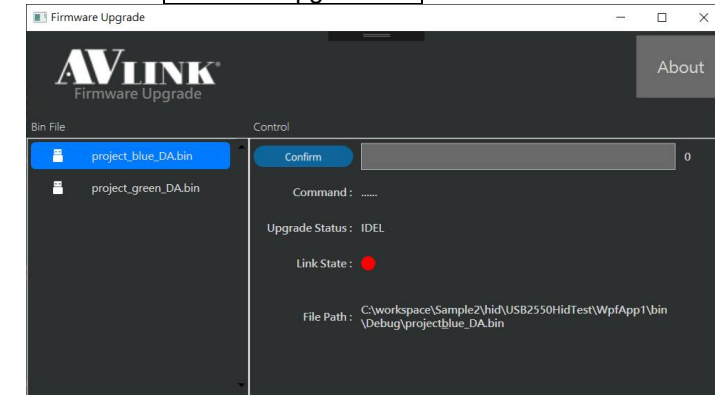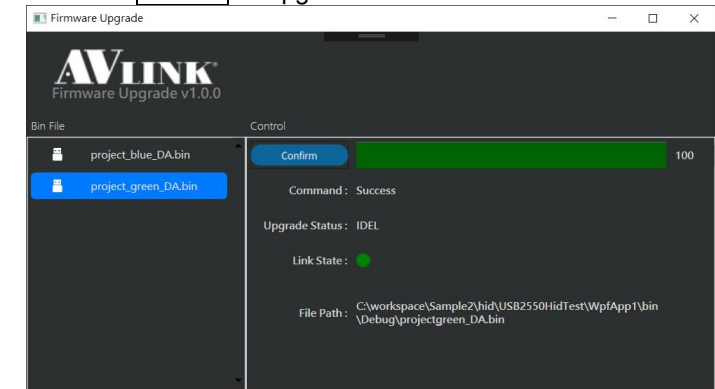# Firmware Upgrade:

Micro USB   Power

1. Connect Power Jack
2. Connect Micro USB
3. Put Bin File in Start Folder.
4. Execute Firmware Upgrade.exe

5. Check Link State (Red: Disconnect Green: Connected)
6. Select Bin File
7. Press Confirm to Upgrade

8. Check Progress Bar value is 100 and Command Success
※Firmware upload utility software from AVlink's official website.

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