gofanco®

PRO-12GSDI8P

1x8 12G/6G/3G/HD/SD-SDI Distribution Amplifier
with Reclocking

User's Guide

1 YEAR WARRANTY   RoHS   FC   CE

gofanco®

Congratulations for owning a gofanco product. Our products aim to meet all your connectivity needs wherever you go.

Have fun with our products!

Please read this manual carefully before first use.

If you need more information about our products, please visit
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1. Introduction

The PRO-12GSDI8P 1x8 12G/6G/3G/HD/SD-SDI Distribution Amplifier with Reclocking receives one SDI input, perfectly duplicates it, and re-transmits eight SDI outputs for real time multi-viewing. It is a reliable video device splitting an SDI, HD-SDI, 3G-SDI, 6G-SDI, or 12G-SDI video source to eight SDI compliant displays at the same time.

2. Features

- 12G/6G/3G/HD/SD-SDI distribution
- Eight independently buffered and reclocked outputs✻
- Cable equalization and signal retiming
- LED indication of signal lock and video rate
- Pass ancillary data and embedded audio
- Provides automatic input cable equalization (Belden 1694A) up to 180m (594ft)@3G, 100m (330ft)@6G and 70m(230ft) @12G
- Reclocking SDI signals for cascading and thus longer transmission
- Inter-locked power supply for better fixedness

> ✻ Due to the super high frequency and lower jitter requirement for 12G SDI signals, to have the best performance, it is strongly recommended to use one 75 ohm terminator if the paired SDI in not in use.
>
> Please see the following table for 12G SDI output pairing.

Table #1

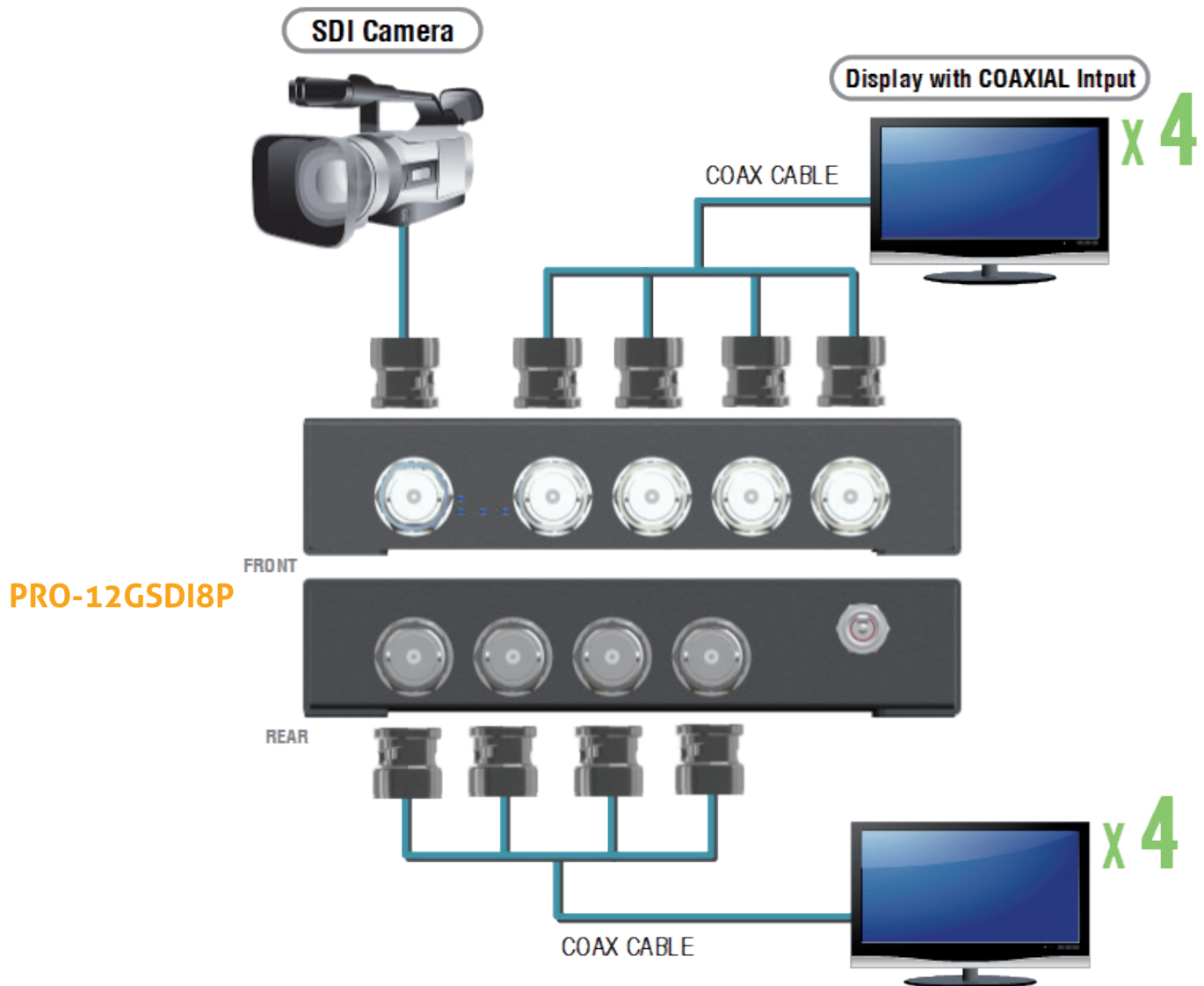|	Output Port			Output Port
Pair A	Output 1 & 2		Pair C	Output 5 & 6
Pair B	Output 3 & 4		Pair D	Output 7 & 8

3. Package Contents

- 1x PRO-12GSDI8P
- 1x 5V power adapter
- 1x BNC 75 ohm terminator
- 1x User Manual

4. Specifications

Item	Description	
SDI standard	SD/HD/3G/6G/12G-SDI	
Multi-Rate Support	Auto detection of SD, HD, 3G, 6G or 12G Signals	
SDI Compliance	SMPTE 424M, SMPTE 292M, SMPTE 344M, SMPTE 259M, DVB-ASI, ST-2081(6G), ST2082(12G)	
SDI Data rates	1.485 / 2.97 / 5.94 / 11.88 Gbps	
Video bandwidth	[11.88Gpbs & 11.88/1.001Gbps]	
Output impedance	75π	
Reclocking	Yes	
Cable equalization	[12G] up to 70m (230ft) [6G] up to 100m (330ft) [3G] up to 180m (594ft)	
Audio support	Yes	
RP-198 pathological patterns	Immune	
PCB stack-up	4-layer board [impedance control — differential 100π ; single 75π]	
Input	1x BNC [SDI]	
Output	8x BNC [SDI]	
BNC connector	75π inter-locked socket	
Eye pattern characteristics[12G]	Amplitude: Within 800mV (<10%) Rise/Fall time: Less than 35ps	Timing jitter: <1.0 UI (10Hz to 1188MHz) Alignment jitter: <0.3 (100KHz to 1188MHz)
Mechanical		
Housing		Metal enclosure
Dimensions [L x D x H]	Model	133 x 53 x 28 mm [5.2" x 2.1" x 1.1"]
	Package	198 x 137 x 74mm [7.8" x 5.4" x 2.9"]
	Carton	420 x 400 x 300mm [1'4"x 1'3" x 11.8"]
Weight	Model	198g [7 oz]
	Package	425g [0.9 lbs]
Fixedness		Inter-locked power supply
Power supply		5V 1A DC
Power consumption		3.5 Watts [max]
Operation temperature		0~40°C [32~104°F]
Storage temperature		-20~60°C [-4~140°F]
Relative humidity		20~90% RH [no condensation]

* The measurement results are from Phabrix QX with SDI through 1m (3.3ft) long Belden 1694A.

5. Connection Diagram

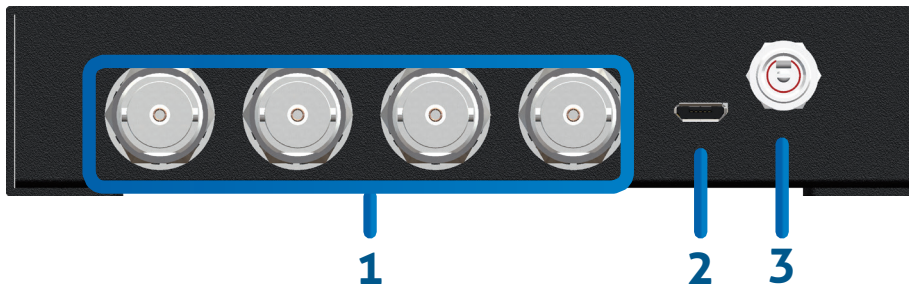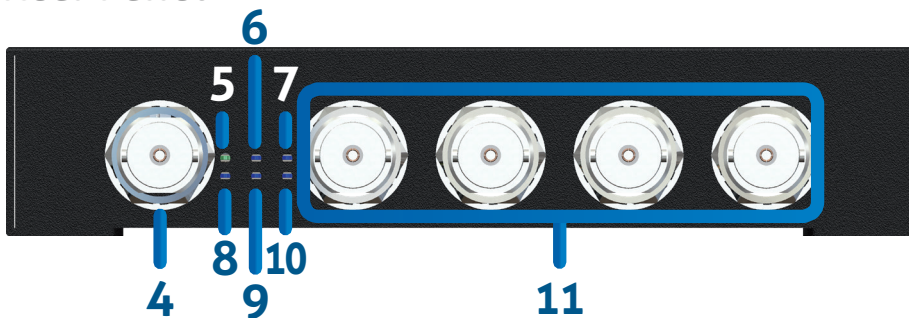

6. Hardware Installation

1. Connect an SDI camera or other SDI devices to the PRO-12GSDI8P's SDI input.

2. Connect SDI sink devices (e.g. monitors or video processors) to the PRO-12GSDI8P's outputs.

3. Plug the power adapter into a reliable power outlet.

7. Panel Description

Front Panel

Rear Panel

1. 12G/6G/3G/HD/SD-SDI output
2. Micro-USB for F/W update
3. 5V DC power jack
4. 12G/6G/3G/HD/SD-SDI input
5. Power LED indicator
6. 12G Signal LED indicator
7. 6G Signal LED indicator
8. 3G Signal LED indicator
9. HD Signal LED indicator
10. SD Signal LED indicator
11. 12G/6G/3G/HD/SD-SDI output

11. Limited Warranty

The SELLER warrants the **PRO-12GSDI8P 1x8 12G/6G/3G/HD/SD-SDI Distribution Amplifier with Reclocking** to be free from defects in the material and workmanship for 1 year from the date of purchase from the SELLER or an authorized dealer. Should this product fail to be in good working order within 1 year warranty period, The SELLER, at its option, repair or replace the unit, provided that the unit has not been subjected to accident, disaster, abuse or any unauthorized modifications including static discharge and power surge. This warranty is offered by the SELLER for its BUYER with direct transaction only. This warranty is void if the warranty seal on the metal housing is broken.

Unit that fails under conditions other than those covered will be repaired at the current price of parts and labor in effect at the time of repair. Such repairs are warranted for 90 days from the day of reshipment to the BUYER. If the unit is delivered by mail, customers agree to insure the unit or assume the risk of loss or damage in transit. Under no circumstances will a unit be accepted without a return authorization number.

The warranty is in lieu of all other warranties expressed or implied, including without limitations, any other implied warranty or fitness or merchantability for any particular purpose, all of which are expressly disclaimed.

Proof of sale may be required in order to claim warranty. Customers outside Taiwan are responsible for shipping charges to and from the SELLER. Cables are limited to a 30 day warranty and cable must be free from any markings, scratches, and neatly coiled.

The content of this manual has been carefully checked and is believed to be accurate. However, The SELLER assumes no responsibility for any inaccuracies that may be contained in this manual. The SELLER will NOT be liable for direct, indirect, incidental, special, or consequential damages resulting from any defect or omission in this manual, even if advised of the possibility of such damages. Also, the technical information contained herein regarding the PRO-12GSDI8P features and specifications is subject to change without further notice**.**

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