

## PRO-SDIGen

12G/6G/3G/HD/SD-SDI Pattern Generator with LED monitor

## User's Guide



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 [www.gofanco.com](http://www.gofanco.com).

For technical support, please email us at [support@gofanco.com](mailto:support@gofanco.com).

For drivers/manuals download, please go to <http://www.gofanco.com/downloads>.

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## 1. Safety and Notice

Please read all of these instructions carefully before you use the device. Save this manual for future reference.

The **PRO-SDIGen 12G/6G/3G/HD/SD-SDI Pattern Generator with LED monitor** has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipment, the PRO-SDIGen should be used with care. Please read and follow the safety instructions to protect yourself from possible injury and to minimize the risk of damage to the unit.

- Follow all instructions and warnings marked on this unit.
- Do not attempt to service this unit yourself, except where explained in this manual.
- Provide proper ventilation and air circulation and do not use near water.
- Keep objects that might damage the device and assure that the placement of this unit is on a stable surface.
- Use only the power adapter and power cords and connection cables designed for this unit.
- Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.

## 2. Introduction

The **PRO-SDIGen 12G/6G/3G/HD/SD-SDI Pattern Generator with LED monitor** is an advanced SDI pattern generator with multi-format (12G/6G/3G/HD/SD) and multi-pattern support. Besides still and moving video test patterns, other features such as audio (SMPTE-291M) are also provided. PRO-SDIGen can support up to 8 channel AES compliant audio with 48KHz sample rate. PRO-SDIGen is equipped with four buttons, one rotary switch and LCD screen for easy device control. This device provides a cost effective way to calibrate and test SDI enable video devices and displays.

## 3. Features

- **Supported output resolution**  
NTSC 525@60, PAL 625@50,  
720p@23.98/50/59.94/60,  
1080i@50/59.94/60,  
1080p@23.97/24/25/29.97/30/50/59.94/60,  
4K2K@23.97/24/25/29.97/30/50/59.94/60
- **Bit Rate**  
2.97 Gbps, 2.967 Gbps, 1.485 Gbps, 1.4835 Gbps, 5.94Gbps,  
5.934Gbps, 11.88Gbps, 11.868Gbps, 270 Mbps
- **Video Patterns**  
100% Color Bars, Borderline, Random Noise, Check Field, Black, Vertical Lines, Black / White alternate fields, Full Grey / Full White, Black to White Gradient, Random Generator for all still patterns, moving squares White noise, Inverse effect with still pattern, Scrolling Title (see Appendix for illustrations)
- **Save Settings to Memory Option**
- **Control**  
By LCM, panel buttons & rotary switch
- **Video Output**  
SDI output (SDI, HD-SDI, 3G-SDI, 6G-SDI, 12G-SDI)
- **Supports Preset Modes**

## 4. Specifications

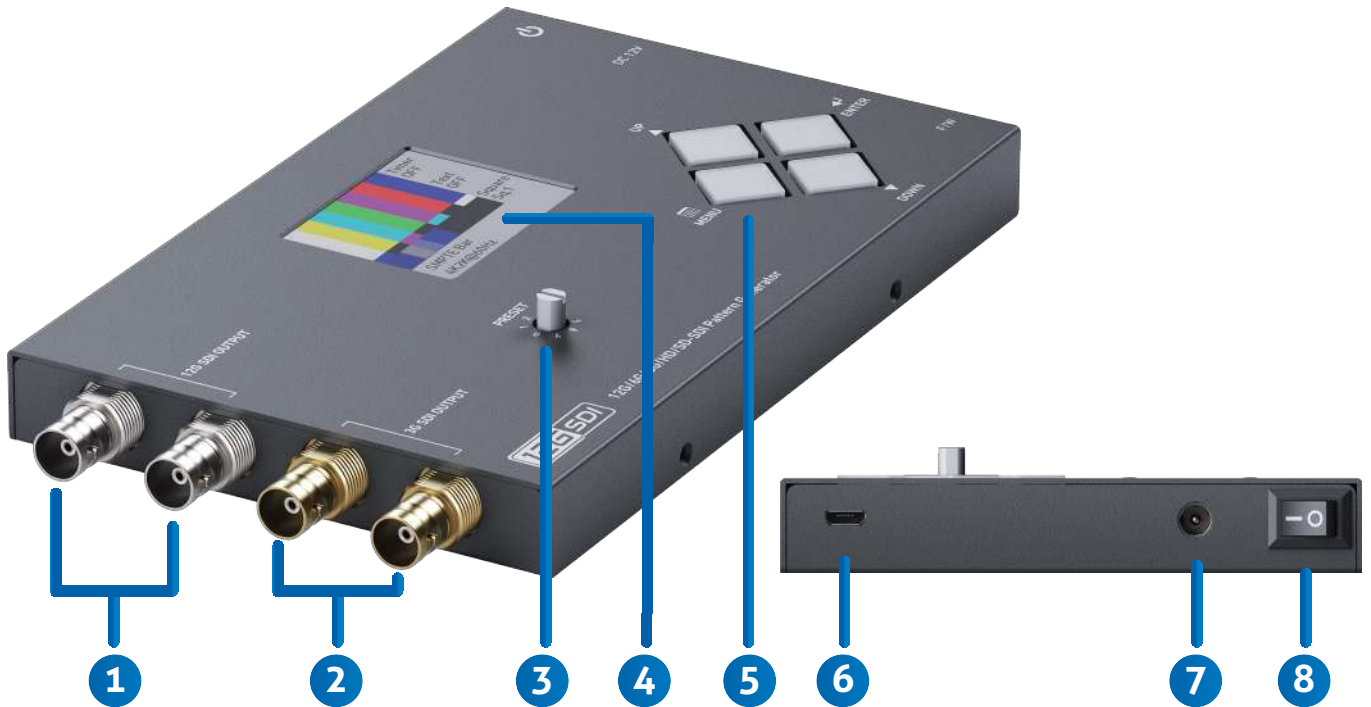
Item	Description
<b>Technical</b>	
Hardware type	Pattern generator
SDI standards	12G/6G/3G/HD/SD-SDI
Auto SDI rate detection	Yes
Supported protocols	SMPTE 259M (270Mbps / 360Mbps) SMPTE 292M / HDTV (1.485 & 1.485/1.001Gbps) SMPTE 424/425M (2.97 & 2.97/1.001Gbps) SMPTE ST-2081 (5.94&5.94/1.001Gbps) SMPTE ST-2082 (11.88&11.88/1.001Gbps)
Video support	11.88Gpbs
Audio support	270 / 1483 / 1485 / 2967 / 2970 / 5934 / 5940 / 11868 / 11880 Mbps
Resolution support	[12G] 4K2K@50/59.94/60 [6G] 4K2K@23.97/24, 25, 30 [3G] 1080p@50/59.94/60 (4:2:2) [HD] 720p50/59.94/60, 1080p24/30, 1035i50/59.94/60, 1080i50/59.94/60 [SD] NTSC@59.94Hz, PAL@50Hz
PCB stack-up	SMPTE-292M / 259M / 424M / ST-2081 / ST-2082
Input	75 $\pi$
Output	[12G-SDI] up to 50m (165ft) / [6G-SDI] up to 100m (330ft) / [3G-SDI] up to 200m (660ft)
HDMI Input selection	Yes
IR remote control	6-layer board [impedance control — differential 100 $\pi$ ; single 75 $\pi$ ]
HDMI connector	4x BNC [SDI]
RJ-45 connector	75 $\pi$ interlocking socket
RS-232 connector	Amplitude: Within 800mV <10% Long time jitter <1.0 UI Rise overshoot: Less than 2% Timing jitter <1.0 UI Fall overshoot: Less than 2% Alignment jitter <0.2 UI

Mechanical		
Housing	Metal enclosure	
Dimensions [L x D x H]	Model	167 x 112 x 24mm [6.5" x 4.4" x 0.9"]
	Package	325 x 196 x 92mm [12.7" x 7.7" x 3.6"]
	Carton	490 x 426 x 352mm [1'6" x 1'4" x 1'2"]
Weight	Model	303g [0.6 lbs]
	Package	533g [1.1 lbs]
Power supply	12VDC	
Power consumption	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]	

## 5. Package Contents

- 1x PRO-SDIGen
- 1x 12V power supply unit
- 1x User Manual

## 6. Panel Description



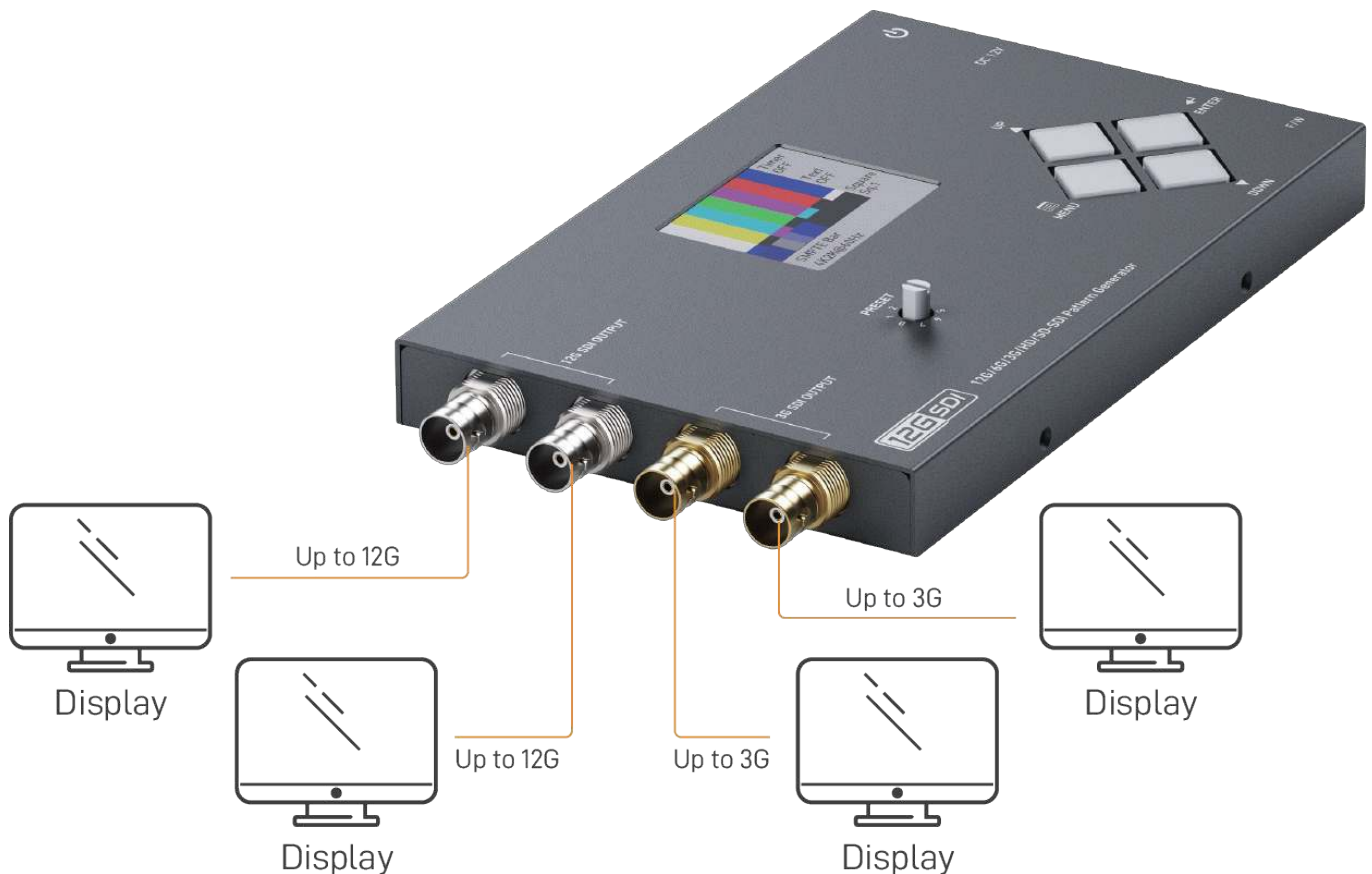
1. SDI OUT1-2: 12G/6G/3G/HD/SD-SDI output
2. SDI OUT3-4: 3G/HD/SD-SDI output
3. Rotary Switch: For 0-7 preset mode
4. LCD: 2.0" LCD monitor
5. PUSH BUTTON:



Button	Function
Menu	Opens the OSD
Enter	Enter the menu item
Up	Choose the last menu item
Down	Choose the next menu item

6. Micro USB: Micro-USB port for F/W update
7. +12V DC: 12V DC power jack
8. Power Switch: Power ON/OFF

## 7. Connection Diagram

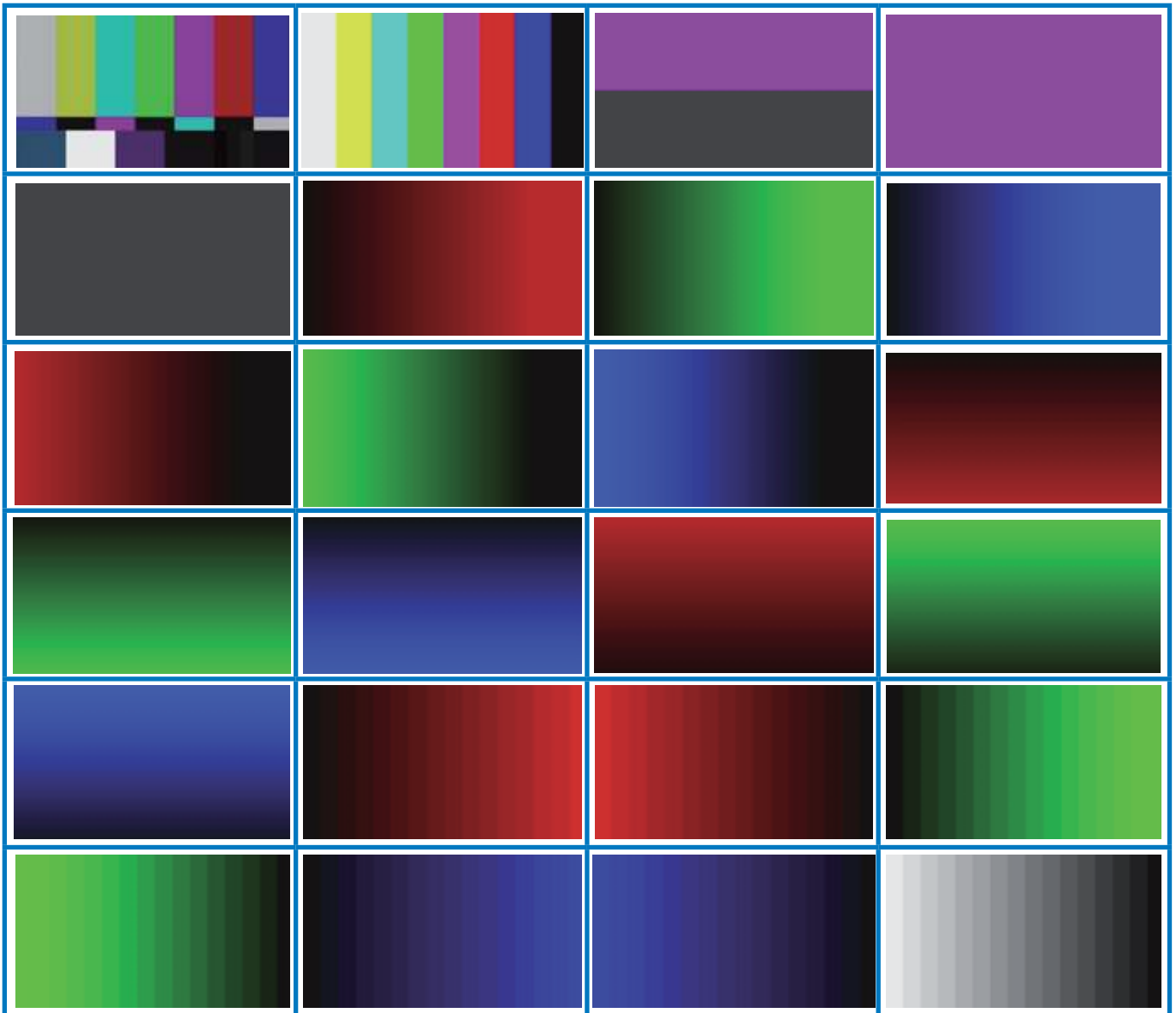


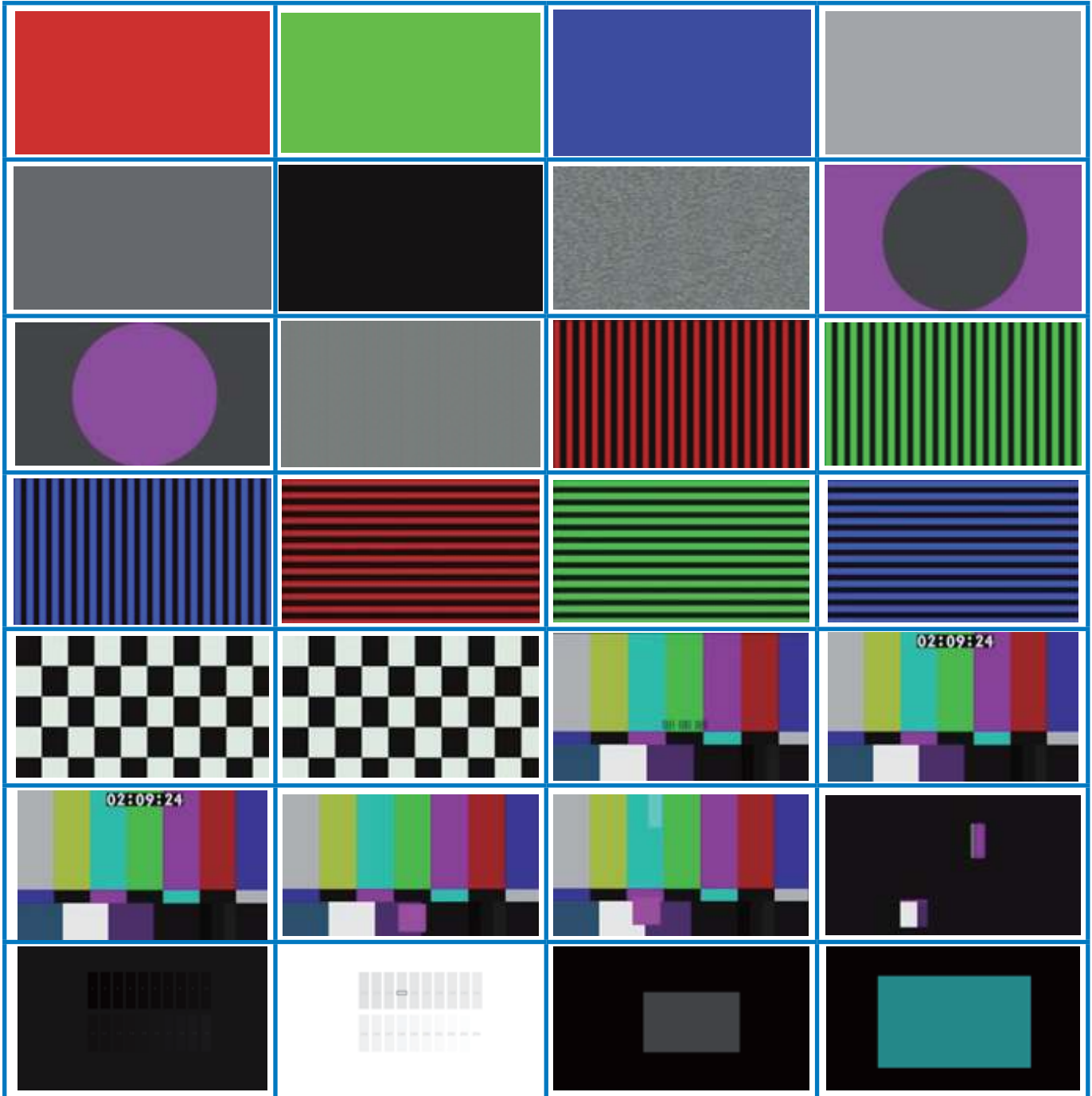
## 8. Notice

1. Due to the high frequency bandwidth and low jitter requirement of SDI signals, it is strongly recommended to use just one SDI OUTPUT with one 75 ohm.
2. Features such as new timings, test patterns and menu items, due to firmware or other updates is subject to change without further notice.

## 9. Appendix

- Built-in Video Patterns





## 10. Limited Warranty

The SELLER warrants the **PRO-SDIGen 12G/6G/3G/HD/SD-SDI Pattern Generator with LED monitor** 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 surges.

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-SDIGen features and specifications is subject to change without further notice.

### Disclaimer

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We reserve the rights to make changes without prior notice to a product or system described herein to improve reliability, function, or design.



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