

gofanco[®]

PRO-EDIDemul

4K EDID Emulator

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.

For technical support, please email us at support@gofanco.com.

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

1. Introduction

The PRO-EDIDemul **4K EDID Emulator** boosts up your HDMI extension transmission over long cable and makes multiple layers cascading of HDMI products possible. The PRO-EDIDemul amplifies and equalizes the HDMI signal to provide high quality audio and video. The power can be provided by HDMI source which follows HDMI spec to provide 5V. If the source cannot provide enough power, the external power can be added to extend HDMI 2.0a signal.

2. Features

- HDMI 2.0a compliant
- Supports 4K2K@60 4:4:4 8bits
- Supports HDR*, which is 4K2K@60 4:2:0 10bits**
- HDCP 2.2 compliant
- Supports CEC bypass
- Supports default EDID and EDID learning from display
- Supports LPCM 7.1 audio, Dolby TrueHD, Dolby Digital

* HDR = High Dynamic Range.

** The video bandwidth of 4K2K@60 4:2:0 10bits (HDR) is 384 MHz, and the 4K2K@60 4:4:4 8bits is 594MHz.

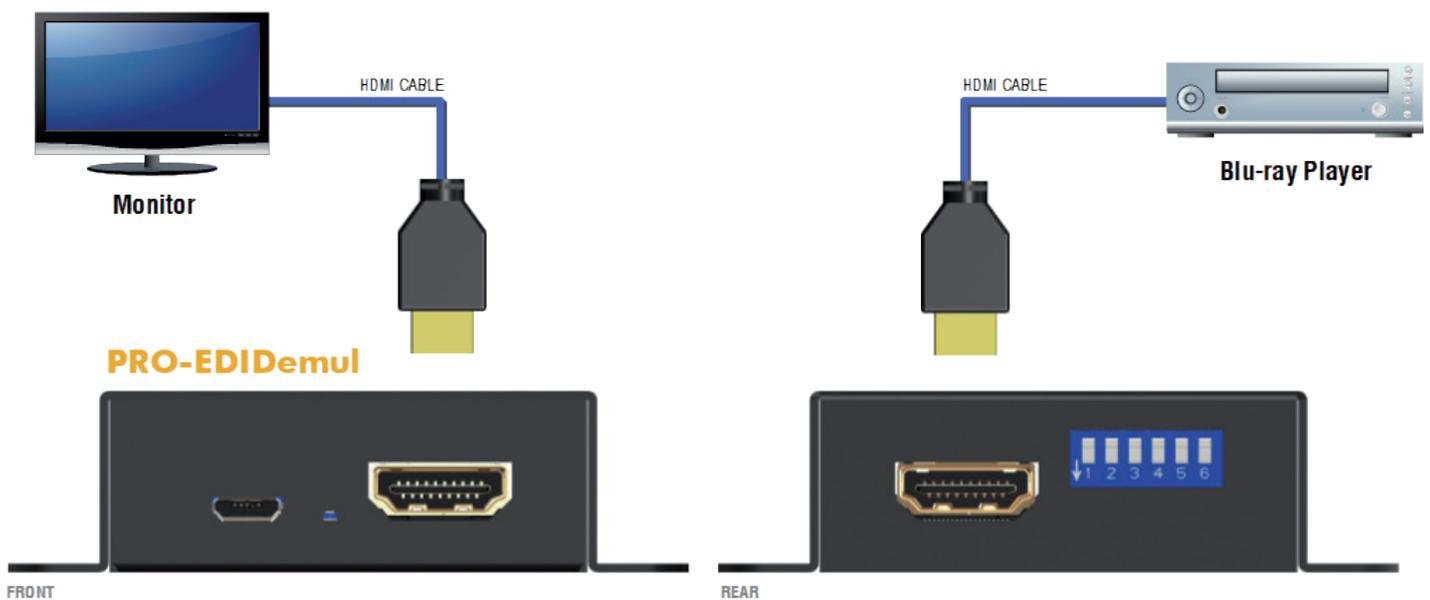
3. Specifications

Item	Description	
Technical		
Role of usage	HDMI EDID Emulator/Retimer/Repeater	
HDMI compliance	HDMI 2.0a	
HDCP compliance	Yes	
Input Video bandwidth	Single-link 594MHz [18Gbps]	
Video support	Up to HDR 4K2K@60 (4:2:0 10bits) / 4K2K@60 (4:4:4 8bits)	
Audio support	Bypass	
ESD protection	Human body model — ±15kV [air-gap discharge] & ±8kV [contact discharge]	
PCB stack-up	4-layer board [impedance control — differential 100Ω; single 50Ω]	
CEC Channel	Bypass	
Input	1x HDMI	
Output	1x HDMI	
HDMI connector	Type A [19-pin female]	
Mechanical		
Housing	Metal enclosure	
Dimensions [L x D x H]	Model	74 x 57 x 20mm [2.9" x 2.2" x 0.8"]
	Package	165 x 111 x 42mm [6.4" x 4.4" x 1.7"]
	Carton	490 x 426 x 352mm [1'6" x 1'4" x 13.8"]
Weight	Model	103g [3.6 oz]
	Package	309g[10.9 oz]
Fixedness	Wall-mounting case with screws	
Power supply	5V 1A DC	
Power consumption	3 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]	

4. Package Contents

- 1x PRO-EDIDemul
- 1x DC 5V 1A power supply
- 1x User Manual

5. Connection Diagram



6. Panel Description

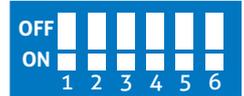
Front Panel



- 1. Micro USB:** Connect to a 5V DC power supply / FW update
- 2. LED:** Power indicator
- 3. HDMI OUT:** Connect to an HDMI display with an HDMI male-male cable here
- 4. HDMI IN:** Connect to an HDMI source with an HDMI male-male cable here
- 5. EDID MODE:** See more detail in the DIP SWITCH SETTING section

7. Dip Switch Setting

DIP Switch Position	description
PIN#1	
OFF[↑]	HDMI EDID Mode
ON[↓]	DVI EDID Mode



* Please use HDMI mode when you have HDMI system while DVI EDID mode with DVI system

Mode	DIP Switch Position					description
	PIN#2	PIN#3	PIN#4	PIN#5	PIN#6	
1	OFF[↑]	OFF[↑]	OFF[↑]	OFF[↑]	OFF[↑]	EDID Bypass from connected monitor
2	OFF[↑]	OFF[↑]	OFF[↑]	OFF[↑]	ON[↓]	EDID Saving Note: EDID of the connected monitor at mode 3 will be saved when DIP switch changed from mode 3 to mode 2
3	OFF[↑]	OFF[↑]	OFF[↑]	ON[↓]	ON[↓]	EDID Learning from connected monitor and save to mode 2
4	OFF[↑]	ON[↓]	ON[↓]	OFF[↑]	OFF[↑]	Full HD(1080p@60) – 8bit 2D video & 7.1ch audio
5	OFF[↑]	ON[↓]	OFF[↑]	ON[↓]	ON[↓]	Full HD(1080p@60) – 8bit 3D video & 2ch audio
6	OFF[↑]	ON[↓]	OFF[↑]	ON[↓]	OFF[↑]	Full HD(1080p@60) – 8bit 3D video & 7.1ch audio
7	OFF[↑]	ON[↓]	OFF[↑]	OFF[↑]	ON[↓]	HD(1080i@60)(720p@60) – 8bit 2D & 2ch
8	OFF[↑]	ON[↓]	OFF[↑]	OFF[↑]	OFF[↑]	HD(1080i@60)(720p@60) – 8bit 2D & 7.1ch
9	OFF[↑]	OFF[↑]	ON[↓]	ON[↓]	ON[↓]	Full-HD(1080p@60) – 12bit 2D video & 2ch audio
10	OFF[↑]	OFF[↑]	ON[↓]	ON[↓]	OFF[↑]	Full-HD(1080p@60) – 12bit 2D video & 7.1ch audio
11	OFF[↑]	OFF[↑]	ON[↓]	OFF[↑]	ON[↓]	Full-HD(1080p@60) – 8bit 2D & 2ch & 5.1ch
12	OFF[↑]	OFF[↑]	ON[↓]	OFF[↑]	OFF[↑]	Ultra HD(4K2K@60 4:2:0) – 8/10/12bit 3D video & 2ch audio
13	OFF[↑]	ON[↓]	ON[↓]	OFF[↑]	ON[↓]	Ultra HD(4K2K@60 4:2:0) – 8/10/12bit 3D video & 7.1ch audio
14	OFF[↑]	OFF[↑]	OFF[↑]	ON[↓]	OFF[↑]	Ultra HD(4K2K@60) – 8/10/12bit 3D HDR video & 2ch audio
15	OFF[↑]	ON[↓]	ON[↓]	ON[↓]	OFF[↑]	Ultra HD(4K2K@60) – 8/10/12bit 3D HDR video & 7.1ch audio
16	ON[↓]	OFF[↑]	OFF[↑]	OFF[↑]	OFF[↑]	Ultra HD(8K4K@30)* (4K2K@60) – 8/10/12bit 3D HDR video & 7.1ch audio
17	ON[↓]	OFF[↑]	OFF[↑]	OFF[↑]	ON[↓]	User Programmable EDID (via software on page 8)

* Only Supports 8K4K@30 4:2:0 8bits

8. Software Operation

Note: Only the User Programmable EDID mode (mode 17) requires this software. This software can be found on our website at www.gofanco.com/downloads

Getting Started:

Your Computer System Requires:

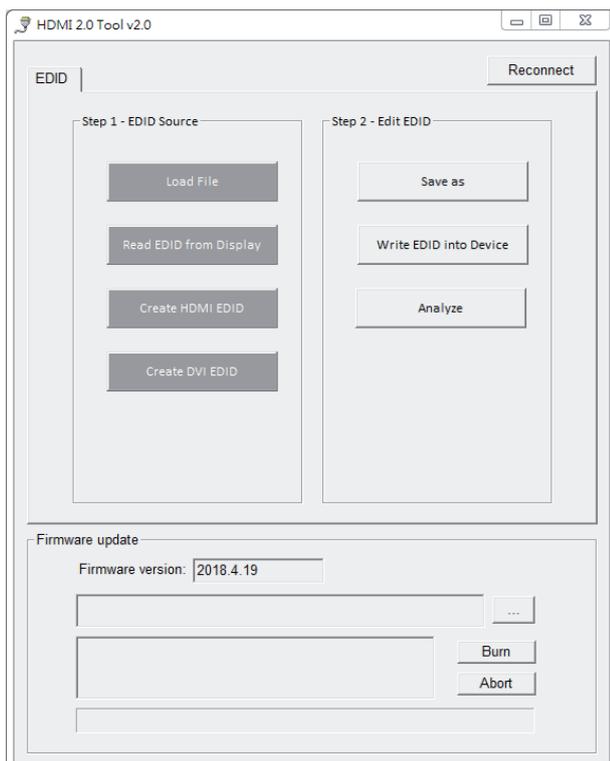
The software supports Windows XP consistently. Both Windows 7 and Windows 8 are supported after manually configuring the compatibility properties.

Windows 7 and Windows 8: Please configure the compatibility properties manually.

Step 1. Right-click the link for the software that you want to configure, and then click Contents.

Step 2. On the Compatibility tab, click Run this program in compatibility mode.

Start Software:



EDID

a) Step 1: Select EDID Source

Load File

: To select EDID source by loading the file you saved.

Read EDID from Display

: To read EDID info from the connected display.

Create HDMI EDID

/ Create DVI EDID

: To create EDID source which users are capable of monitoring or modifying.



The selected EDID source will be highlighted in red.

Create HDMI EDID

1. Click **Create HDMI EDID** to pop-up the HDMI EDID edition page, which users are capable of monitoring or modifying HDMI EDID here.
2. Click "Add" button after specifying your options.
3. Finally please click "Confirm" button to generate EDID and then you will see the success message.

Create DVI EDID

1. Click **Create DVI EDID** to pop-up the DVI EDID edition page, which users are capable of monitoring or modifying DVI EDID here.
2. Click "Add" button after specifying your options.
3. Finally please click "Confirm" button to generate EDID and then you will see the success message.

b) Step 2: Edit EDID

Save as : To save the EDID information to computer for future use.

Write EDID into Device : To write EDID information into the PRO-EDIDemul device

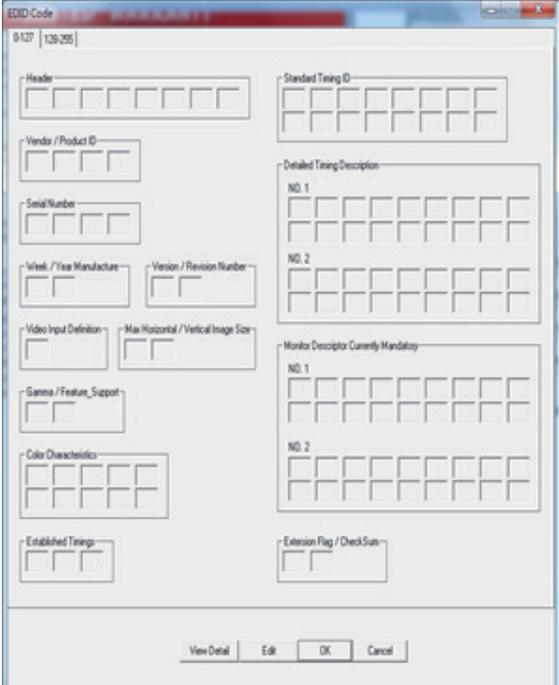
Analyze : To make a quick analysis of EDID information you process, which users are capable of monitoring or modifying.

Analyze

1. Click **Analyze** to make a quick analysis on the EDID information you process.

View Detail: To make a quick analysis on the EDID information.

Edit: users are capable of monitoring or modifying EDID information.



c) Firmware update

Update FW to the device

- a. Click **...** to load the FW and update it to PRO-EDIDemul device
- b. Click **Burn**, then re-cycle power to start the FW update process

9. Limited Warranty

The SELLER warrants the **PRO-EDIDemul 4K EDID Emulator** 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 and power adapters are limited to a 30 day warranty and 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-EDIDemul features and specifications is subject to change without further notice.**

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