



Component/Composite over CAT5 Extender



P/N: AV-GM03X3-S1

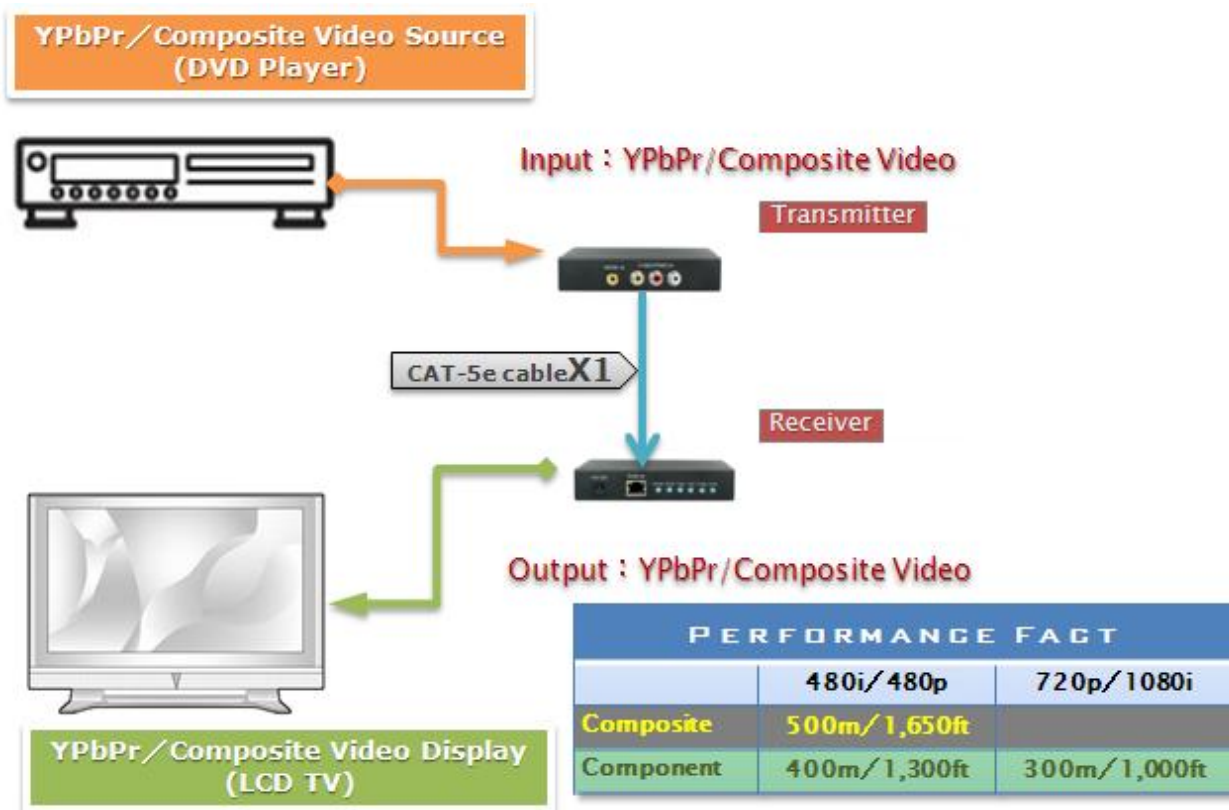


Safety and Notice

The **AV-GM03X3-S1 Component/Composite over CAT5 Extender** has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the AV-GM03X3-S1 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.

With only one CAT-5e cable, the AV-GM03X3-S1 lets you extend signals to cover the distance up to 500m (1,650ft). The devices are composed of a transmitter and a receiver. The transmitter is installed near the video signal source, and the receiver is placed near the desired display, up to impressive 500m (1,650ft) away for composite (CVBS) case or component (YPbPr) case in 480i / 480p with digital audio to 400m (1,300ft) away. For composite case, you can send your video with analog stereo audio signal, and for component case, digital audio in S/PDIF format can be sent through a cost-effective CAT-5e cable.



Features

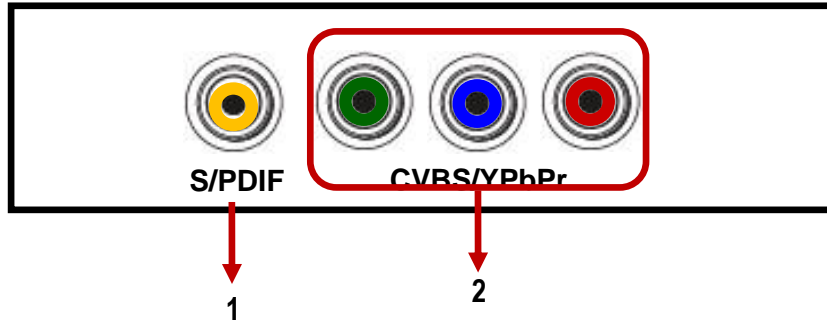
- Extends composite signals with analog audio to 500m (1,650ft)
- Extends component video in 480i / 480p to 500m (1,650ft) with digital audio to 400m (1,300ft)
- Extends component video in 720p with digital audio to 300m (1,000ft)

- Adjustable EQ & gain control on the receiver side to adapt the module to the quality of cable and video.

Specifications & Package Contents

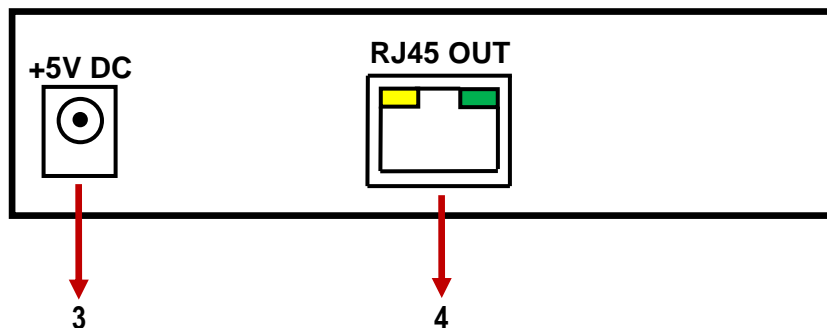
Model Name		AV-GM03X3-S1	
Technical		AV-GM03X3-S1-TX	AV-GM03X3-S1-RX
Role of usage		Transmitter [TX]	Receiver [RX]
Video support		[Component] - up to 720p@60Hz, 1080i@60Hz, 1080p@30Hz [Composite] - NTSC / PAL / SECAM	
Transmission length		720p@60Hz - 185m (600ft) [CAT5e] 480i - 330m (1,000ft) [CAT5e]	
Audio support		[Component] - S/PDIF or mono audio [Composite] - stereo audio	
Input		4x RCA	1x RJ-45
Output		1x RJ-45	4x RCA
RCA connector		75Ω female	
RJ-45 connector		WE/SS 8P8C with 2 LED indicators	
Mechanical			
Housing		Metal case	
Dimensions [L x W x H]	Model	TX/RX: 115 x 100 x 30mm [4.5" x 3.9" x 1.2"]	
	Package	330 x 200 x 93mm [1'1" x 7.9" x 3.7"]	
	Carton	495 x 440 x 380mm [1'7" x 1'5" x 1.3"]	
Weight	Model	645g [1.4 lbs]	
	Package	1150g [2.5 lbs]	
Fixedness		Wall-mounting case upon request	
Power supply		5V 4A DC	
Power consumption		5 Watts [max]	8 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]	
Package Contents		1x AV-GM03X3-S1 [TX & RX] 2x 5V power adapter 1x User Manual	

Front Panel — Transmitting unit (AV-GM03X3-S1-TX)



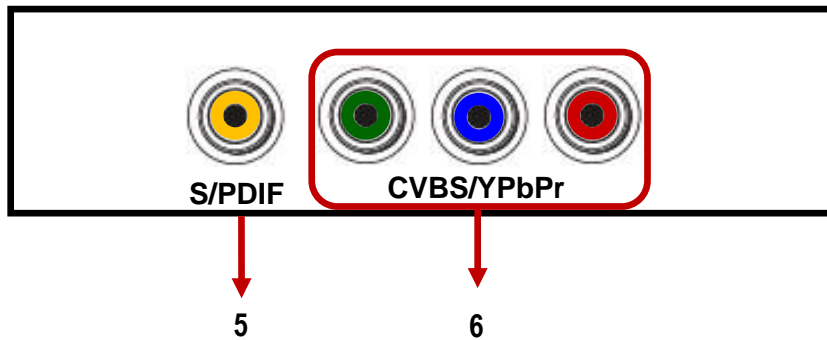
1. **S/PDIF:** Digital S/PDIF or analog mono audio input for component A/V; or another composite video input
2. **CVBS/YPbPr:** Component video input or composite audio/video from an A/V source; or three composite video inputs

Rear Panel — Transmitting unit (AV-GM03X3-S1-TX)



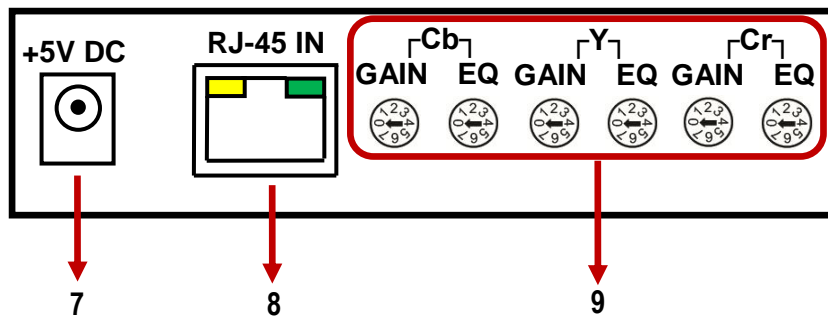
3. **+5V DC:** Connect to 5V DC power supply
4. **RJ45 OUT:** Plug in a CAT-5/5e/6 LAN cable that needs to be linked to the RJ-45 connector of the receiving unit AV-GM03X3-S1-RX.

Front Panel — Receiving unit (AV-GM03X3-S1-RX)



5. SPDIF: Connect to digital audio output
6. CVBS/YPbPr: Connect to a display with either a component or composite cable

Rear Panel — Receiving unit (AV-GM03X3-S1-RX)



7. +5V DC: connect to 5V DC power supply
8. RJ-45 IN: Plug in a CAT-5/5e/6 LAN cable that needs to be linked to the RJ-45 connector of the receiving unit AV-GM03X3-S1-RX.
9. Gain & EQ: Rotary controllers for gain control and equalization of Cb/Pb, Y, Cr/Pr respectively

Hardware Installation

1. Connect your YPbPr/CVBS/Audio source (such as a DVD player) to the transmitting unit.
2. Connect your display (such as a plasma TV) to the receiving unit.
3. Connect your CAT-5/5e/6 LAN cable between the transmitting and receiving units.
4. Make sure your CAT-5/5e/6 LAN cable is tightly connected and not loose.
5. Plug in 5V DC power cord to the power jack of the receiving unit.
6. Plug in 5V DC power cord to the power jack of the transmitting unit.
7. If a flickering or a blinking image is seen or even worse, not displayed at all, try to adjust the rotary controls to improve the cable skew. GAIN rotary controls are designed for gain control, and EQ rotary controls are designed for equalizing the wave form of the receiving video signal. It is suggested to begin with adjusting the rotary control of Y EQ to get the input video displayed first, and then the Y GAIN and Y EQ according to the video you see on the screen.

Notice

1. All transmission distances are measured using Belden CAT-5e 125MHz LAN cable and ASTRODESIGN Video Signal Generator VG-859C. The transmission distance is defined as the distance between the video source and the display.
2. The transmission length is largely affected by the type of LAN cables, the type of A/V sources, and the type of A/V display. The testing result shows solid LAN cables (usually in 300m/1000ft form) can transmit a lot longer signals than stranded LAN cables (patch cord). Shielded STP cables are better suit than unshielded UTP cables. A solid UTP CAT5e cable shows longer transmission length than stranded STP CAT6 cable. For long extension users, solid LAN cables are your only choice.
3. EIA/TIA-568-B termination (T568B) for LAN cables is recommended for better performance.
4. To reduce the interference among the unshielded twisted pairs of wires in LAN cable, you can use shielded LAN cables to improve EMI problems, which is worsen in long transmission.
5. Because the quality of the LAN cables has the major effects in how long transmission distance will be made and how good is the received display, the actual transmission length is subject to your LAN cables. For resolution greater than 1080i or 1280x1024, a CAT-6 cable is recommended.



Performance Guide for Component/Composite over LAN Cable Transmission

Performance rating		Type of LAN cable		
Wiring	Shielding	CAT5	CAT5e	CAT6
Solid	Unshielded (UTP)	★★★	★★★★	★★★★★
	Shielded (STP)	★★★	★★★	★★★★★
Stranded	Unshielded (UTP)	★	★★	★★
	Shielded (STP)	★	★	★★
Termination		Please use EIA/TIA-568-B termination (T568B) at any time		

Limited Warranty

The SELLER warrants the **AV-GM03X3-S1 Component/Composite over CAT5 Extender** to be free from defects in the material and workmanship for 3 years from the date of purchase from the SELLER or an authorized dealer. Should this product fail to be in good working order within 3 years 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 AV-GM03X3-S1 features and specifications is subject to change without further notice.

Support

For more info or tech support
<http://www.siig.com/support>

April, 2018