CAT5 VGA Extender

ITEM NO.: TTP111VGA

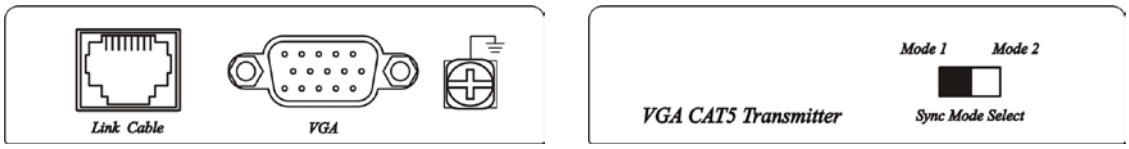
The VGA Extender allows VGA video signals to be transmitted up to 100 meters via 4-paris CAT5 STP or UTP cable. Used in pairs, the VGA Extender is used in home or commercial applications as a smart, fast and cost-effective, eliminates costly and bulky VGA cable, allowing VGA monitors to be connected extended distances from the PC via standard twisted pair cable. Ideal for classrooms video distribution, lecture halls, retail kiosks, video information displays, overhead projector systems, PC-training systems, and tradeshows PC demo systems.

Features:

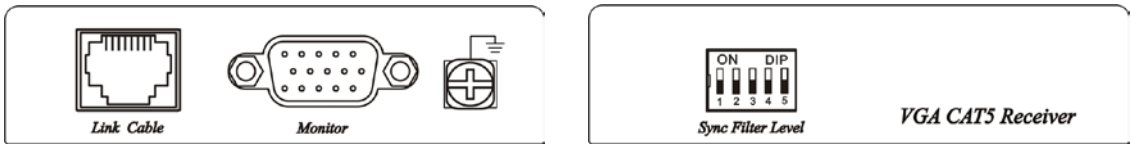
- Passive device, no power required.
- Including 2 units as transmitter and receiver.
- Supports up to 1280x1024 pixels.
- **Up to 100 meters via standard 4 pairs CAT5 STP or UTP cable instead of VGA cable.**
- **Transmitter built in virtual DDC to avoid improperly setting at resolution and frequency.**
- **Transmitter built in sync mode selection for signal stability.**
- **Receiver built in sync filter level adjustment for signal stability.**
- Perfect for classrooms, lecture halls, tradeshows, video information displays…etc.

Panel View:

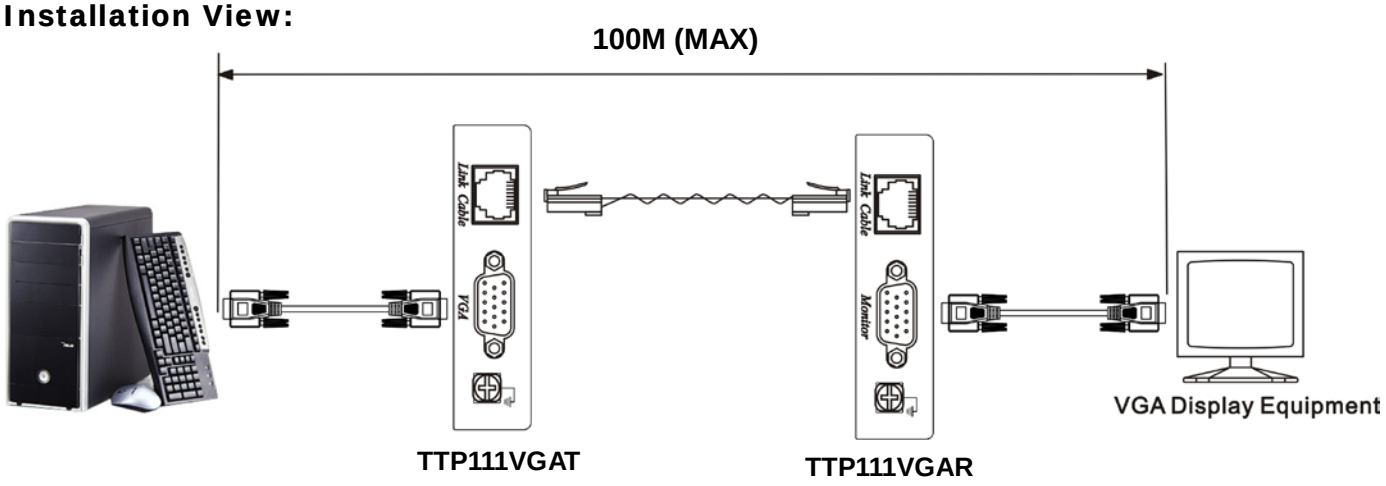
TTP111VGAT



TTP111VGAR



Installation View:



Installation:

Recommend Cable:

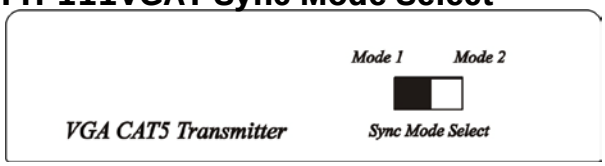
1. CAT5e UTP/STP or CAT6 UTP cable.
2. There are some certain models or brands of monitors with very high demand at sync-sensitive, recommend use STP (shielding twisted pair) cable to instead of UTP (unshielded twisted pair) cable.

RJ45 Pin Configuration: TIA/EIA 568B Wiring standard

1. Orange-white	**Red +**
2. Orange	**Red -**
3. Green-white	**H-Sync**
4. Blue	**Green +**
5. Blue-white	**Green -**
6. Green	**V-Sync**
7. Brown-white	**Blue +**
8. Brown	**Blue -**

Slide Switch Setting:

TTP111VGAT Sync Mode Select



← **Mode 1**
→ **Mode 2**

1. **For new type monitors, such like over 17" LCD Monitor, recommends setting at mode 1 for the best stability. If the picture not normal, then switch to Mode 2.**
2. **For old type monitors, such like CRT or under 17" LCD Monitor, recommend setting at mode 2. If the picture still not normal after adjust the dip switch of TTP111VGAR. Then please use STP (shielding twisted pair) cable.**

DIP Switch Setting:

TTP111VGAR Sync Filter Level

==========

1 2 3 4 5

↓ ↓ ↓ ↓ ↓ **Level 0 (Min)**
↑ ↓ ↓ ↓ ↓ **Level 1**
↓ ↑ ↓ ↓ ↓ **Level 2**
↓ ↓ ↑ ↓ ↓ **Level 3**
↓ ↓ ↓ ↑ ↓ **Level 4**
↓ ↓ ↓ ↓ ↑ **Level 5 (Max)**

Sync Filter is designed for using UTP CAT5 cabling.
Sync Filter level adjustment is to add the sync stability, but not adjust picture quality or eliminate skew.

Since different brand monitor have different setting, so there is no recommended setting. Please adjust the level based on picture stability. If no picture display or picture not stable, then please use STP cable.

Caution:

1. The wiring must be away from electro magnetic equipment, i.e. microwave, wireless, hi voltage cable…etc.
2. The maximum distances supported by the VGA Extender are dependent on the type of twisted pair cable and image resolution of the PC's VGA interface. Make sure that the maximum recommended operational distances have not been exceeded.
3. All wiring is "straight-through" twisted pair cable, not being used for other LAN or telephone

equipment.

4. Do not connect the VGA Extender to a telecommunication outlet wired to unrelated equipment.

Troubleshooting at picture problem:

1. No picture display:

Check Link cable.
Check DIP switch setting.
Check VGA cable connect.
Change the resolution or frequency.
Change Link cable for STP cable.

2. Picture not stable or disappear intermittence or no picture display:

Check DIP switch setting.
Change the resolution or frequency.
Wiring away from electro magnetic equipments.
Change Link cable for STP cable.

3. Picture tilt:

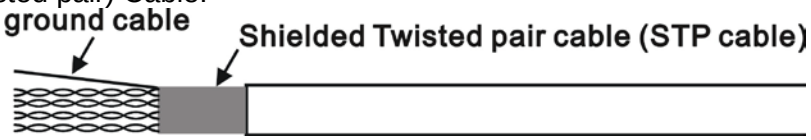
Check DIP switch setting.
Change the resolution or frequency.
Change Link cable for STP cable.

Max. Distance via CAT 5 Cable	
800x600 pixels (30MHz)	**100M**
1024x768 pixels (60MHz)	**75M**
1280x1024 pixels (100MHz)	**60M**

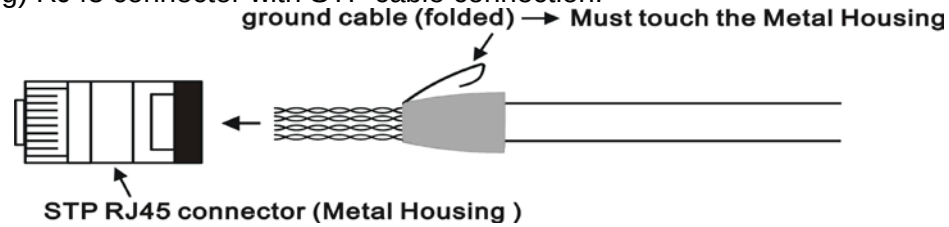
Application Tips to use CAT5 STP cable:

Following is the correct cable connection when use STP cable:

1. STP (shielding twisted pair) Cable.



2. STP (shielding) RJ45 connector with STP cable connection.



Specification:

ITEM NO.	TTP111VGAT	TTP111VGAR
Input Signals	Video: 1 Vp-p	
	Horizontal & Vertical SYNC : TTL standard. 300kHz max. bandwidth	
Insertion Loss	Less than 3dB per pair over the frequency range	
Video Signal Return Loss	-15dB max from DC to 60Mhz	
Impedance	75 ohms (DB15), 100 ohms (RJ45)	
Setting Switch	2 Stage Slide Switch	5 Stage Dip Switch
Transmission Distance	60~100 meters depend on image resolution	
Link Cable	CAT5 / CAT5e / CAT6 / STP or UTP Cable	
Temperature	Operation: 0 to 55 C, Storage: -20 TO 85 c, Humidity: up to 95%	
Dimensions mm	110 x 76.6 x 26	
Weight g	175	

RoHS CE FC

Rev. B