

## VGA135 VGA CAT5 Extender



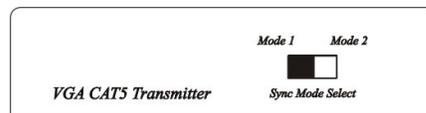
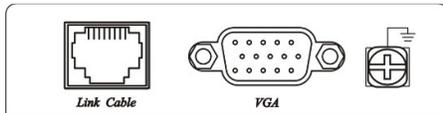
Thank you for your purchase of the VGA135 VGA CAT5 extender. This VGA Extender allows VGA video signals to transmit up to 328' (100m) via 4 pairs of CAT5 STP or UTP cable. The VGA135 can be used in a home or commercial application as a smart, fast, and cost-effective alternative as it replaces costly and bulky VGA cable. VGA135 is ideal for classroom video distribution, lecture halls, retail kiosks, video information displays, overhead projector systems, PC-training systems, and tradeshow.

### FEATURES

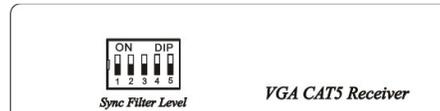
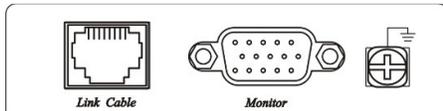
- Passive device, no power required.
- Includes transmitter and receiver.
- Resolution up to 1920x1080 pixels.
- Up to 328' (100m) via standard 4 pairs CAT5 STP or UTP cable
- Replaces costly VGA cable with less expensive UTP cable.
- Transmitter has built in virtual DDC to avoid improper settings of resolution and frequency.
- Transmitter has built in sync mode selection for signal stability.
- Receiver has built in sync filter level adjustment for signal stability.

### UNIT VIEW

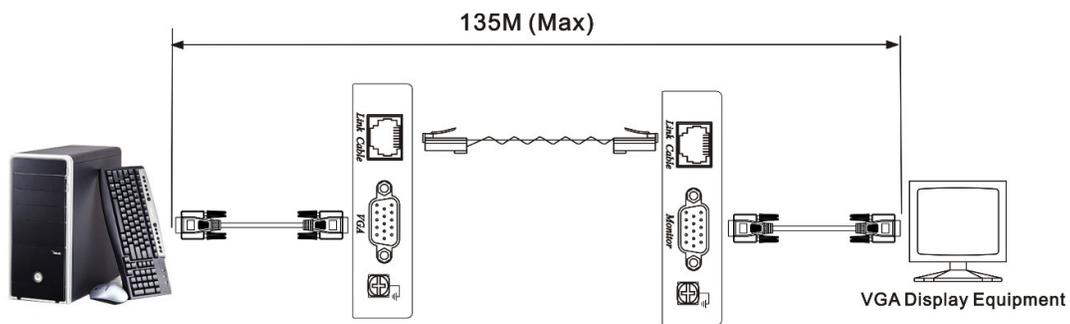
#### Transmitter



#### Receiver



### INSTALLATION



## TRANSMISSION DISTANCE CHART

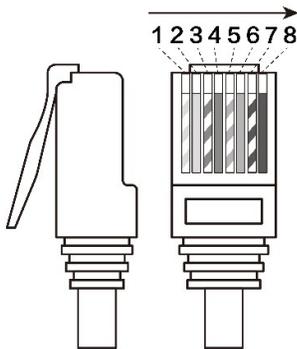
Max. Distance via CAT5e Cable	
800x600 pixels (60Hz)	328' (100M)
1024x768 pixels (60Hz)	246' (75M)
1280x1024 pixels (60Hz)	196' (60M)
1920x1080 pixels(60Hz)	131' (40M)

## RECOMMENDED CABLE

1. CAT5e UTP/STP or CAT6 UTP cable.
2. There are some monitor models with very high sync-sensitive demand. For these units, it's recommended to use STP (shielding twisted pair) cable instead of UTP (unshielded twisted pair).

## RJ45 PINOUT

(PIN TIA/EIA-568B)



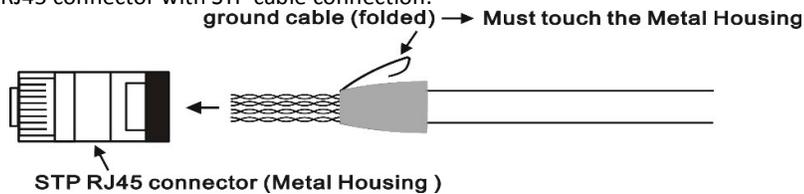
(PIN TIA/EIA-568B)		
PIN	Wire Color	
1	Orange-white	Red +
2	Orange	Red -
3	Green-white	H-Sync
4	Blue	Green +
5	Blue-white	Green -
6	Green	V-Sync
7	Brown-white	Blue +
8	Brown	Blue -

## TIPS FOR USING STP CABLE

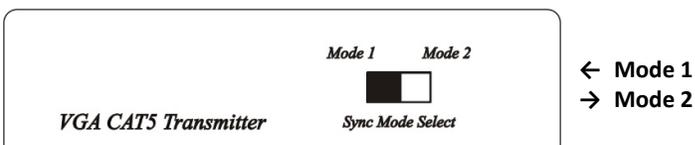
1. STP (shielding twisted pair) Cable.



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



## SYNC MODE SELECT SWITCH

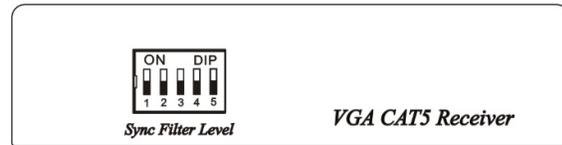


1. For "newer" monitors, such as LCD monitors over 17", it is recommended using Mode 1 for the best transmission stability. If the picture is not normal, please switch to Mode 2.
2. For "older" monitors, such as CRT or LCD monitors under 17", it is recommended using Mode 2 and adjusting the Sync Filter Level at the receiver. If the picture is not normal after following above suggestion, please change UTP to STP (shielding twisted pair) cable.

## SYNC FILTER LEVEL SETTING

### DIP Switch Chart

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



Sync Filter Level is designed for improving signal synchronizing stability, not for picture quality or skewing problems when using UTP cable.

There is no definitive setting as monitors have different set values. Please try multiple levels of setting to figure out the best stability.

If there is no picture display or picture is not stable after adjustment, please change the UTP to STP cable.

### CAUTION

1. The wiring must be kept away from electromagnetic equipment, i.e. microwave, wireless, hi-voltage cables, 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, and not to be used for other LAN or telephone equipment.
4. Do not connect the VGA Extender to a telecommunication outlet wired to unrelated equipment.

### TROUBLESHOOTING

#### 1. No picture display:

- Check Link cable.
- Check DIP switch setting.
- Check VGA cable connection.
- Change the resolution or frequency.
- Change UTP to STP cable.

#### 2. Picture not stable or disappearing intermittently:

- Check DIP switch setting.
- Change the resolution or frequency.
- Move cable away from electromagnetic equipment.
- Change UTP to STP cable.

#### 3. Picture tilt:

- Check DIP switch setting.
- Change the resolution or frequency.
- Change UTP to STP cable.

## SPECIFICATIONS

	<b>Transmitter</b>	<b>Receiver</b>
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)	
Controls	2 Stage Slide Switch	5 Stage Dip Switch
Transmission Distance	131-328' (40~100M)	
Recommended Cable	CAT5 / CAT5e / CAT6 / STP or UTP Cable	
Temperature	Operation: 32 to 131°F (0 to 55°C), Storage: -4 to 185°F (-20 to 85°C) Humidity: up to 95%	
Dimensions	4.3 x 3 x 1" (110 x 76.6 x 26mm)	
Weight	0.4lbs (175g)	

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