



VGA Extender

# User Manual

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Model : VE01P

Passive VGA CAT5e Extender



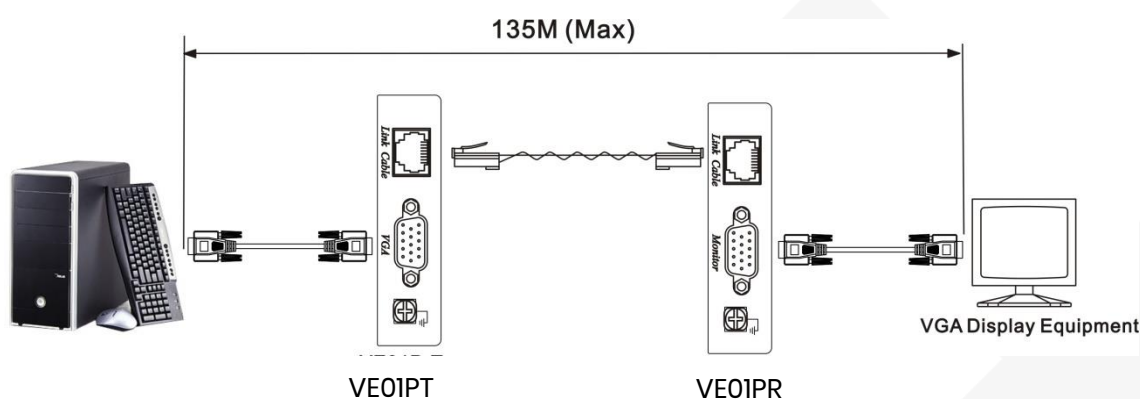
## Introduction

VE01P is a VGA extender designed to use a cost-effective 4 pairs CAT5e UTP cable to carry the signal for a long distance, with the resolution up to 1920 x 1080@60Hz, replacing costly and bulky VGA cable. It's an ideal solution for classrooms, lecture halls, retail store, PC-training systems, and demo systems for tradeshow.

## Features

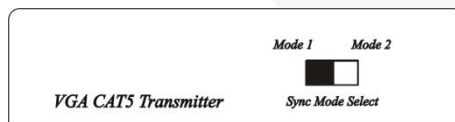
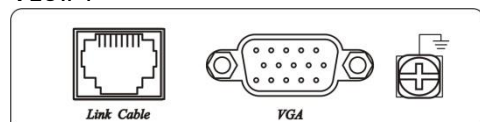
- Resolution up to 1920 x 1080@60Hz.
- Signal extension up to 100M over a 4 pairs CAT5e UTP cable.
- No external power required at both TX and RX unit.
- Built-in virtual DDC at TX unit to avoid improper setting for resolution and frequency.
- Supports sync mode at TX unit for signal stability.
- Built in sync filter level adjustment at RX unit for signal stability.

## Installation View

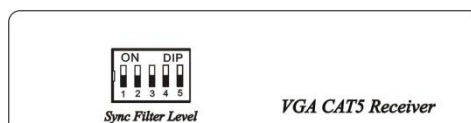
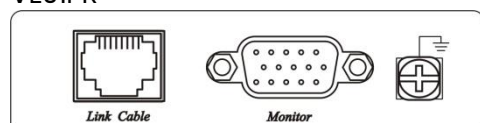


## Panel View

### VE01PT



### VE01PR



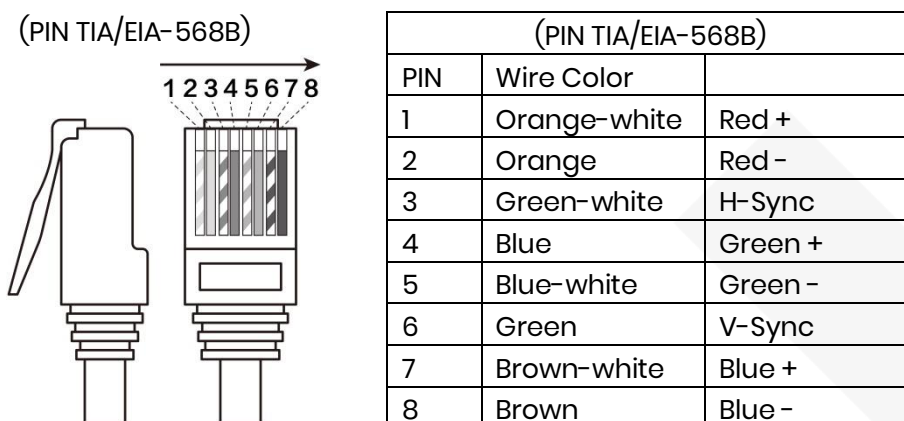
## Transmission Distance Chart

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

## Cable Recommended

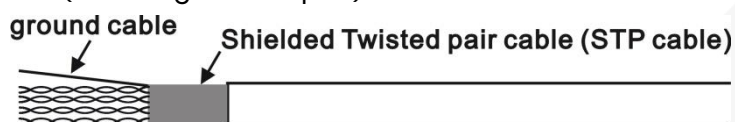
1. CAT5e UTP/STP or CAT6 UTP cable.
2. There are some monitor models with very high demand at sync-sensitive, it is recommended to use STP (shielding twisted pair) cable instead of UTP (unshielded twisted pair) cable.

## RJ45 Pinout

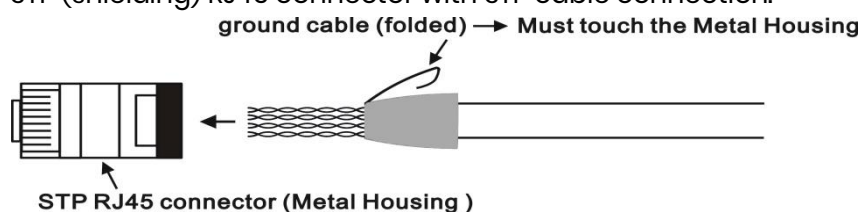


## Tips of using STP cable

1. STP (shielding twisted pair) Cable.

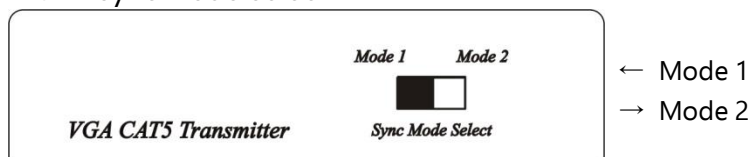


2. STP (shielding) RJ45 connector with STP cable connection.



## Slide Switch Setting

VE01PT Sync Mode Select

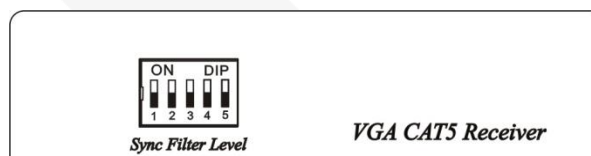


1. For new type monitors, such as LCD Monitor over 17", it is recommended setting at Mode 1 for the best transmission stability. If the picture is not normal, please switch to Mode 2.
2. For old type monitors, such as CRT or LCD Monitor under 17", it is recommended setting at Mode 2 and adjust Sync Filter Level at 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 skews problem when using UTP cable.

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

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

## Caution

1. The wiring must be away from electromagnetic 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 of picture problem

### No picture display

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

### Picture not stable or intermittent disappearing

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

### Picture tilt

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

## Specification

ITEM NO.	VE01PT	VE01PR
Support		
Compliance	TTL	
Max. Video Resolution	1920 x 1200px	
Max. Transmission Distance	100M over CAT5/ CAT5e/ CAT6/ STP or UTP Cable	
Video Bandwidth	300kHz	
Insertion Loss	Less than 3dB	
Video Return Loss	-15dB	
Ports & Interfaces		
Video Input	1 x DB15 (75Ω, 1Vp-p)	1 x RJ45 (100 ohms)
Video Output	1 x RJ45 (100 ohms)	1 x DB15 (75Ω, 1Vp-p)
Setting Switch	1 x 2-position Slide Switch	1 x 5-position DIP Switch
Ambient Temperature		
Operation	0 to 55°C	
Storage	-20 to 85°C	
Humidity	up to 95%	
Physical Characteristics		
Dimensions	110 x 76.6 x 26mm	110 x 76.6 x 26mm
Weight	175g	175g