VTS-C5 Series

User's Guide

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Getting Started

VTS-C5 Series is an extension system that can transmit VGA and RS-232 Data (Tx/Rx) over Cat 5 / 5e / 6 cable up to 300 meters (1000 ft). VTS-C5 system consists of a Transmitter and a Receiver unit. The Transmitter is placed near PC and Receiver near Touch Screen and Cat 5 / 5e / 6 cable is used to connect both devices. It is suitable for the interactive application of Touch Screen Extension and Flat Panel Remote Control. It can simplify the installation, ease the maintenance and reach a longer distance. The video quality can be adjusted very easily from the FOCUS and GAIN Control in the Receiver. Now, you can centralize PC and servers in a secured place and extend the VGA and Data signal up to 300 meters (1000 ft).

The VGA Data Extender is easy to install and provides accurate signal. It come with a magnetic pad on the bottom of unit and an attachable metal plate, so you can place the VGA Data Extender very easily on the surface of PC or any preferred place.

Key Features

- Extend VGA and Data Signal over Cat 5 / 5e / 6 cable
- Supported VGA Resolution and Distance:
    a. 1280x1024 @ 300m (1000 ft)
    b. 1600x1200 @ 200m (675 ft)
- Bidirectional serial RS-232 control
- Remote and local monitors can display simultaneously
- Plug & Play
- Supports VGA, SVGA, XGA, TFT-LCD with DDC2B
- Equipped with magnetic pad and metal plate for easy installation

System Devices and Functions

Transmitter VTS-C5-S

a. Built-in one set to VGA (DB15) and Data (DB9 adapter cable) inputs
b. Built-in one set of VGA (DB15) output for monitoring
c. Built-in one RJ45 port for system output which can be connected by Cat 5 / 5e / 6 cable and send signal to System Receiver

Receiver VTS-C5-R

a. Built-in one set of VGA (DB15) and Data (DB9 adapter cable) output for Touch Screen
b. Maximum VGA resolution of up to 2048x1536@300m (1000 ft)
c. Built-in Video and Focus control to adjust video quality
d. A PS/2 connector to provide DC 5V power for Touch Screen's RS-232 control

Panel Description

Transmitter VTS-C5-S and Receiver VTS-C5-R

Installation and Operation

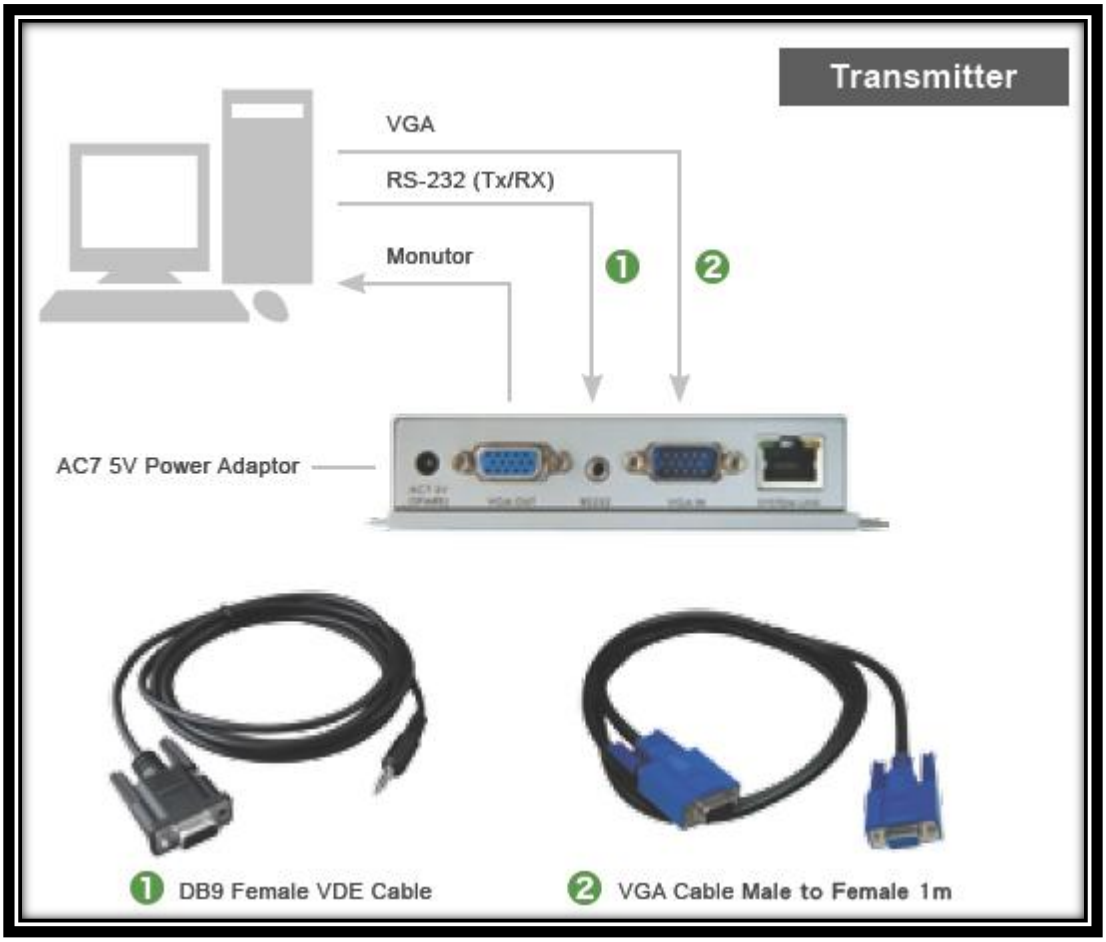
Transmitter VTS-C5-S Installation

a. **Site Selection:** In your first time installation, place Transmitter (VTS-C5-S) near the PC you want to extend.

> *Ensure to test the VGA Data Device locally first. It can be Touch Screen, Flat Panel, or Projector with a RS-232 Tx/Rx control. You may need to install certain software to activate the RS-232 Tx/Rx communication.*
>
> *You can use magnetic pad to attach the unit on a metal plane or use attachable Rack Mounting Kit to fix the unit on selected area by screw.*

Unit attached with Rack Mounting Kit

b. **Device Connection:** Connect VGA Cable, DB9 Female and VTS cable between Transmitter and PC. You may connect PS/2 Keyboard and Mouse directly to PC for local control.



Installation Diagram of VTS-C5-S Transmitter

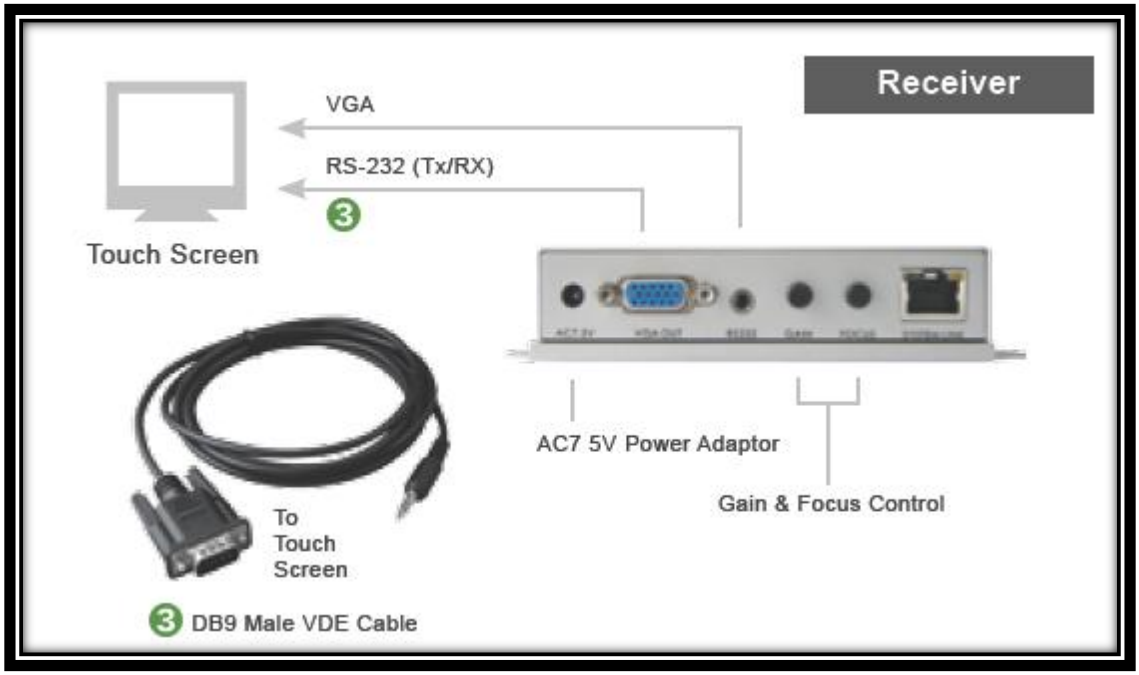
c. **Function Test:** Power ON your PC after installation of Transmitter and Receiver.

> *Ensure to connect the Serial Device (e.g. Touch Screen) before booting up the PC. Serial communication provided by VTS-C5 Series is Tx/Rx mode. Ensure that the device to be connected supports Tx/Rx VGA + Data communication.*

Receiver VTS-C5-R Installation

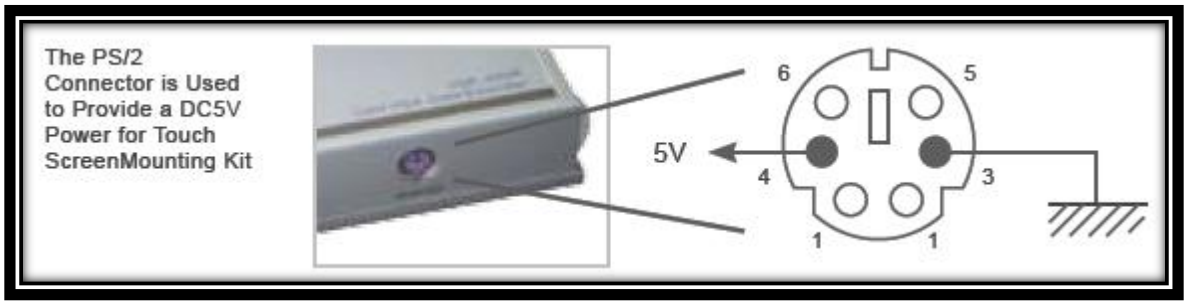
a. **Site Selection:** Place VTS-C5-R Receiver in an appropriate place.

b. **Cable Selection:** For best VGA signal, use Cat 5e or Cat 6 cable.

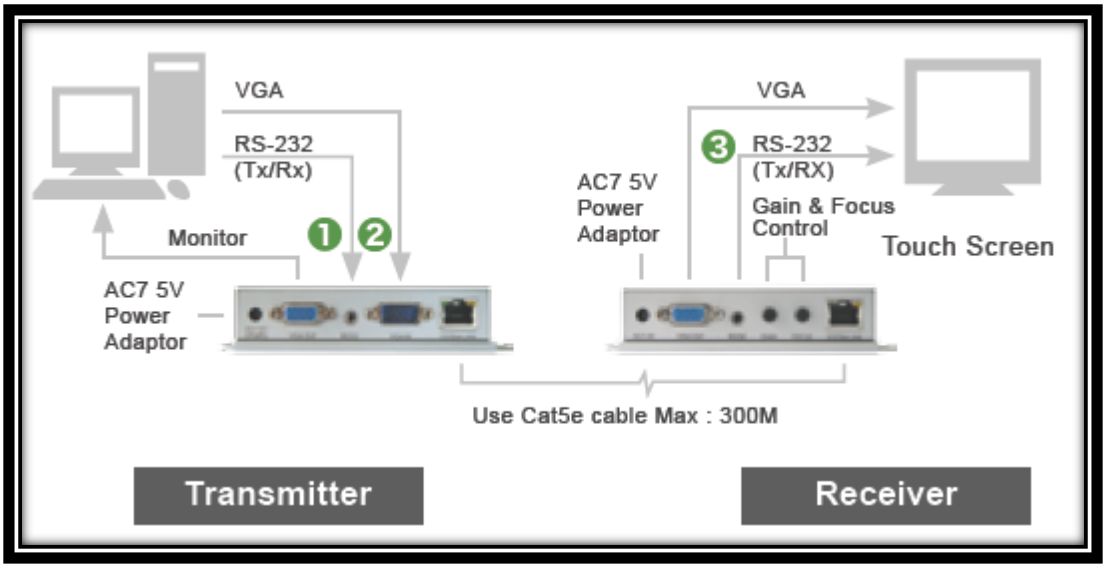


Installation Diagram of VTS-C5-R Receiver

c. **Power ON:** Plug power adapter to the Receiver and connect Touch Screen' VGA and Serial connection to Receiver (VTS-C5-R). Most of the Touch Screen (Serial Connection) will be required to take the power from PS/2 to activate the Tx/Rx communication. The Receiver has a built-in PS/2 port to provide a DC 5V power for Touch Screen. The LEDs of unit will stay on Blue to indicate power on status and RJ45 LEDs will blink to indicate the unconnected status of the cable.



d. **Connect Cable:** Plug two ends of Cat 5 / 5e / 6 cable to Transmitter and Receiver's RJ45 "SYSTEM LINK" ports. Now the LEDs above RJ45 should turn on to indicate the activation of Video Signal and correct connection of the cable.



Connection Diagram of VTS-C5 Series Extender

e. **Function Test:** Power on your PC and Touch Screen or VGA Data Device. Test the function of Touch Screen. During the operation, the STATUS LED will blink on *Blue* and *Red* to indicate the Tx/Rx communication.

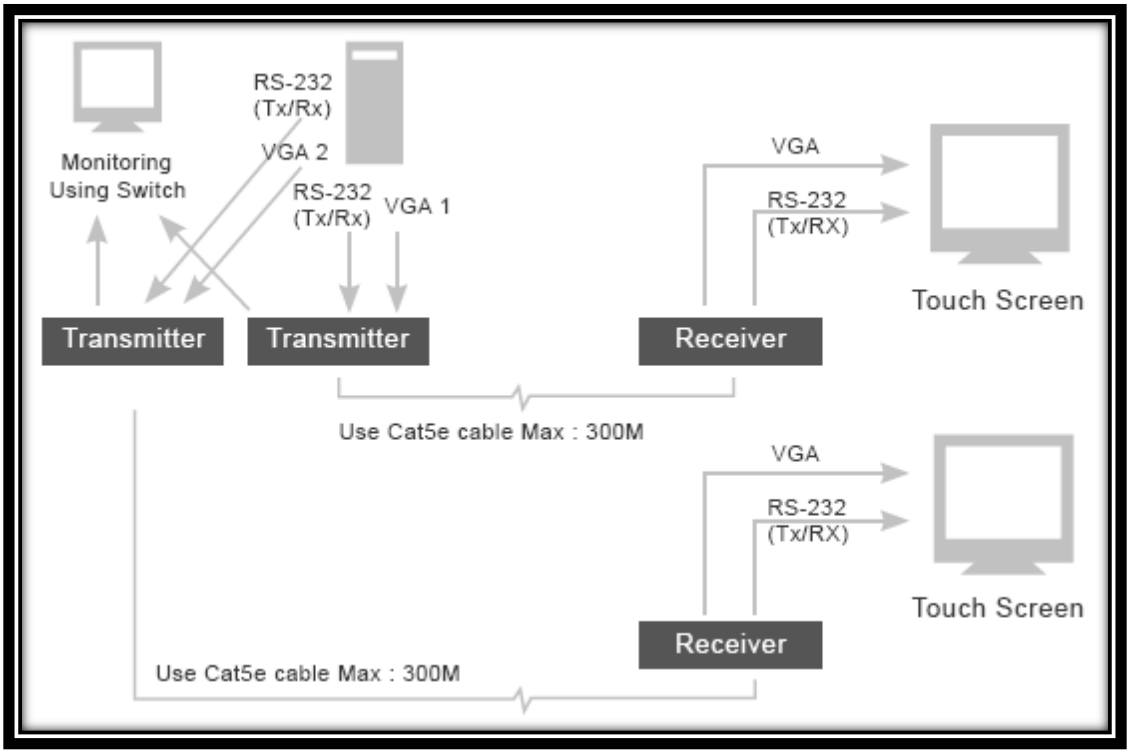
f. **Manual VGA Adjustment:** The video quality can be manually adjusted by the Control of GAIN and FOCUS at the back of the Receiver unit.

General Troubleshooting	
Problem	**Possible Solution**
Screen Defects Appear	• Check that VGA resolution and frequency is not over the limit of monitor display. • Check your current resolution, refresh rate and color depth settings in the **Settings** and Monitor tabs in your **Display** Properties dialog.
Off-Center Screen Image, Odd Colors or No Picture	• Try adjusting the brightness, sharpness, contrast, and color balance controls of your monitor. • Try adjusting the centering and positioning controls of your monitor to position the picture on the screen.
No Image	• Ensure that the monitor cable is securely fastened to the VGA and Monitor port.

	• Try to connect monitor directly to a PC to ensure basic functionality of these devices. • Check if the Receiver's power adapter is AC 7.5V with a capacity of over 1Amp.
RS-232 Tx/Rx Problem	• Try to connect Touch Screen from Transmitter directly to your PC to verify basic functionality. • Restart the PC to ensure it is properly detected. • Check the Receiver LED indicators to ensure basic functionality. • Ensure proper cable connection.

Other System Integration

a. **Illustration of Multiple Touch Screen installed to a PC:** If you have Multi-Console PC, you may connect more Touch Screens to save the equipment cost and take the advantage of VGA Data Extender to centrally locate the PC.



System Integration for Multi-Console PC supporting Two Extended Touch Screens

b. **KVM Switch and Drawer:** You may use a KVM Switch to control many PCs through one KVM console or use integrated KVM Switch – KVM Drawer to use just 1U space to control many computers.

Specifications

Model	VTS-C5-S	VTS-C5-R
Description	One Port Transmitter	One Port Receiver
AV Input	DB15 / DB9	RJ45
AV Output	DB15 / RJ45	DB15 / DB9
Video CTRL	-	Gain / Focus
LED	Tx / Rx	
Power Input	AC 7.5V	AC 7.5V
Power Output	-	DC 5V
Max Resolution & Distance	1280x1024x60Hz@300m (1000 ft) 1600x1200x60Hz@200m (675 ft)	
Dimension (LxWxH)	62 x 113 x 29	

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