

INSTALLATION GUIDE FOR THE 2-PORT TTL VIDEO ONLY SWITCH

SE-15V-2-2U1C-TTL / SE-15V-2-2C1U-TTL/SE-15V-2-2U1C-RS

INTRODUCTION

The NTI 2-port "TTL" controlled video only switch allows one (1) CPU to switch two (2) monitors (model SE-15V-2-2U1C-TTL) or one (1) monitor to be switched to two (2) computers (model SE-15V-2-2C1U-TTL). All NTI 2-port "TTL" controlled video only switches are available for VGA video with 150MHz bandwidth and 1600X1200 resolution.

Optional: RS232 Control instead of TTL control available in model SE-15V-2-2U1C-RS.

INSTALLATION

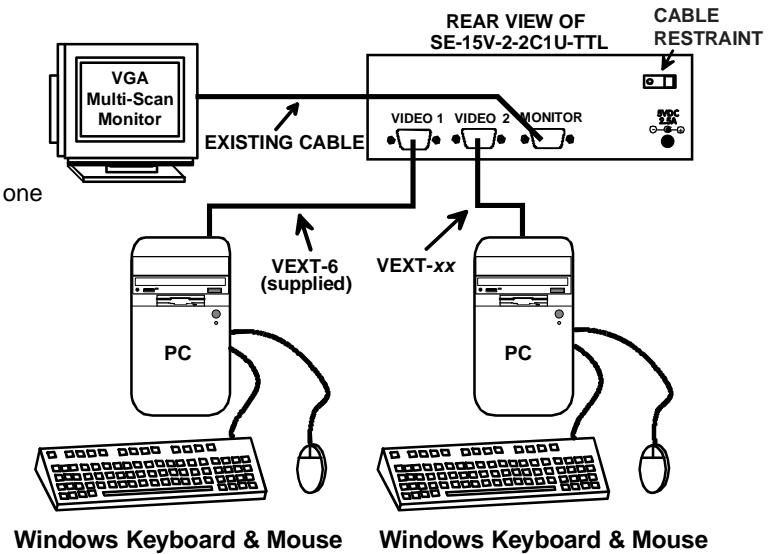
1. Turn OFF power to CPU(s) and monitor(s).

FOR MODEL SE-15V-2-2C1U-TTL

- 2a. Using the supplied video cable, connect the video port of one CPU to the "VIDEO 1" port on the unit.

NOTE: It will be necessary to repeat this step on the "VIDEO 2" port with another VEXT-xx video cable that must be purchased separately.

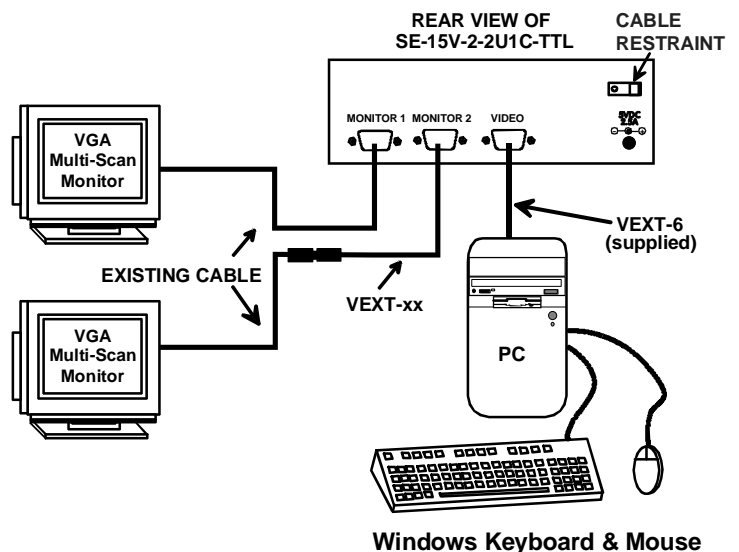
- 3a. Connect the monitor using its existing video cable to the "MONITOR" port on the unit.



FOR MODEL SE-15V-2-2U1C-TTL/SE-15V-2U1C-RS

- 2b. Using the supplied video cable, connect the video port of the CPU to the "VIDEO" port on the switch.
- 3b. Connect the monitors using their existing video cables to ports "MONITOR 1" and "MONITOR 2" on the switch.

NOTE: Using a VEXT-xx video cable the monitor cable(s) can be extended up to 250 feet (sold separately).



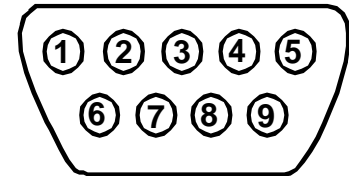
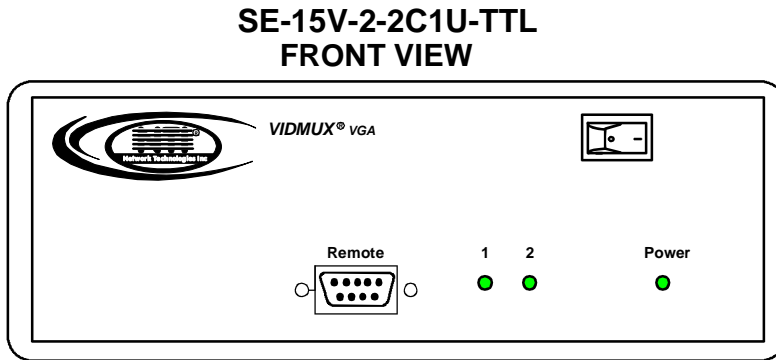
4. Secure the power cable to the cable tie on the SE-15V-2 and connect the power plug from the AC adapter to the SE-15V-2.
5. Plug in the AC adapter and power-up the switch. The "Power" LED and "1" LED should illuminate, indicating a connection between the monitor and the CPU connected to "Video 1".
6. Apply power to the CPU(s) and monitor(s).

TTL Control (SE-15V-2U1C/2C1U-TTL Models Only)

Models with -TTL include a 9 pin D female connector port for remote control. The proper wiring of the 9DB connector to use this port is as follows:

- Pin 1 = Ground
- Pin 2 = NC or connect to TTL1 (>2.4VDC) to switch to Monitor 1
- Pin 2 = Connect to pin 1 or TTL0 (<0.8VDC) to switch to Monitor 2.

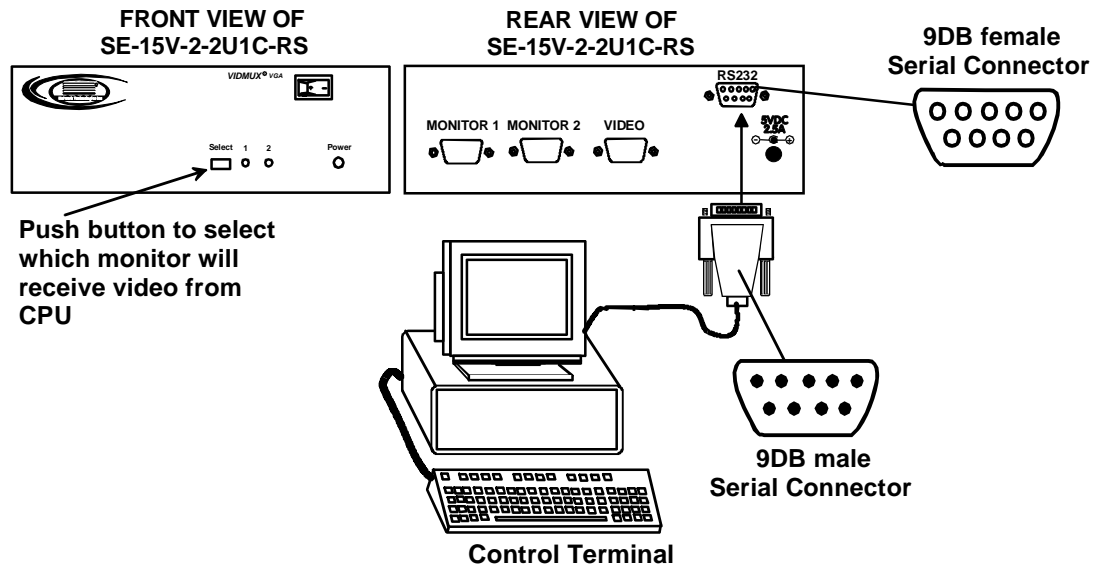
The LEDs (1 or 2) will illuminate to provide indication of port selection



Mating Face of a 9DB Male

RS232 CONTROL (SE-15V-2U1C-RS Only)

The SE-15V-2U1C-RS can be controlled from the front panel push button (press to switch between MONITOR 1 and MONITOR2) or it can be controlled using RS232. RS232 control can be achieved using a separate user terminal or CPU with a terminal program. To make a terminal connection, connect a serial cable (specifications on page 3) between the user terminal and the 9 pin DIN female connector on the VIDMUX labeled "RS232". Configure the terminal program for a baud rate of 9600.



Remote Connection

The RS232 Interface is designed to meet the RS232C standard and can be controlled from any CPU or other controller with an RS232 communications port. The pin-out for the 9DB connector on the unit is as follows:

On the 9DB female connector, pins 1 (DCD), 4 (DTR), and 6 (DSR) are shorted and pins 7 (RTS) and 8 (CTS) are shorted. Therefore, host handshaking is bypassed and TXD and RXD are the only active signals. A straight-through 9DB serial cable (**not null modem- see cable specifications on page 3**) will work for most CPUs.

RS232 CONNECTOR (9DB FEMALE)

PIN	SIGNAL	FUNCTION
1	CD	Carrier Detect
2	TXD	Transmit data (RXD at host)
3	RXD	Receive data (TXD at host)
4	DTR	Data terminal ready
5	GND	Signal ground
6	DSR	Data set ready
7	RTS	Request to send
8	CTS	Clear to send
9	-	No connection

COMMAND PROTOCOL

CPU controller commands supported by the unit are defined below. All commands should be terminated with a <CR> (carriage return). All characters in the command string should be upper case, and all numbers below 10 should have a leading 0 (ex: 1 = 01).

Legend: (All numbers must be two digits)

BR : Baud Rate Code (03,06,12,24,48,96)
 OP : Output Port (01,02)
 <CR> : Carriage Return (Hex 0xD)

Command Definitions

Command String	Good Response	Description
CS 01,OP,01	*<CR>	Connect One Output Port To Input Port
RO 01,01	*<CR>IP<CR>	Read Connection For Output/User Port
CB 00,BR	None	Change baud rate of serial line BR=03(00),06(00),12(00),24(00),48(00),96(00) Factory default is 9,600 (see note below)
RS 01	*<CR>	Internal Reset
RV 01,00	*<CR>string\0<CR>	Read NTI Version String
RU 01	*<CR>IP,OP<CR>	Read Unit Size

If the syntax of a command is incorrectly entered, the command will be ignored or the switch will answer with a bad response ?<CR>.

Note: The baud rate as changed via RS232 will hold only until the VIDMUX is power cycled. On power-up, the VIDMUX will resume the default baud rate of 9600.

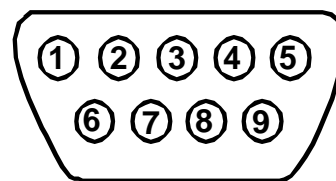
Note: If the baud rate of the VIDMUX is changed from 9600, be sure to change the baud rate of the user terminal as well.

Note: Each time the SE-15V-2 is power-cycled, it will connect the video to "MONITOR 1" by default.

SPECIFICATIONS FOR STRAIGHT-THROUGH RS232 SERIAL CABLE

VIDMUX to PS2 CPU (9 PIN)

VIDMUX		Signal Direction	PS/2 CPU	
9 pin			9 pin	
Function	Pin #		Pin #	Function
RxD	3	←	3	TxD
TxD	2	→	2	RxD
CTS	7	←	7	RTS
RTS	8	→	8	CTS
DSR	4	←	4	DTR
DTR	6	→	6	DSR
SG	5	—	5	SG



**Mating Face
of a 9DB Male**

Terminals 7 and 8 are jumpered together and terminals 4 and 6 are jumpered together.

TECHNICAL SPECIFICATIONS

Resolution	1600X1200
Bandwidth	150 MHz
Video Connectors	<ul style="list-style-type: none">• Two (2) 15HD (VGA) male connectors and one (1) 15HD (VGA) female connector for 2C1U model• Two (2) 15HD (VGA) female connectors and one (1) 15HD (VGA) male connector for 2U1C model
Power	120VAC or 240VAC@50 or 60Hz-5VDC/2.0A AC Adapter

TROUBLESHOOTING

PROBLEM	SOLUTION
Keyboard Error	<ul style="list-style-type: none">• Check cable connections on computer and switch.• Make sure that AC adapter is plugged in.
No Video	<ul style="list-style-type: none">• Check cable connections on CPU and switch.

WARRANTY INFORMATION

The warranty period on this product (parts and labor) is two (2) years from date of purchase. Please contact Network Technologies Inc at (800) 742-8324 (800-RGB-TECH) in the U.S. and Canada or 330-562-7070 (worldwide) for information regarding repairs and/or returns. A return authorization number is required for all repairs/returns.

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CHANGES

The material in this guide is for information only and is subject to change without notice. Network Technologies Inc reserves the right to make changes in the product design without reservation and without notification to its users.

SERIAL NO: _____

DATE: _____

INSPECTED BY: _____

SE-15V-2-2U1C-TTL

SE-15V-2-2C1U-TTL

SE-15V-2-2U1C-RS