



NTI[®] NETWORK
TECHNOLOGIES
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VOPEX[®] Series

VOPEX-2/4MM-BI TOUCH SCREEN SHARER Installation and Operation Manual



TRADEMARK

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CHANGES

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INTRODUCTION

The VOPEX Touch Screen Sharer enables up to 2 or 4 touch screen monitors to communicate with 1 CPU. Three different operating modes allow varying degrees of user control. LED's on the front panel will illuminate to indicate mode of operation, DELAY mode program status, and/or which touch screen has control.

The VOPEX Touch Screen Sharer has three modes of operation:

- USERx mode- one of up to 4 users (x) has exclusive control over the CPU,
- INST mode- all connected users have shared instantaneous control of the CPU (one at a time)
- DELAY mode- users have shared use of the CPU but control transfers are delayed by a configurable idle time period

Materials Included with this kit:

- ✓ NTI VOPEX Touch Screen Sharer unit
- ✓ 120VAC or 240VAC at 50 or 60Hz-9VDC/0.5A AC Adapters
- ✓ DINT-6 Connects the serial port of the CPU to the VOPEX
- ✓ This owner's manual

INSTALLATION

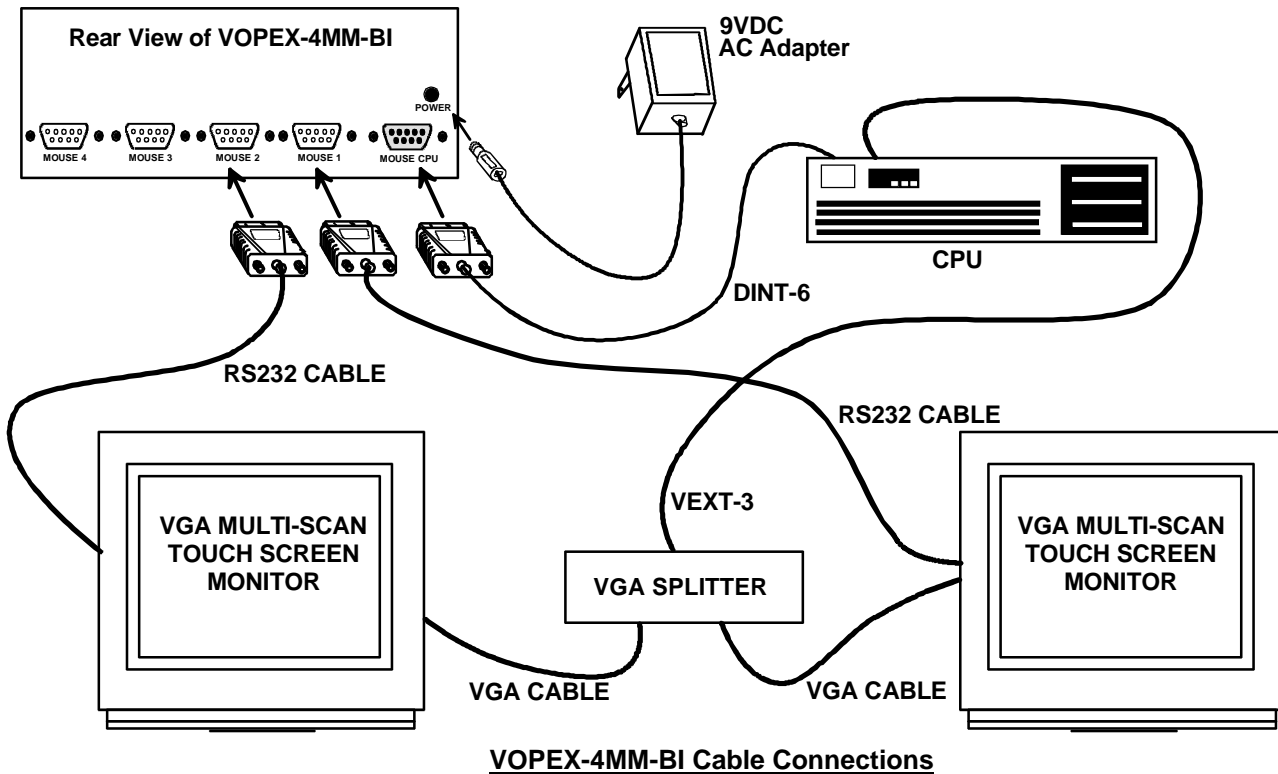
Turn OFF power to the CPU and monitor. Connect all touch screen serial ports and the DINT-6 cable to the CPU and VOPEX before power is applied.

1. Disconnect the RS232 cable from the touch screen at the CPU and reconnect the RS232 cable to "MOUSE 1" on the VOPEX.
2. Connect the female end of the DINT-6 cable to the serial port on the CPU.
3. Connect the male end of the DINT-6 cable to "MOUSE CPU" on the VOPEX.
4. Connect the RS232 cable from the second touch screen to "MOUSE 2" on the VOPEX. Repeat step for additional touch screens using "MOUSE 3" and "MOUSE 4" (if applicable).

NOTE: If the RS232 cable from a touch screen monitor is not long enough to reach, it can be extended using NTI cable MMEXT-xx where xx = 25,35,50, or 100 (feet).

5. Connect the AC adapter to the "Power" socket on the VOPEX.
6. Plug in the AC adapter to an electrical outlet.
7. Turn ON power to the VOPEX Touch Screen Sharer.
8. Install the VGA splitter (required but not supplied) between the CPU and the monitors as shown on page 2. (Follow instructions for the VGA splitter installation that came with the VGA splitter.)
9. Turn ON power to the VGA Splitter.
10. Turn ON power to the CPU and monitors.

NOTE: If a change from the default DELAY mode time period of 30 seconds is desired, make the change before powering-up the CPU and monitor, as the CPU must be re-booted anytime a change is made to this programmable time period. See "DELAY Mode" on page 2 for more details.



OPERATING MODES

USERx Mode

The VOPEX has a USER mode for each port. When first powered-ON the VOPEX Touch Screen Sharer will be in USER1 mode with a connection made between the touch screen associated with USER 1 and the CPU. The "U1" LED will be illuminated solid. Only the user's touch screen whose LED is illuminated will be connected to the CPU. All other users will be locked-out. User control will only change by pressing the Mode button. To change to USER 2 mode, press the Mode button on the front panel once. If there are more than 2 users, press the Mode button again to change to USER 3 mode, and again for USER 4 mode.

NOTE: If a different operating mode is desired upon powering-ON of the VOPEX Touch Screen Sharer, follow the instruction under "POR MODE" on page 3 to set the power-ON mode to a preferred mode of operation.

INST Mode

After cycling through the individual USERx modes, the next press of the Mode button will switch the Touch Screen Sharer to INST mode, indicated by the illumination of the "Inst" LED. While the "Inst" LED is illuminated, any touch screens connected to the VOPEX Touch Screen Sharer have instantaneous control of the CPU, but only one at a time. (I.e., If User 1 is controlling the CPU, User 1 need only to stop activity for an instant in order for User 2 to take control.) The first sensed user will have control and all other users are locked out. The "Busy" LED will cycle between the users communicating with the CPU to indicate which user has control.

DELAY Mode

If, while in INST mode, the Mode button is pressed once more, the Touch Screen Sharer will switch to DELAY mode, indicated by the illumination of the "Delay" mode LED on the front panel. While in Delay Mode, the user of the touch screen controlling the CPU must pause activity for a programmable delay period before another user can take control of the CPU. The delay period can be as short as 30 seconds and as long as 4 minutes and 30 seconds. Once programmed, when the connected touch screen stops activity for a period longer than the set delay period, only then can another touch screen make connection and control the CPU. The "Busy" LED will remain illuminated until the delay period has elapsed and will go dark to indicate readiness for a connected touch screen to take control. See "Program Mode" on page 3 to program the delay period.

Pressing the Mode button one more time will switch the mode of operation back to USER1 mode, with an exclusive connection to the USER 1 mouse. See the following chart for a summary of LED combinations for the different operating modes.

LED COMBINATIONS FOR USER MODES

Mode	USER LED	BUSY LED	INST LED	DELAY LED
USER1 Mode	1 ON	OFF	OFF	OFF
USER2 Mode	2 ON	OFF	OFF	OFF
USER3 Mode	3 ON	OFF	OFF	OFF
USER4 Mode	4 ON	OFF	OFF	OFF
INST Mode	USER ACTIVE ON***	ACTIVE ON**	ON	OFF
DELAY Mode	USER IN CONTROL ON*	ACTIVE ON**	OFF	ON

*The LED for the user that is in control of the CPU will be on

** The LED will be on while the user in control is active on the CPU.

*** The LED for the active user will be on.

CONFIGURATION

Program Mode

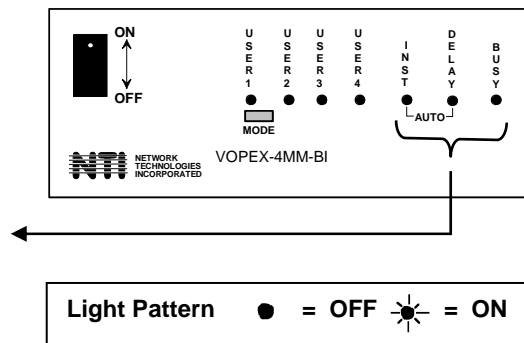
To program the DELAY Mode time period, follow these steps:

1. Power OFF the CPU.
2. Use the power switch to power OFF the VOPEX Touch Screen Sharer.
3. Press and hold the Mode button while switching the VOPEX power back ON.
4. Release the Mode button. The "U1" and "U2" LED's will flash, indicating readiness to program the DELAY mode.

Pressing the Mode button will change the time delay setting of the VOPEX Touch Screen Sharer. The different time delay settings will be indicated by illuminated patterns of the "Inst", "Delay", and "Busy" indicator LED's . The default time period (no LED's illuminated) is 30 seconds. The chart below shows how many times the Mode button must be pressed to select the desired time period and the LED pattern associated with it to indicate the selection.

5. Once the pattern is flashing for the desired time period, turn OFF power to the VOPEX Touch Screen Sharer again and then turn it back ON, this time without pressing the Mode button. The selected time period for the DELAY Mode will have been saved.
6. Power ON the CPU.

PRESS MODE BUTTON	TIME DELAY	LIGHT PATTERN
DEFAULT	30 SECONDS	● ● ●
1 TIME	1 MINUTE	☀ ● ●
2 TIMES	90 SECONDS	● ☀ ●
3 TIMES	2 MINUTES	☀ ☀ ●
4 TIMES	3 MINUTES	● ● ☀
5 TIMES	3 MIN.30 SEC.	☀ ● ☀
6 TIMES	4 MINUTES	● ☀ ☀
7 TIMES	4 MIN. 30 SEC.	☀ ☀ ☀



POR Mode (Power-ON-Reset Mode)

The factory default Power-ON-Reset mode is with User 1 connected. If a different Power-ON-Reset mode is desired, it can be configured.

1. Using the chart at the top of this page, press the Mode button until the desired mode is indicated.
2. With the press that selects the desired mode, hold the Mode button in for 5 seconds (the user LED's will alternately flash).
3. Release the Mode button.

The last mode chosen will now be the Power-ON -Reset mode each time the VOPEX Touch Screen Sharer is powered-ON.

SPECIFICATIONS

Serial CPU Connector	9D Female
Serial Monitor Connectors	9D Male
Power	120 or 240VAC at 50 or 60Hz-9VDC/0.5A via AC Adapter
Dimensions WxDxH (in.)	8.5x6.2x2.6

TROUBLESHOOTING

Each and every piece of every product produced by Network Technologies Inc is 100% tested to exacting specifications. We make every effort to insure trouble-free installation and operation of our products. If problems are experienced while installing this product, please look over the troubleshooting chart below to see if perhaps we can answer any questions that arise. If the answer is not found in the chart, please check the FAQs (Frequently Asked Questions) at our website at <http://www.networktechinc.com> or contact us directly for help at 1-800-742-8324 (800-RGB-TECH) in US & Canada or 1-330-562-7070 worldwide. We will be happy to assist in any way we can.

PROBLEM

Touch screen not working

SOLUTION

- VOPEX has to be turned ON before the CPU
- Touch screen not plugged-in all the way
- Not waiting for programmed delay time to elapse (see DELAY Mode on page 2)
- Port connected to is not active (see USERx Mode on page 2)

WARRANTY INFORMATION

The warranty period on this product (parts and labor) is one (1) year from date of purchase. Please contact Network Technologies Inc at (800) 742-8324 (800-RGB-TECH) or (330) 562-7070 or visit our website at <http://www.networktechinc.com> for information regarding repairs and / or returns. A return authorization is required for all repairs / returns.

SERIAL NO: _____

VOPEX-2MM-BI 2 port

DATE: _____

VOPEX-4MM-BI 4 port

INSPECTED BY: _____