NTI

**NETWORK
TECHNOLOGIES
INCORPORATED**

1275 Danner Dr
Aurora, OH 44202

Tel:330-562-7070
Fax:330-562-1999

INSTALLATION GUIDE FOR

SUN KEYBOARD & MONITOR SPLITTERS

| VOPEX-2KSUN | VOPEX-2KM-SUN |
| VOPEX-3KSUN | VOPEX-3KM-SUN |

◇ SUN WORKSTATION

VOPEX-2KM-SUN
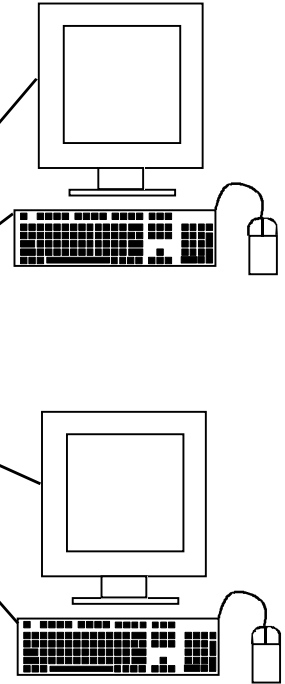
INTRODUCTION

This VOPEX unit allows (1) SUN Workstation to support multiple users (up to 3 – depending on the VOPEX model)

The VOPEX has 3 basic modes of operation: Instant Auto, Delayed Auto and User. Press the mode button on the front panel of the VOPEX to select the desired mode. The LED's on the front panel show which mode has been selected (see Fig 1). Only 1 mode can be selected at a time.

WARNING! DO NOT PRESS THE MODE BUTTON WHILE THE COMPUTER IS BOOTING OR WHILE AN APPLICATION IS LOADING.

USER MODES

The following is a description of the three available modes.

Instant Auto Mode

Any user can gain immediate access to the computer by pressing a key or moving a mouse.

Delayed Auto Mode

To gain access to the computer, a user need only press a key on the keyboard or move the mouse when the BUSY LED (located on the front panel of the VOPEX) is not lit. When the active user's keyboard and mouse are idle for 5 seconds, the VOPEX releases that port, and the BUSY LED goes out. Any user can now gain immediate access to the computer by pressing a key or moving a mouse.

User Mode

The VOPEX has a User Mode for each keyboard port (USER 1, USER 2, etc..). When a User Mode is selected, then only the user connected to that port can access the computer. All other users are locked out until the mode is changed.

MONITOR

All monitors connected to the VOPEX display exactly the same information. For example, if the user connected to Port 1 is inputting data, then all users connected to the VOPEX see what the user is entering.

KEYBOARD CONFIGURATION

All keyboards connected to the VOPEX automatically have the same keyboard configuration as the user currently accessing the computer. For example, if the user currently accessing the computer changes a status key (such as CAPS LOCK or NUM LOCK), then all keyboards will immediately be updated.

AVAILABLE OPTIONS

VOPEX models are available that support any combination of the options:

1. 2 or 3 users
2. 13W3 video
3. 60 or 50 Hz and 110 or 220 VAC

MATERIALS

Materials Supplied With This Kit

1. VOPEX

2. A set of cables connecting the VOPEX to the SUN Workstation

    a) SUCEXT-6   Connects the Video port of the computer to the VOPEX (can be purchased up to 250 feet) **NOTE:** This cable is only supplied if your VOPEX unit supports the Video Option.

    b) SUKINT-6-MM   Connects the keyboard port of the computer to the VOPEX.

Optional Materials

The maximum length of these cables is 250 feet.

1. SUCEXT-xx-MF   Extension cable for the monitor. Use if the monitor has a video cable permanently attached.

2. SUKINT-xx-MM   Extension cable for the keyboard.
    OR
    SUKEXT-xx-MM

Where: xx is the length in feet
        MM indicates male – male connectors
        MF indicates male – female connectors

Cables can be purchased from Network Technologies Inc.
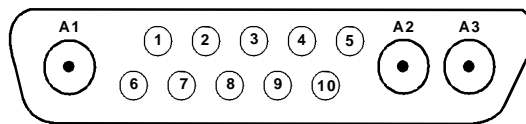
TECHNICAL SPECIFICATIONS

SUN Keyboard / Mouse
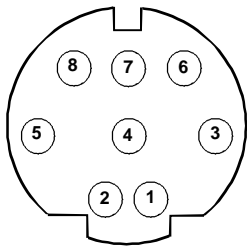
SUN Video

Mating face of a Female 8mD SUN Keyboard Connector

Mating face of a Female 13W3 SUN Video Connector

PIN #	SIGNAL
1	Ground
2	Ground
3	+5V
4	Mouse
5	Kybd Transmit
6	Kybd Receive
7	Pwr N
8	+5V

PIN #	SIGNAL	PIN #	SIGNAL
1	Ground	9	ID 0
2	V sync	10	Ground
3	ID 2	A1	Red
4	Ground	A2	Green
5	C sync	A3	Blue
6	H sync		
7	Ground		
8	ID 1		

INSTALLATION

Connecting the VOPEX to the Computer

1. Turn OFF power to the computer that will be connected to the VOPEX before connecting of disconnecting any cables.

WARNING! YOU MAY DAMAGE YOUR COMPUTER IF YOU DO NOT TURN THE POWER **OFF** BEFORE CONNECTING OR DISCONNECTING CABLES.

2. Connect the computer to the VOPEX as follows (see Fig 1):

    a) Connect the supplied SUKINT-6-MM cable from the keyboard port of the computer to the KEYBOARD-CPU port on the front panel of the VOPEX.

    b) If your VOPEX unit supports the video option, then connect the supplied SUCEXT-6 cable from the Video port of the computer to the VIDEO IN port at the rear of the VOPEX.

3. If your VOPEX unit has a power switch (located on the front panel (see Fig 1), then plug the VOPEX into an AC power outlet.

    If your VOPEX unit does not have a power switch, then it will be powered by the computer.

MAN032   **Revised 10/29/98**

Fig 1

Front Panel of VOPEX

Installing the Keyboard(s)

1. Connect a keyboard to the port labeled KEYBD-1 on the rear of the VOPEX (see Fig 1).

2. Connect the other keyboards to the back of the VOPEX.

NOTE: EACH KEYBOARD PORT MUST HAVE A KEYBOARD CONNECTED TO IT. The mouse connects to the keyboard.

Installing the Optional Monitor(s)

1. Plug all monitors into AC power outlets.

2. Turn OFF power to the monitors that will be connected to the VOPEX before connecting them.

3. Connect a monitor to the MONITOR 1 port on the back of the VOPEX (see Fig 1).

NOTE: A MONITOR MUST BE CONNECTED TO THE MONITOR 1 PORT FOR THE MONITOR DEVICE DRIVER TO FUNCTION PROPERLY.

4. Connect any other monitors to any of the other MONITOR ports on the back of the VOPEX.

NOTE: ALL MONITORS MUST BE THE SAME. ALL MONITORS MUST BE MONOCHROME OR ALL MONITORS MUST BE COLOR.

MAN032   **Revised 10/29/98**

POWER-UP SEQUENCE

1. Turn ON power to the monitor(s).

NOTE: THE MONITOR(S) **MUST** BE TURNED ON BEFORE THE COMPUTER.

2. If your VOPEX unit has a power switch (located on the front panel, (see Fig 1), turn ON power to the VOPEX.

    If your VOPEX unit does **NOT** have a power switch, then your computer will power the VOPEX.

3. Turn ON power to the computer.

POWER-DOWN SEQUENCE

1. Turn OFF power to the computer.

2. Turn OFF power to the VOPEX, if your VOPEX has a power switch.

WARNING! THE VOPEX MAY BE DAMAGED IF YOU TURN OFF POWER TO THE VOPEX BEFORE TURNING OFF POWER TO THE COMPUTER.

TROUBLESHOOTING

1. Verify that all cables are securely connected.

2. Verify that all keyboard ports on the VOPEX have keyboards connected to them. Selecting a port without a keyboard connected to it will cause a keyboard error.

3. If the keyboard cable connecting the computer to the VOPEX is disconnected:

    a) Perform the power-down sequence described above.

    b) Connect the cable.

    c) Perform the power-up sequence described above

4. If a keyboard is disconnected from the VOPEX:

    a) Turn the switch on the front panel to a port that has a keyboard connected to it.

    b) Reconnect the keyboard to the VOPEX.

    c) Verify that the keyboard is now functioning properly.

    d) If it is not functioning properly, then perform the steps in Power-down sequence and then the steps in Power-up sequence.

5. If a monitor is not functioning properly:

    a) Verify that a monitor is connected to MONITOR-1 on the rear panel of the VOPEX.

    b) Verify that all monitors connected to the VOPEX are the same type (all monochrome or all color).

WARRANTY INFORMATION
The warranty period on this product (parts and labor) is one (1) year from date of purchase. Please contact Network Technologies at 800-742-8324 or 330-562-7070 for information regarding repairs and/or returns. A return authorization number is required for all repairs/returns.

COPYRIGHT
Copyright 1994 by Network Technologies Inc. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written consent of Network Technologies Inc, 1275 Danner Drive • Aurora, OH 44202.

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: _____

☐ **VOPEX-2KSUN**

☐ **VOPEX-3KSUN**

☐ **VOPEX-2KM-SUN**

☐ **VOPEX-3KM-SUN**

MAN032   **Revised 10/29/98**