KEEMUX™ Series

KEEMUX-P2

2-Port PS/2 KVM Switch
Installation and Operation Manual

TRADEMARK

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CHANGES

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TABLE OF CONTENTS

INTRODUCTION

The KEEMUX-P2 switch allows one user to access two PS/2 CPUs with only one keyboard, monitor and mouse. Internal auto-boot circuitry allows both CPUs to boot simultaneously and error-free without the need for a keyboard, monitor and mouse on each CPU.

See our catalog, visit our website at http://www. networktechinc.com, or contact your NTI sales representative for more details.
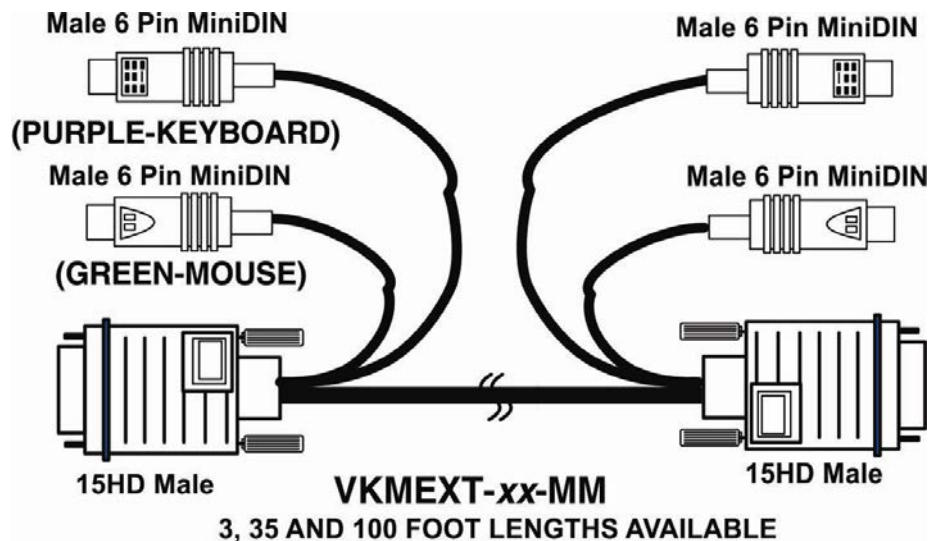
MATERIALS

Materials Supplied with this kit:
NTI KEEMUX-P2 PS/2 KVM Switch

Materials Not Supplied, BUT REQUIRED:

A set of 2 cables for each CPU being connected to the switch must be used:
PS/2 CPU to switch   • VKMEXT-xx-MM (Where xx = 3, 35 and 100 foot lengths)

Male 6 Pin MiniDIN   Male 6 Pin MiniDIN

(PURPLE-KEYBOARD)
Male 6 Pin MiniDIN   Male 6 Pin MiniDIN

(GREEN-MOUSE)

15HD Male   VKMEXT-*xx*-MM   15HD Male
3, 35 AND 100 FOOT LENGTHS AVAILABLE

FEATURES AND FUNCTIONS
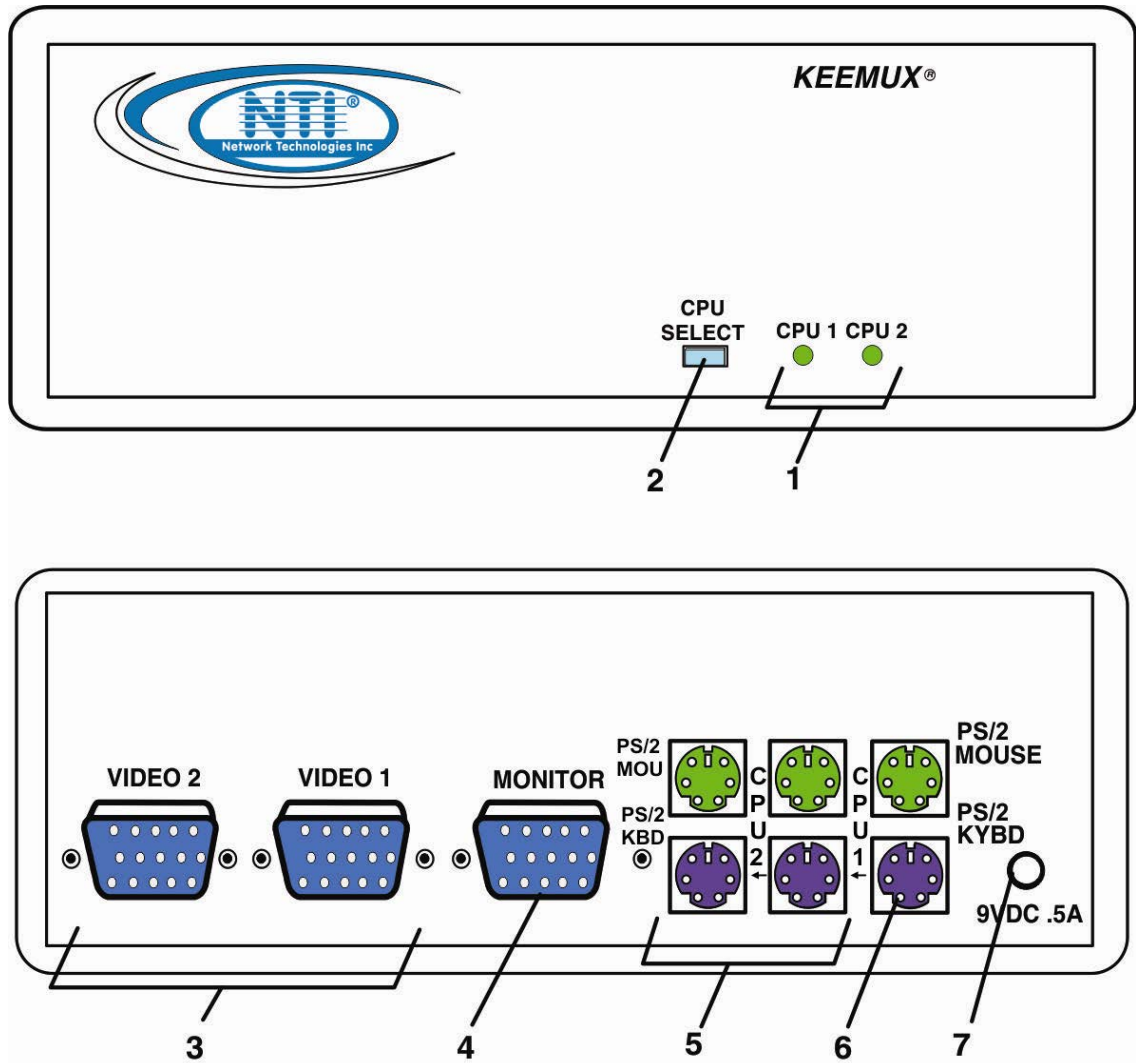
#	LABEL	CONNECTOR/LED	DESCRIPTION
1	**CPUx**	LEDs	For visual indication of connection between the user and a specific CPU. Also an visual indication of switch mode status.
2	**CPU SELECT**	Switch	Push to manually switch to a specific CPU
3	**VIDEO x**	15HD Female	For attachment of video cables from CPUs
4	**MONITOR**	15HD Female	For attachment of user monitor
5	**CPUx MOU/KBD**	6 Pin miniDIN Female	For attachment of PS/2 cables from CPUs
6	**PS/2 MOUSE/KYBD**	6 Pin miniDIN Female	For attachment of PS/2 user keyboard and mouse cables
7	**9VDC .5A**	Jack	For connection of power supply (Optional- sold separately)

INSTALLATION

1. Turn OFF power to all CPUs that will be connected to the NTI Switch before connecting or disconnecting any cables.

WARNING! Damage to the CPU may result if power is not turned <u>OFF</u> before connecting or disconnecting cables.

2. Connect PS/2 keyboard to "PS/2 KEYBOARD" port on the rear panel of the switch. (See figure below)
3. Connect PS/2 mouse to "PS/2 MOUSE" port on the rear of the switch.
4. Connect monitor to "MONITOR" port on the rear of the switch.
5. Using a VKMEXT-xx-MM cable (Page 1, required, not supplied), connect the keyboard and mouse connectors between a PS/2 CPU   and the   CPU 1 "PS/2 KBD" ,"PS/2 MOU" and "VIDEO 1" ports on the rear of the switch.
6. Repeat step 4 for connecting a second CPU to the remaining ports on the rear of the switch.
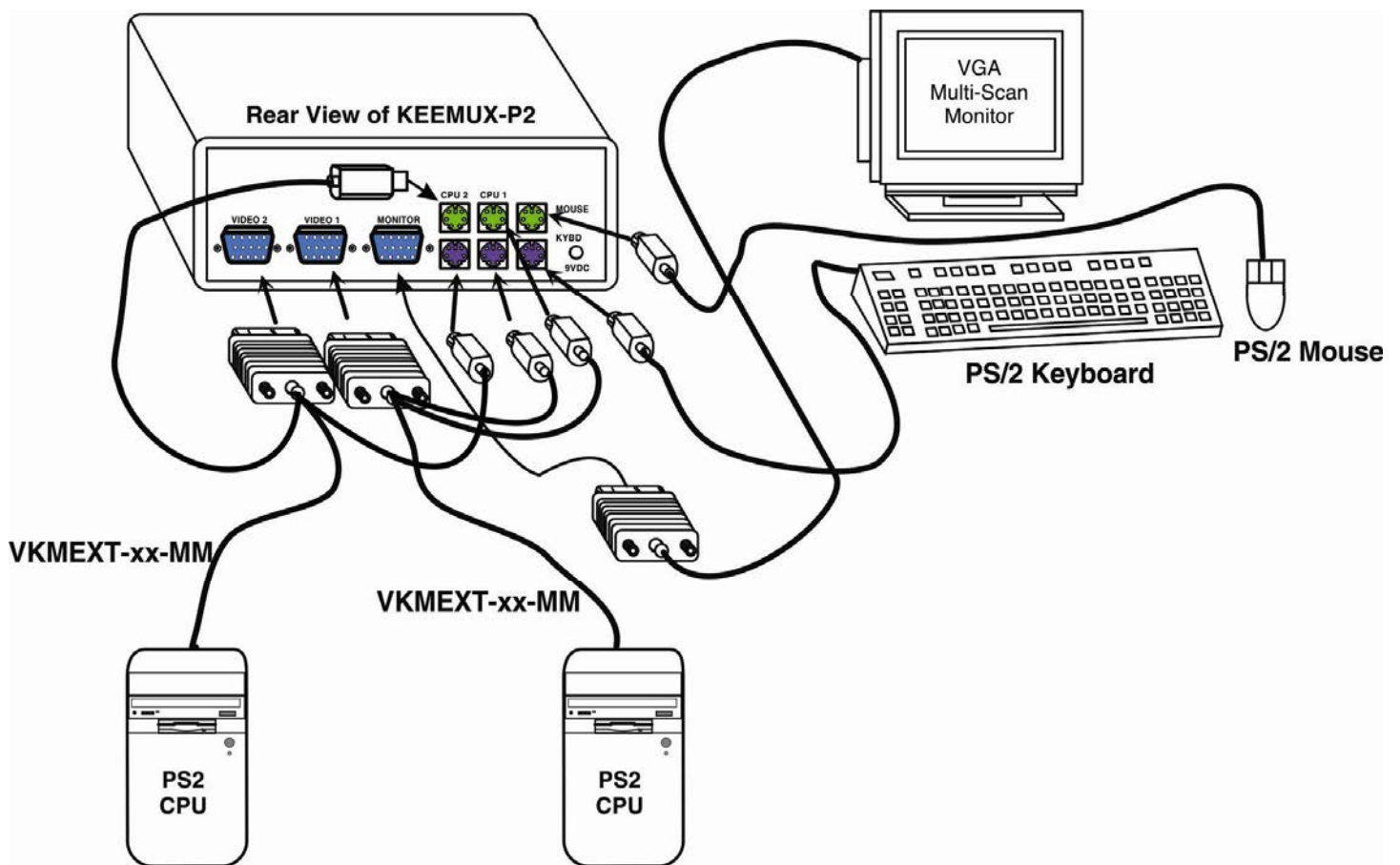
USING THE NTI SWITCH

The switch can be operated by the front control panel or by keyboard control.

Front Panel Control

1. Pressing the touch switch on the front panel will toggle between CPU 1 and CPU 2 and connect the selected CPU to the keyboard, monitor and mouse.
2. Holding down the "CPU SELECT" button for more than 2 seconds will cause the switch to cycle through 3 extended modes of operation: SCAN, BROADCAST, and COMMAND (see below for Command, Scan and Broadcast Mode sections). Release the button when the desired mode has been selected.

Keyboard Control

In order to control the switch with the keyboard, COMMAND Mode must be enabled. To enter/exit COMMAND Mode from the keyboard:

Press [**Ctrl**] **+** [**~** `] **(ACCENT KEY)**

Command Mode

When the COMMAND Mode is ON, all 3 status LEDs on the keyboard will illuminate to indicate that COMMAND Mode is enabled and the following functions are available: (**NOTE**: The user must exit COMMAND Mode in order to type to a CPU.)

Function:	**Keystroke:**
Increment Port	[**I**] **or** [**→**] **(move to next higher port)**
Decrement Port	[**D**] **or** [**←**] **(move to next lower port)**
Toggle "SCAN" Mode ON and OFF	[**S**]
Toggle "BROADCAST" Mode ON and OFF	[**B**]
Sets scan time-out period for each port.	[**T**] **-** [**(0-2) x**] **-** [**(0-9) x**] **-** [**(0-9) x**] **(xxx from 002 to 255. ie. t 002 would set the time-out period for 2 seconds)**
Selects a specific port	[**P**] **-** [**0**] **-** [**x**] **(P0x would be P01 or P02)**
Exit COMMAND Mode	[**Esc**] **or** [**Ctrl**] **+** [**~** `] **(ACCENT KEY)**
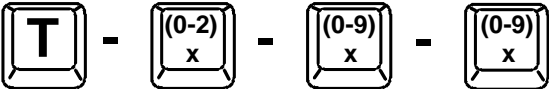
KEY SYMBOLS LEGEND:

or PRESS EITHER KEY

+ CHORDED SEQUENCE- PRESS CONSECUTIVELY AND KEEP KEYS PRESSED UNTIL ALL ARE PRESSED.

- PRESS CONSECUTIVELY

SCAN Mode

SCAN Mode is indicated by a flashing CPU port LED. The switch scans to either port with a CPU powered-ON. That port remains active for the configured dwell time (default time is 5 seconds) before switching to the other powered-ON CPU port. See COMMAND MODE Section for configuring the scan dwell time.

NOTE: The keyboard and mouse must remain idle for the full SCAN dwell time before the switch selects the other port.

CPU 1 CPU 2

A flashing CPU LED means that CPU is being scanned and is active.

BROADCAST Mode
(USE WITH EXTREME CAUTION)

BROADCAST Mode is indicated when both CPU LEDs are illuminated. This mode allows the operator to send keystrokes to both active CPUs simultaneously. However, BROADCAST Mode has some critical requirements:
1. BROADCAST Mode must be OFF when booting an attached CPU.
2. COMMAND Mode must be OFF for keystrokes to reach attached CPU(s) when in BROADCAST.

CPU 1 CPU 2
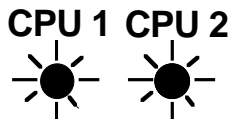
Two illuminated CPU LEDs means that the switch is in BROADCAST Mode.
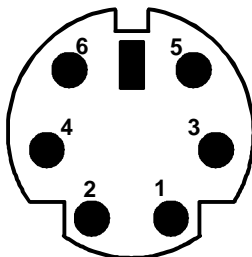
Keyboard Features

The keyboard configuration of each CPU is saved in the NTI Switch. For example, if the CPU attached to Port 2 had CAPS LOCK and NUM LOCK selected the last time that CPU was accessed, then they will automatically be set when that CPU is accessed again.

TECHNICAL SPECIFICATIONS

PS2 Keyboard or Mouse

Pin #	Signal
1	KYBD DATA
2	MOUSE DATA
3	GND
4	+5
5	KYBD CLOCK
6	MOUSE CLOCK

VGA Video

PIN#	Signal	Pin #	Signal
1	RED	9	NC
2	GREEN	10	GND
3	BLUE	11	ID0
4	ID2	12	ID1
5	TST	13	HS
6	RED GND	14	VS
7	GREEN GND	15	NC ID3
8	BLUE GND		

Mating face of a 6 pin miniDIN female
PS/2 KEYBOARD AND MOUSE

Mating face of a 15HD male
VGA VIDEO
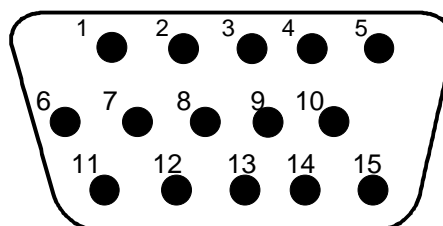
TROUBLESHOOTING

1. Verify all cables are securely connected and that installation procedure was carefully followed.
2. Verify that the power-up sequence was observed.
3. If a CPU seems to be locked up, press the "CPU SELECT" button a couple of times.
4. If the problem still persists, unplug the keyboard and mouse cables (not the CPU keyboard and mouse) from KEEMUX-P2 and reconnect them.
5. If the KEEMUX-P2 switch continues to have erratic or inconsistent operation, there may not be enough power coming from the CPUs to operate it (common with some older CPUs).   If this is the case, contact NTI and order an optional power supply (PS4094).

If the suggestions above have been tried and the KEEMUX-P2 KVM switch is still not functioning properly, a solution to the problem may be found on our website at http://www.networktechinc.com in the Frequently Ask Questions (FAQ) section, or, please call us directly at (**800) 742-8324** (800-RGB-TECH) or **(330) 562-7070** and we'll be happy to assist in any way we can.

WARRANTY INFORMATION

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