

KEYPORT MILLENNIA Series

User Manual

Table of Contents

Introduction

Product Overview	1
Product Features	3
Configurations	4

Installation

Device Connections	.7
Initial Power-Up	.9

Operation

Front Panel Push Buttons	13
On Screen Display	14
Hot-Key Commands	20
Cascade Configurations	22

Appendices

Specifications	
Troubleshooting	
Technical Support	
Warranty	30

Connect-Tek, Inc. 39-20 24th Street Long Island City N.Y. 11101 Phone: (718)729-3700 Fax: (718)729-3972 www.connect-tek.com

----- Introduction

Overview

One-Console Keyport Millennia Switches

The Keyport Millennia allows you to access multiple computers from a single keyboard, mouse and monitor. There are no interface cards to install or software to configure. Installation is as easy as connecting cables to the Keyport Millennia and your computers. Operation is as simple as pressing a push button, entering a hot-key command or navigating through the user-friendly on-screen menu (OSD). Keyport Millennia allows you to consolidate equipment to increase productivity of server management and decrease floor space requirements. Depending on the model you have, it switches up to 4, 8 or 16 IBM-compatible computers. The Keyport Millennia is independent of the computer operating system, allowing the attached computers to run different applications.

Two-Console Keyport Millennia Switches

The advanced multi-access Keyport Millennia "Dual Console" Switches enable you to control multiple computers from **two** different locations, remotely and locally with two keyboards, mice and monitors.

On-Screen Display (OSD) Menu

The built-in OSD control, allows you to name your computers, switch to a desired computer from a list, configure settings with easy-to-use menus, and view the name of the selected computer on-screen with programmable time interval. The OSD displays system status continuously throughout operation. Improved technology ensures a clear, high quality OSD menu between computers of different VGA resolutions and smooth switching.

Automatic Mouse Conversion

This technology enables you to connect computers with either PS/2 or serial mouse ports to the Keyport Millennia and control the computers from one PS/2 mouse. With a special mouse adapter connected to a computer using serial mouse, the Keyport Millennia automatically identifies the mouse and switches to proper mouse protocol.

High Video Quality

Keyport Millennia supports VGA resolution up to 1600x1200 without any degradation. The advanced VGA circuit design guarantees smooth and flicker-free switching from one computer to the other with cable distances up to 100ft (30M)* at both Console and PC sides.

* Tested with high-quality UL2919-rated, low-loss and shielded cables.

Features

- ■Supports both PS/2 and serial mouse
- Cascade configuration expands system capability
- ■Auto-scan automatically selects computers sequentially
- ■Supports Microsoft IntelliMouse (Pro)
- ■Hot-key functions allow easy computer access
- Keyboard states automatically saved and restored when switching computers
- Operating system independent, transparent to all applications
- ■Plug and play system configuration
- ■Keyboard and mouse can be hot plugged at any time
- ■High VGA resolution 1600x1200
- ■DDC2B compatible
- ■Optional standard 19 inch rack mounting accessories
- Supports optional multimedia module for microphones and stereo speakers

On-Screen Display features

- ■Assign computers with unique and meaningful names
- ■Identify and select computers by the names
- ■Programmable scan filters unused computers
- Store system settings and name entries to non-volatile memory
- ■Password security locks computer from unauthorized access
- ■Gain complete control with easy-to-use OSD interface

More features for multi-access models

- ■Manage multiple computers from two locations
- Each Console may have a different type of PS/2 mouse i.e. generic
- mouse and scroll mouse
- ■Selectable User Timeout

Configurations

Keyport Millennia is available in 4, 8, and 16 port models, to support a variety of requirements. For applications with a larger number of computers, Keyport Millennia can be cascaded in a master/slave configuration.

Single Keyport Millennia Configuration

Connect a PS/2 keyboard, a PS/2 mouse and a VGA multi-sync monitor directly to the *Master's* **CONSOLE** port. Then, connect multiple sets of keyboard, mouse and monitor cables to the "**PC** x" ports of the Keyport Millennia, as shown in figure 1.



Figure 1: A single Keyport Millennia configuration

Cascade (Master/Slave) Configuration

You can connect a second level of one or more Keyport Millennia to "PC 1"~"PC 4" (4port) or "PC 1"~"PC 8" ports (8 port or 16 port) of a *Master* unit. Cascade configuration expands system ability allowing you to select computers connected to the *Master* or *Slaves*. There is only one *Master*, which has a mouse, a keyboard and a monitor connected to its **CONSOLE** port directly operated by a user. Once connected, Keyports Millennia automatically configure themselves to either *Master* or *Slave*. *Slaves* of different Keyport Millennia models can be mixed in cascade configuration. [NOTE: Master must have equal or more PC ports than that of Slaves, i.e., if 8 port is a master, 8 port or 4 port can be Slaves, but 16 port cannot.]



Figure 2: A cascade Keyport Millennia configuration

Throughout this manual, *Master* is the Keyport Millennia that has a physical keyboard, mouse and monitor connected to its **CONSOLE** port. *Slave* is a Keyport Millennia that has its **CONSOLE** port connected to a *Master's* "**PC** x" port. *Slave* only exists in cascade configuration.

--- Installation -----

Device Connection

The monitor connected to the HD-DB-15 VGA port of a Master CONSOLE must be capable of synchronizing with the computer's video signal. If you are uncertain about the monitor type, please consult the monitor user's manual. Connect a PS/2 mouse and a keyboard to the CONSOLE port marked with a mouse and a keyboard respectively as shown in figure 3. [NOTE: Only a PS/2 mouse can be connected to the CONSOLE mouse port. The Keyport Millennia automatic mouse conversion system allows you to connect computers using serial mouse and control the computers from one PS/2 mouse.]



Figure 3: Master console connection

Determine the channel address of each computer. For computers using PS/2 mouse, connect the computer's mouse and keyboard cables to the Keyport Millennia's connectors marked with a mouse and keyboard respectively, as shown in figure 4.



Figure 4: Master computer connection

For computers using serial mouse, connect the DB-9 to mini-DIN-6 adapter (included with Keyport Millennia) to the computer mouse port, then use PS/2 cables to connect the mouse to Keyport Millennia, see figure 5. Connect the computer's monitor cable to the HD-DB-15 VGA connector. Repeat above steps for all remaining computers to be connected to the Keyport Millennia.



Figure 5: Adapter and serial mouse connection

7

Initial Power-Up

Make sure all computers are powered down during installation. For cascade installations, be sure that the Master Keyport Millennia is powered up before turning on any other devices.

- For single Keyport Millennia: 1) Apply a power adapter to the Master. 2) Turn on computers.
- For cascade: 1) Apply a power adapter to the Master. 2) Apply a power adapters to all Slaves. 3) Turn on computers.

This power–up sequence ensures the *Master* receives computer settings correctly when each computer boots. As a result, the Keyport Millennia generates correct responses and allows all computers and *Slaves* to boot successfully without user intervention. Should you decide to expand the system in the future or to replace failed devices, you may hot plug any additional **powered-down** computer or *Slave* without turning the *Master* off.

Replace Master Console Devices

You can replace a faulty keyboard or mouse of the *Master* **CONSOLE** port at any time without powering down the Master, as long as your computers are booted with proper device driver for the new device. Should you encounter any difficulty, just activate **K/M RESET** by holding the front-panel '1' and '2' push buttons down for 2 seconds.

Adhesive Rubber Foot

For desktop operation, you may stick the four round rubber feet (included with the unit) to the bottom of the Keyport Millennia. NOTE: Do not use the rubber feet for rack mount operation.

Optional Rack Mount Accessories

Figure 6 shows how to attach optional mounting brackets to the Keyport Millennia unit for standard 19-inch rack.





Figure 7 shows how to assemble rack cable support then screw it to the back and inside the rack cabinet vertical post.



Then, keyboard/mouse/monitor cables can be routed over the cable support. You can use plastic cable ties to bundle and label the cables through the rack cable support holes for easy identification.

Multimedia Module

An optional multimedia A/V module is used to select microphone, speaker and monitor signals from one out of eight computers. The A/V module is connected to the **LINK** port on the rear panel via a mini-DIN-8 connector. When a computer is selected, the microphone signal is directed to that computer; speaker and monitor signals come from the same computer.

As an OSD option, the A/V module may select a computer different from that of the Keyport Millennia. There are two options in *Audio Stick* function (<F4>:More\Audio Stick). When set to '**On**', A/V module selection follows computer selection. When set to '**Off**', A/V module selection stops following computer selection. It is useful if you want to listen to one particular computer's audio signal while selecting other computers during operation.

With extra VGA ports, the A/V module enables you to view multiple monitors from one PC at the same time (the PC must have extra VGA cards installed). Now you can extend your Windows desktop for all your computers and switch accordingly.

----- Operation

Front Panel Push Buttons

You may select a computer by pressing the front panel push button directly, by issuing hot-key commands or by activating the OSD window. The front panel indicator changes to reflect the computer port selected (red) and whether the port is connected to a powered computer (green). The indicator flashes red when it is in either *Auto Scan* or *Manual Scan* mode. See figure 8 below.



Figure 8: Front panel indictor

Some computers support 'keyboard/mouse power up' function, i.e., press certain keys or mouse buttons to startup the computers. Their corresponding green front indicators light all the time even if the computers are 'off'.

K/M RESET

K/M RESET is a very handy function that solves most problems developed by keyboard, mouse, device replacement, change of configuration, etc. You may press down both the front-panel number **1** and **2** push buttons for 2 seconds to re-configure the whole system without turning either Keyport Millennia or any computer off.

AUTO SCAN

Keyport Millennia provides an easy to use feature to start *Auto Scan*ning. You can press down both the front-panel number **7** and **8** buttons for 2 seconds to start Auto Scanning.

13

OSD (On-Screen-Display) Operation



Figure 9: OSD screen illustration

By hitting the left <CTRL> key twice within two seconds, you may see the 'Hotkey Menu' if it is enabled (an OSD option). Or, by hitting the left <CTRL> 14

<mark>key t</mark> l	<mark>hree ti</mark>	<mark>mes w</mark>	<mark>ithin</mark>	two s	econ	<mark>ds,</mark> j	you
will s	ee a 'k	CVM M	enu'	scree	n sho	owin	ig a
list	of	the	С	ompu	ters	V	vith
corre	spond	ing	char	inel	add	ress	ses,
name	es and	status	s, see	e figu	re 9.		

The channel address of the currently selected computer is displayed in red, same as the front indicator, to the right of the OSD title 'KVM

Menu'. The color of a device name is green if it has power and is ready for selection (its corresponding front panel indicator is green), or the color is white as it has no power. OSD menu updates the color when it is activated. Use the <UP> and <DOWN> arrow keys to highlight a computer and the <ENTER> key to select it. Or, you may press <ESCAPE> to exit OSD and remove the OSD menu from the display; the status window returns to the display and indicates the currently selected computer or operating status.

A triangle mark (\bullet) to the right of a name indicates the port is cascaded to a *Slave*; the number at the left of the triangle mark shows the number of ports the *Slave* has, i.e. **8** \bullet for 8 port. <ENTER> key brings you one level down and another screen pops up listing the names of the computers on that *Slave*. The name of the *Slave* will be shown at the upper right corner of the OSD menu. It is useful to group computers and still be able to see the group name.

An eye mark (O) to the right of a name indicating the computer is selected to be monitored in Scan mode. In OSD, this mark can be switched on or off by function key <F2>.

Press <ESCAPE> key to exit OSD and to return to the selected computer; the computer name is also shown on the screen.

● <u>Function key <F1></u>:To edit name entry of a computer or a *Slave*. First, use the <UP> and <DOWN> arrow keys to highlight a channel then press <F1> followed by name entry. Valid characters are 'A'~'Z', '0'~'9' and the dash character. Lowercase letters are converted to uppercase ones. Press <BACKSPACE> to delete a letter one at a time. Non-volatile memory stores all name entries until you change, even if the unit is powered down.

• <u>Function key <F2></u>: To switch the eye mark (O) of a computer on or off. First, use the <UP> and <DOWN> arrow keys to highlight it, then press <F2> to switch its eye mark on or off. If *Scan Type* is '**Ready PC +**O', only the power-on and

eye mark selected computers will be displayed sequentially in Scan mode.

● <u>Function key <F3></u>: To lock a device (a computer or a *Slave*) from unauthorized access, use *Security*. *Security* is effective for only one device (a computer or a *Slave*). To lock a device, use the <UP> and <DOWN> arrow keys to highlight it, then press <F3>. Now, enter up to 4 characters ('A'~'Z', '0'~'9, '-') followed by <ENTER> as new password. A Security-enabled device is marked with a lock () following its channel number. To permanently disable the *security* function from a locked device, highlight it, press <F3> then enter the password.

If you want to access the locked device temporarily, simply highlight it and press <ENTER>, the OSD will ask you for the password. After entering correct password, you are allowed to use the device. This device is automatically re-locked once you switch to another one. During Scan mode, OSD skips the security-enabled device. NOTE: Only one device (a computer or a *Slave*) can be locked by this function at a time. If you forget the password, the only way to permanently disable the security function is to remove all possible power sources from the master Keyport Millennia. You need to turn off all computers and unplug the power adapter, then restart everything.

● <u>Function key <F4></u>: More functions are available by hitting <F4>. A new screen pops up displaying more functions as described below. Most of them are marked with a triangle () indicating there are options to choose from. Using the <UP> and <DOWN> arrow keys, select the functions and press <ENTER>. Available options will be shown in the middle of the screen. Again, using the <UP> and <DOWN> arrow keys to view options then press <ENTER> to select it. You can press <ESCAPE> to exit at any time.

Auto Scan

In this mode, the Keyport Millennia automatically switches from one powered-on computer to the next sequentially in a fixed interval. During *Auto Scan* mode, the OSD displays the name of the selected computer. When *Auto Scan* detects any keyboard or mouse activity, it suspends the scanning till activity stops; it then resumes with the next computer in sequence. To abort the *Auto Scan* mode, press the left <CTRL> twice, or, press any front button. *Scan Type* and *Scan Rate* set the scan pattern. *Scan Type* (<F4>:More\Scan Type) determines if scanned computers must also be eye mark selected. *Scan Rate* (<F4>:More\Scan Rate) sets the display interval when a computer is selected before selecting the next one.

Manual Scan

Scan through power-on computers one by one by keyboard control. *Scan Type* (<F4>:More\Scan Type) determines if scanned computers must also be eye mark selected. Press the up arrow key (↑) to select the previous computer and the down arrow key (↓) to select the next computer. Press any

other key to abort the Manual Scan mode.

Audio Stick

An optional multimedia module can be LINKed to the back of each Keyport Millennia for selecting microphone and stereo speaker signals. There are two options for *Audio Stick*: **ON** and **Off**. When set to '**On**', audio selection follows computer selection. When set to '**Off**', audio selection stops following computer selection. It is useful if you want to listen to a particular computer's audio signal while operating other computers. The non-volatile memory stores the *Audio Stick* setting.

Scan Type

Ready PC +(*****): In Scan mode, scan through power-on and eye mark selected computers.

Ready PC: In Scan mode, scan through power-on computers.

The non-volatile memory stores the Scan Type setting.

Scan Rate

Sets the duration of a computer displayed in *Auto Scan* mode. The options are **3 seconds**, **8 seconds**, **15 seconds and 30 seconds**. The non-volatile memory stores the *Scan Rate* setting.

Keyboard Speed

Keyport Millennia offers keyboard typematic setting that overrides the similar settings in BIOS and in Windows. Available speed options are **Low**, **Middle**, **Fast** and **Faster** as 10, 15, 20 and 30 characters/sec respectively.

The non-volatile memory stores the Keyboard Speed setting.

Hotkey Menu

When you hit the left <CTRL> key twice within two seconds, the "Hotkey Menu" appears displaying a list of hot-key commands if the option is **On**. The 'Hotkey Menu' can be turned **Off** if you prefer not to see it when the left <CTRL> key is hit twice. The non-volatile memory stores the Hotkey Menu setting.

CH Display

Auto Off: After you select a computer, the channel address and name of the computer will appear on the screen for 3 seconds then disappear automatically.

Always On: The channel address and name of a selected computer and/or OSD status displayed on the screen all the time.

The non-volatile memory stores the CH Display setting.

Position

The position of the selected computer name and/or OSD status displayed on screen during operation. The actual display position shifts due to different VGA resolution, the higher the resolution the higher the display position. The non-volatile memory stores the Position setting.

UL as Upper Left, UR as Upper Right, LL as Lower Left, LR as Lower Right. MI as MIddle,

ESC: To exit the OSD, press the <ESCAPE> key.

Hot-Key Commands

Hot-key command is a short keyboard sequence to select a computer, to activate computer scan, etc. Keyport Millennia interprets keystrokes for hot-keys all the time. A hot-key sequence starts with two left <CTRL> keystrokes followed by one or two more keystrokes. A built-in buzzer generates a high-pitch beep for correct hot-key command; otherwise, one low-pitch beep for error and the bad key sequence will not be forwarded to the selected computer.

The short form hot-key menu can be turned on as an OSD function (<F4>:more\Hotkey Menu) every time the left <CTRL> key is pressed twice.

- L-CTRL: is the <CTRL> key located at the left side of the keyboard.
- 1~8/A~H: are the number keys '1' ~ '8' at the upper row of the keyboard and character keys 'A' ~ 'H' case insensitive. Do not use the keypad at the right of the keyboard.
- To select a computer by hot-key command, you must know its channel address, which is determined by the Keyport Millennia connection. For a computer connected to a *Master*, its address is represented by the PC port label (1~8 or A~H). For a computer connected to a *Slave*, two characters represent its address. The first character is the channel address of the *Master* unit (1~8) and the second one is the channel address of the *Slave* (1~8 or A~H). Please note that only *Master's* 'PC 1' ~'PC 8' ports can be connected to a *Slave*.

Left Ctrl + left Ctrl + 7

Selects a computer connected to port 7 of the Master.

Left Ctrl + left Ctrl + 6 + C

Selects a computer connected to port C of a *Slave* connected to port 6 of the *Master*.

■ To start *Auto Scan*, automatically scan <u>powered-on</u> computers one by one at a fixed interval:

left Ctrl + left Ctrl + F 1

When Auto Scan detects any keyboard or mouse activity, it suspends

the scanning till activity stops; it then resumes with the next computer in sequence. The length of the *Auto Scan* interval (*Scan Rate*) is adjustable, see below. To abort the *Auto Scan* mode, press the left *Ctrl* key twice.

Note: In OSD screen, *Scan Type* determines whether eye mark is necessary during *Auto Scan*.

Manual Scan enables you to manually switch back and forth between <u>powered-on</u> computers.

left Ctrl + left Ctrl + F2

Press \uparrow or \downarrow to select the previous or the next computer in sequence. And, press any other key to abort the *Manual Scan*.

Note: In OSD screen, *Scan Type* determines whether eye mark is necessary during *Manual Scan*.

To adjust *Scan Rate* which sets the duration before switching to the next computer in *Auto Scan*:

left Ctrl + left Ctrl + F3

The Keyport Millennia sends one to four beeps indicating scan interval of **3**, **8**, **15** and **30** seconds respectively.

To adjust keyboard typematic rate (characters/sec), this setting over-rides that of BIOS and any operating system:

left Ctrl + left Ctrl + F4

The Keyport Millennia generates 1 to 4 beeps corresponding to *10*, *15*, *20* and *30* characters/sec respectively.

Audio Stick

An optional multimedia module can be LINKed to the back of each Keyport Millennia for selecting microphone and stereo speaker signals. There are two options for *Audio Stick*: **ON** and **Off**. When set to '**On**', audio selection follows computer selection. When set to '**Off**', audio selection stops following computer selection. It is useful if you want to listen to a particular computer's audio signal while operating other computers.

left Ctrl + left Ctrl + F5

The Keyport Millennia generates 1 or 2 beeps corresponding to **On** and **Off** respectively.

----- Cascade Configuration

Connection

Before connecting a device (a computer or a Slave) to the Master under power, you must turn off the device. The Master must have equal or more '**PC** \mathbf{x} ' ports than that of the Slave, i.e., if 8 port is the master, then 8 port or 4 port can be Slaves, but 16 port cannot.

The ports labeled "PC 1"~"PC 8" can be connected to either a computer or a *Slave*'s **CONSOLE** port, as shown in figure 10. The ports "PC A"~"PC H" can only be connected to a computer. A power adapter with DC 9V/500mA output rating must be connected to the *Master*.



Figure 10: Slave console connection

The maximum number of computers controlled by a master/slave configuration with all 4 port units is 16--with 4 *Slaves* and each *Slave* connects to 4 computers, see figure 11. For one with all 8 port units, the number is 64--with 8 *Slaves* and each *Slave* connects to 8 computers, see figure 12. Using all 16 port units, the number is 136, see figure 13. The *Master* 16 port unit connects to 8 Slaves and 8 computers, and each *Slave* connects to 16 computers.



Figure 11: Cascaded 4-port Keyport Millennia



Figure 12: Cascaded 8-port Keyport Millennia



After connection is complete, you should re-activate the OSD menu to check if the *Master* recognizes the *Slaves*. A triangle mark (\blacktriangleright) is placed to the right of the channel name indicating the port is connected to a *Slave not* a computer. A number to the left of the triangle mark indicates the *Slave* model, i.e. **8** \blacktriangleright for 8 port.

Change Configuration while Running

Devices at any 'PC x' port can be changed at any time after initial power-up. If you change any one of the "PC 1" to "PC 8" ports connection from a computer to a *Slave* or vice versa, or replace the devices of a port; the OSD will update this change the next time it is activated. *[NOTE: Any new device, a computer or a Slave, must be turned off before it is connected to the Master.]*



Figure 13: Cascaded 16-port Keyport Millennia

-----**Dual Console** Keyport Millennia

Overview

The advanced multi-access 8 port and 16 port models have all the standard Keyport Millennia features with the additional feature of two console ports. This facilitates installations where a local and remote keyboard, monitor and mouse set is required. This adds additional convenience in server room applications where access is required in close proximity to computers for some tasks and perhaps at your desk elsewhere for other tasks.

Connections

Connect two keyboards, mice and monitors to the two **CONSOLE** ports. The built-in PS/2 mouse signal translation enables you to connect PS/2 mice of different types to the **CONSOLE** ports, i.e., a generic PS/2 mouse for one **CONSOLE** and a scroll mouse for another.



Operation

On power up, the dual console models are in Idle mode, broadcasting the VGA signal from the selected computer and detecting for keyboard and mouse activity. User LEDs (marked with reverse white \mathbf{A} and \mathbf{B}) are both green indicating the Keyport Millennia is not in use.

When keyboard or mouse activity is detected at one **CONSOLE**, the Keyport Millennia immediately disables the other **CONSOLE** from accessing the computer. Only one User LED, at the front panel, remains lit indicating the Keyport Millennia is under user operation. In the mean time, keyboard LEDs (Num/Caps/Scroll Lock) of the other **CONSOLE** start to flash as its access is denied and the monitor is blocked from the VGA signal for security reasons. After the user has finished his operation for a period of time (i.e., *User Timeout*), the multi-access Keyport Millennia Switch returns to Idle mode. *User Timeout* has four options, **5 sec**, **30 sec**, **60 sec** and **HOLD**. Select **HOLD** when you plan to access the Keyport Millennia for an extended time. Pressing the <Scroll Lock> twice forces the Keyport Millennia to return to Idle mode immediately, regardless of the *User Timeout* setting.

The *User Timeout* is available in the OSD menu by pressing the Function key <F4>, under the sub-menu **More**. Note: *Keyboard Speed* option is not available for multi-access models.

Configuration

To expand the number of computers under control, you may connect **CONSOLE** port of another Keyport Millennia to "**PC 1**" ~ "**PC 8**" port. Refer to the chapter *Cascade Configuration* for more details. There are rules to apply for Master/Slave configurations. When an 8 port is the Master, its slaves may includes 4 or 8 port units. When a 16 port is the Master, its slaves may include 4, 8 or 16 port units.

----- Appendices

Specifications:

Specifications	4 Port	8 Port	16 port	8 Port Dual	16 Port Dual
				Console	Console
Number of Console Ports	1	1	1	2	2
Number of Computer Ports	4	8	16	8	16
Cascade Control of x number	Up to 16*	Up to 64*	Up to 136*	Up to 64*	Up to 136*
of PC Ports					
On-screen display (OSD)			Yes		
Front panel button control	4	8	16	8	16
Hot plug-and-play	Yes				
Hot-key control	Yes				
Rack-mount kit	Optional				
Automatic scan interval	3, 8, 15, 30 seconds				
Programmable scan patter n	Yes				
Cable length (Max)	30M (100ft) at CONSOLE				
	30M (100ft) at PC ports				
VGA	1600 x 1200, DDC2B				
PC PORTS: Keyboard	PS/2				
Mouse connector	PS/2, serial (with adapter)				
Monitor	HD-DB-15 male				
CONSOLE PORT(s):Keyboard	PS/2				
Mouse connector	PS/2				
Monitor	HD-DB-15 female				
H x W x D (mm)	44x220x130	44x436x180	88x436x220	44x436x180	88x436x220
(in.)	1.7x8.7x5.1	1.7x17.2x7.0	3.5x17.2x8.7	1.7x17.2x7.0	3.5x17.2x8.7
size	Compact	1U	2U	1U	2U
Power supply (min)	9V DC, 500mA				

* Cascaded with Keyport Millennia Switches supporting the same number of PC ports. You can mix different models in cascade applications.

Troubleshooting:

Ensure that all cables are well seated. Check that keyboard/mouse cables are not swapped. Label and bundle the cables for each computer to avoid confusion when connected to the Keyport Millennia.

	00/41	0115
No OSD screen	.No power to Keyport Millennia	.Establish power by turning on computers, wait, press left CTRL keys several times.
	Loose monitor connection Monitor not multi-sync	.Reconnect monitor .Use multi-svnc monitor
Keyboard error on boot	Loose keyboard connection	.Make sure keyboard cables are Well seated
Master/slave does not work	Improper installation procedures	.Make sure slave's CONSOLE is connected to <i>Master's</i> PC 1~ PC 8 port .Press and hold the 1 and 2 push buttons to initiate K/M reset .Remove any possible power supply to the slave (unplug al cables), before connecting it to the <i>Master</i>
Keyboard strokes shifted	.The computer was in shifted state when last switched	Press both SHIFT keys
The ↑ and ↓ keys do not work in <i>Manual</i> <i>Scan</i>	.All PCs are off or only one PC is turned on. Scan mode works for power-on computers only .Scan type is eye mark selected but no PC is eye mark selected in OSD.	.Turn computers on. .Press any other key to abort <i>Manual Scan</i> mode. .Set proper <i>Scan type</i> in OSD and determine which PCs are eye mark selected, do it in OSD.
Auto Scan does not switch PC and Keyport Millennia beeps from time to time and red indicator flashes	All PCs are off or only one PC is turned on. Scan mode works for power-on computers only . <i>Scan type</i> is eye mark selected but no power-up PC is eye mark selected in OSD	Turn on computers .Set proper Scan Type in OSD and determine which PCs are eye mark selected, do it in OSD. .Press left CTRL key twice to abort Auto Scan mode. .Press any front button to select a PC, and Auto Scan stops

Symptom Possible causes Recommended Solutions

.Double OSD .Improper slave .Press push buttons 1 and 2 down 28

images at cascade configuration	connection procedure.	for 2 seconds to activate K/M RESET. . Remove any possible power supply to the <i>Slave</i> (unplug all cables), before connecting it to the <i>Master</i> .
OSD menu is not at the proper position	.OSD menu has fixed resolution and its size varies due to computer VGA resolution changes.	.Use <f4>:More\Position to select UL or UR. OSD menu may appear near the middle of the screen when LL or LR is selected.</f4>
Computer can not use serial mouse	Loose mouse adapter Incorrect mouse adapter	Secure the mouse adapter to computer's COM port. Use only the mouse adapter comes with the unit
Can not select a computer connected to a slave	Improper Master unit connection Improper slave unit connection .Too many levels of slaves	Only Master ports PC1~PC8 can be connected to slaves. Connect slave CONSOLE port to PC1~PC8 ports of the Master Only one level of slave units is allowed. Pop up OSD again to check if Master recognizes the slave connection. Look for triangle mark and the number before it.
The Keyport Millennia fails to function occasionally.	.Computers do not supply enough power.	.Add a power adapter with minimum of 9V 500mA output rating to the SPARE power jack.

Technical Support:

FOR TECHNICAL SUPPORT OF ANY KIND, PLEASE CONTACT A FACTORY REPRESENTATIVE BY CALLING (718) 729-3700, PHONE SUPPORT HOURS ARE 9:00 – 5:00 EST. EMAIL TO: sales@connect-tek.com

WARRANTY

Connect-tek, Inc., hereby warrants that this product shall be free from defects in materials and workmanship for a period of one (1) year, from the date of delivery to the original purchaser. Connect-Tek's sole responsibility with respect to this warranty shall be to repair or to replace at Connect-Tek's option, any product or part thereof determined by Connect-Tek to be defective. Connect-Tek expressly states that this warranty does not include this product's compatibility with any specific computer make or model, operating system or application.

This warranty is not extended to include accessories.

To enforce this warranty, contact your place of purchase and your representative will provide the required authorization. CONNECT-TEK EXPRESSLY DISCLAIMS ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, EXCEPT AS THOSE SPECIFIED HEREIN.

LIMITATION OF LIABILITY

CONNECT-TEK'S LIABILITY, IF ANY, FOR DAMAGES RELATING TO THIS PRODUCT, REGARDLESS OF THE NATURE OF THE ACTION BROUGHT, IS LIMITED TO THE ACTUAL PRICE PAID BY THE PURCHASER FOR THIS PRODUCT, AND WILL, IN NO EVENT INCLUDE ANY CONSEQUENTIAL, INCIDENTAL, INDIRECT, SPECIAL OR OTHER DAMAGES OF ANY KIND, EVEN IF CONNECT-TEK HAS BEEN APPRISED OF THE LIKELIHOOD OF SUCH OCCURRING, OR IF SUCH DAMAGES WERE REASONABLY FORESEEABLE.

EXCLUSION OF WARRANTY

THIS WARRANTY DOES NOT COVER ACCIDENT, MISUSE, FIRE, FLOOD, AND ANY OTHER ACT OF GOD, INCORRECT LINE VOLTAGE, DAMAGE CAUSED BY IMPROPER INSTALLATION, IMPROPER OR UNAUTHORIZED REPAIR OR MARRED CABINET, MISSING OR ALTERED SERIAL NUMBERS, AND CUSTOMER ADJUSTMENTS THAT ARE NOT COVERED IN THE INSTRUCTION MANUAL.

Connect-Tek, Inc. makes no representation or warranties with respect to the contents of this manual and disclaims any implied warranties for fitness for any particular application. Connect-Tek, Inc., reserves the right to revise this manual without obligation to notify any person or organization of such revision.

All rights reserved. Reproduction of any part of this manual in any form whatsoever without Connect-Tek's expressed written permission is prohibited. Copyright 1999 by Connect-Tek, Inc.

The computer and product names mentioned in this manual are trademarks of the manufacturers and publishers and are used only for the purpose of identification. IBM and PS/2 are registered trademarks of the International Business Machines Corp.