

# LevelOne Palm-Sized

KVM Switch

KVM-0205 KVM-0405

**User's Guide** 

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Please read this manual thoroughly and follow the **Installation** procedures to prevent any damage to the LevelOne Palm-Sized KVM or any connecting device.

#### ----- Introduction

#### Overview

The LevelOne Palm-Sized KVM, KVM-0205 and KVM-0405 are computer switches that allows access to two or four IBM compatible computers respectively from one PS/2 keyboard, mouse and monitor. Switching between computers is as easy as pressing the push button or entering hot-key commands from your keyboard. There is no interface card and software to install and the LevelOne Palm-Sized KVM is independent of the computer operating system.

Ready to run right out of the box, this Kit comes with everything you need - a switch and complete cable sets, just hook them up and go. By allowing one console to manage all your computers, the LevelOne Palm-Sized KVM eliminates the expense for extra consoles, the spaces for extra peripherals and the time hopping around for accessing different computers.

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#### Features

■Unique loose-free cables included preventing keyboard or mouse connector from getting loose. ■Supports PS/2 keyboard and mouse. ■Keyboard and mouse emulation for error-free PC boot up. ■Keyboard and mouse hot pluggable at any time without turning either LevelOne Palm-Sized KVM or PCs off. ■Space-saving design. ■Auto scan automatically selects computers sequentially. ■Supports M/S IntelliMouse (Pro), Explorer, Optical. ■Hot-key and push button allow easy computer access. Keyboard states automatically saved and restored when switching computers. Operating system independent, transparent to all applications. ■High VGA resolution 1920x1440. ■DDC2B compatible. Power-free operation - the LevelOne Palm-Sized KVM draws power from the attached PCs.

#### -----Installation

## **Console Connection**

Turn your computers off. Connect a PS/2 keyboard to the mini-DIN-6 port marked with "Keyboard" and a PS/2 mouse to the mini-DIN-6 port marked with "Mouse". Then connect your VGA monitor cable directly to the HDB-15 port as shown in figure 1.



Figure 1: KVM-0205 Console Connection

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The figure 2 shows 4-port LevelOne Palm-Sized KVM console connection.



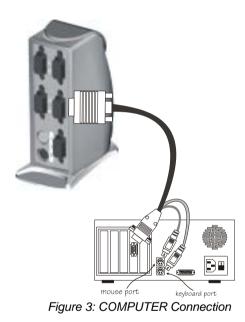
Figure 2: LevelOne KVM-0405 Console Connection

The multi-sync monitor 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.

The LevelOne Palm-Sized KVM consumes negligible power and is designed to run reliably without an external power adapter.

## **Computers Connection**

LevelOne Palm-Sized KVM comes with complete cable sets facilitating computer connection. One side of the cable has an HDB-15 connector and the other side has three connectors (one HDB-15 and two mini-DIN6s). The **PC 1** ~ **PC 4** marks on the LevelOne Palm-Sized KVM are for computer connection as shown in figure 3.



**NOTE:** If your computer uses an AT style keyboard, you will need an "AT-to-PS/2 keyboard adapter" at the computer keyboard port.

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#### **Initial Power-up**

Make sure all computers and the LevelOne Palm-Sized KVM are powered down during installation. You may power up the computers after installation,. The LevelOne Palm-Sized KVM can be powered from the computers. This procedure ensures the LevelOne Palm-Sized KVM receive computer settings correctly when computer boots.

**NOTE:** You may hot plug any additional powered-down computer to the LevelOne Palm-Sized KVM at any time after the initial power up.

#### ----- Operations

#### **Front Panel operation**

You may switch to a different computer by pressing the front panel push-button directly or by issuing hot-key commands. The front-panel LED illuminates indicating the active port. The LED flashes while in either Auto Scan or Manual Scan mode.

Should you encounter any keyboard or mouse problem, press and hold down the push-button for 3 seconds to initialize the keyboard and mouse.

#### Hot-key commands

Hot-key command is a short keyboard sequence to select a computer or to activate computer scanning. *LevelOne Palm-Sized KVM* 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.

```
To select a computer:
left Ctrl + left Ctrl + 1
Selects the computer at PC 1.
left Ctrl + left Ctrl + 2
Selects the computer at PC 2.
left Ctrl + left Ctrl + 3
Selects the computer at PC 3 (for
KVM-0405 only).
left Ctrl + left Ctrl + 4
```

Selects the computer at **PC 4** (for KVM-0405 only).

**NOTE:** Do not use the keypad at the right side of the keyboard for hot key commands.

• To start *Auto Scan*, automatically scans all ports one by one at a fixed interval:

left Ctrl + left Ctrl + F 1

To abort the *Auto Scan* mode, press the left *Ctrl* key twice. Keyboard and mouse are both operational during *Auto Scan*. When it detects any keyboard or mouse activity, it suspends *Auto Scan* until the activity stops; it then resumes with the next computer in sequence. The length of the *Auto Scan* interval (*Scan Rate*) is adjustable, see below. LED flashes during *Auto Scan* for KVM-0405 only.

• *Manual Scan* enables you to manually switch back and forth between 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*. LED flashes during *Manual Scan* for KVM-0405 only.

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

left *Ctrl* + left *Ctrl* + *F*3 There are four options: 3, 8, 15 and 30 seconds.



**NOTE:** Scan Rate is set to default of 3 seconds after LevelOne Palm-Sized KVM loses power, i.e., all connected computers are turned off.

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

#### left Ctrl + left Ctrl + F4

There are four options: 10, 15, 20 and 30 characters/sec.

**NOTE:** The keyboard typematic Rate is set to default of 10 characters/sec when LevelOne Palm-Sized KVM loses all power sources, i.e., all connected computers are turned off.

# ----- Appendices

## **Specifications**

Specification	KVM-0205	KVM-0405
Console port number	1	
Computer port number	2	4
Port selection push button	1	
Hot plug-and-play	Yes	
Hot-key control	Yes	
VGA	1920 x 1440, DDC2B	
Y2K compliance	Yes	
Computer connector	HDB15 x 2	HDB15 x 4
Console connector		
Keyboard	PS/2	
Mouse	PS/2	
Monitor	HDB15	
Automatic scan interval	3, 8, 15, 30 seconds	
Cable length	1.8m x 2	1.8m x 4
H x W x D (mm)	120 x 40 x 77	
Power-free operation	Yes	

# Troubleshooting

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

Symptom	Causes	Solutions
Keyboard or	Improper power-up	Press and hold down the
mouse does not	sequence.	push button for 3
work	Keyboard or	seconds, the LevelOne
	mouse not properly	Palm-Sized KVM will
	initialized.	re-initialize the keyboard
		and mouse.
		If problem persists,
		unplug the keyboard or
		mouse, wait for few
		seconds then plug it back.
Keyboard error	Loose keyboard	Make sure keyboard
on boot	connection.	cables are well seated.
Keyboard	The computer was	Press both SHIFT keys.
strokes shifted	in shifted state	
	when last switched	
Computer can		The LevelOne
not use serial		Palm-Sized KVM does
mouse.		not support serial mouse.
Scan Rate was	All connecting	Set the Scan Time again
set to 30 sec	computers are	and keep at least one
and becomes 3	powered off.	computer on all the time.
sec.	LevelOne	
	Palm-Sized KVM	
	r resets.	

# Package Contents:

## The complete KVM-0205 contains:

KVM-0205(2-port KVM)	x 1
Custom cable set 1.8M(6ft)	x 2
User's manual	x 1

## The complete KVM-0405 contains:

KVM-0405(4-port KVM)	x 1
Custom cable set 1.8M(6ft)	x 4
User's manual	x 1