

# **Supervisor Smart**

## 4, 8 and 16 Port

## **User Guide**



#### International HQ Jerusalem, Israel Tel: + 972 2 535 9666

minicom@minicom.com

North American HQ

Linden, New Jersey Tel: + 1 908 4862100 info.usa@minicom.com European HQ Zurich, Switzerland Tel: + 41 1 455 6220 info.german@minicom.com

#### Italy

Rome Tel: + 39 06 8209 7902 info.italy@minicom.com

www.minicom.com

Customer support - support@minicom.com

5UM20111 V1 4/03

#### **Table of Contents**

1.	Welcome	3
2.	Introduction	4
3.	Features	4
4.	Compatibility	5
5.	The Smart system configuration	5
6.	The Smart models	6
7.	Pre-installation guidelines	7
8.	Connecting the Smart system	7
	Connecting the CPU Adapter cable	9
	Connecting the KVM console	10
9.	Connecting the system to the power supply	10
10.	Order of switching on	10
11.	The OSD	11
	Editing the OSD	11
	Entering data in the Name section	12
	Entering data in the Stations section	12
	Replacing or erasing data	12
12.	Configuring the Scan Setup window	13
13.	Changing the Hotkey from Shift to Ctrl	15
14.	Changing the Keyboard language	15
15.	Setting Autoskip	16
16.	Using the OSD HELP	16
17.	Operating the Smart system	17
18.	Operating the system with the OSD	17
	Selecting a computer	18
19.	Scanning computers	18
20.	Closing the OSD	19
21.	Operating the system with the front panel touch pads	19
22.	Accessing the next computer	19
23.	Accessing the previous computer	19
24.	Setting the scan time	20

25.	Scanning	20
26.	End scanning	20
27.	Settings mode	21
	Making advanced adjustments	21
	Replacing a computer	21
	Keyboard settings when replacing a computer	22
	Mouse driver settings when replacing a computer	22
	Viewing the settings	23
	Exiting the Settings mode	23
28.	Technical specifications	24

#### 1. Welcome

The Supervisor Smart system is produced by Minicom Advanced Systems Limited.

#### **Technical precautions**

This equipment generates radio frequency energy and if not installed in accordance with the manufacturer's instructions, may cause radio frequency interference.

This equipment complies with Part 15, Subpart J of the FCC rules for a Class A computing device. This equipment also complies with the Class A limits for radio noise emission from digital apparatus set out in the Radio Interference Regulation of the Canadian Department of Communications. These above rules are designed to provide reasonable protection against such interference when operating the equipment in a commercial environment. If operation of this equipment in a residential area causes radio frequency interference, the user, and not Minicom Advanced Systems Limited, will be responsible.

Changes or modifications made to this equipment not expressly approved by Minicom Advanced Systems Limited could void the user's authority to operate the equipment.

Minicom Advanced Systems Limited assumes no responsibility for any errors that appear in this document. Information in this document is subject to change without notice.

No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without the express written permission of Minicom Advanced Systems Limited.

© 2003 Minicom Advanced Systems Limited. All rights reserved.

#### Trademarks

PS/2 is a registered trademark of International Business Machines Corporation. All other trademarks and registered trademarks are the property of their respective owners.

## 2. Introduction

Access and control multiple computers from one Keyboard Video Mouse (KVM) console with the Supervisor Smart (Smart) system. The Smart comes in 4, 8 and 16 port models. Connect up to 4 computers to the 4 port model, 8 to the 8 port model and 16 to the 16 port model.

#### 3. Features

- Hot-Swap disconnect and reconnect computers without rebooting
- Scan-mode operation with variable time interval
- Rack mountable for standard 19" racks
- Operate the system using an On Screen Display (OSD) or the front panel touch pads
- Create multi-level cascade arrangements. For example by cascading the Smart 16 Port model, connect up to up to 256 computers in the system
- The computers and the KVM console can be placed up to 4.5m/14.8ft from the Smart

## 4. Compatibility

The Smart is compatible with:

- PS/2 computers
- VGA, SVGA, or XGA monitors

#### 5. The Smart system configuration

Figure 1 illustrates the basic configuration of the Smart system.

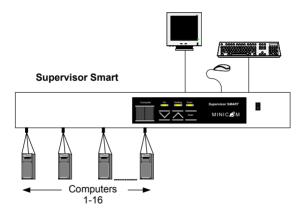


Figure 1 The Smart system configuration

#### 6. The Smart models

Figure 2 illustrates the front panel of all Smart models.

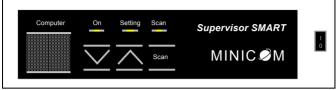


Figure 2 Smart front panel

The Figures below illustrate the rear panels of the Smart 8 and 16 port units respectively.

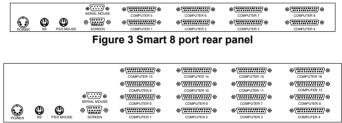


Figure 4 Smart 16 port rear panel

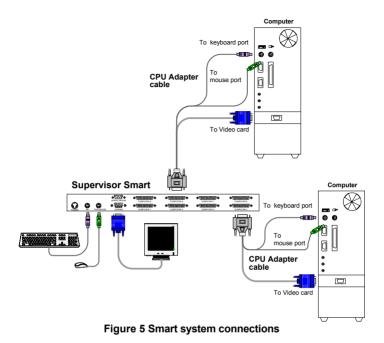
## 7. Pre-installation guidelines

- Switch off all computers, and Smart units
- Place cables away from fluorescent lights, air conditioners, and machines that are likely to generate electrical noise.
- Ensure that the distances between the computers and the Smart, and between the KVM console and the Smart, do not exceed 4.5m/14.8ft.

#### 8. Connecting the Smart system

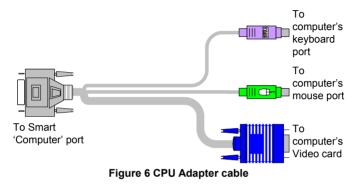
Connect the Smart system using CPU Adapter cables.

Figure 5 illustrates the Smart system connections.



#### **Connecting the CPU Adapter cable**

Connect each computer to the Smart using a CPU Adapter cable. Figure 6 illustrates the cable.



To connect the CPU Adapter cable:

- 1. Connect the DB25M connector to one of the Smart's Computer ports.
- 2. Connect the HDD15M screen connector to the on the computer's Video card.
- 3. Connect the MiniDIN6M keyboard connector to the computer's Keyboard port.
- 4. Connect the MiniDIN6M mouse connector to the computer's Mouse port.

#### Connecting the KVM console

To connect the Smart to a KVM console:

- 1. Connect the monitor's connector to the Smart's Monitor port.
- 2. Connect the keyboard's connector to the Smart's keyboard port.
- 3. Connect the mouse's connector to the Smart's Mouse PS/2 port.

# 9. Connecting the system to the power supply

Connect the system to the power supply using the Power adapter and cable provided.

#### 10. Order of switching on

- 1. Switch on the Smart unit. The Computer # indicator displays 01.
- 2. Switch on the computers.

Always switch on the Smart **<u>BEFORE</u>** switching on the computers.

## 11. The OSD

To display the OSD:

- 1. Switch on the Smart. The On LED illuminates and the Computer # LED displays 01.
- 2. Switch on the computers.

3. Press **Shift** twice. The OSD appears. See Figure 7. There are 3 parts to the OSD. You can enter data in the Name and Stations sections.

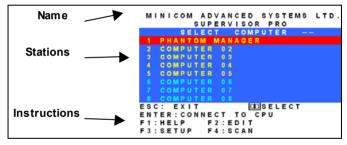


Figure 7 The OSD

#### **Editing the OSD**

Press F2. The Edit window appears, see Figure 8.

M	IN	1	(	C	0	М		А	D	٧	А	Ν	c	Е	D		S	Υ	S	т	Ε	Μ	ŝ	L	ΤC	).
							S	U	Ρ	Е	R	۷	L	S	0	R		Ρ	R	0						
									Е	D		т			м	0	D	Е								
1.		c	1	u	P				R																	
2.	-	1	1	u	P	U		Ε	R																	
з.		3		u					R																	
4 .		: (	)	u	P				R																	
5.		: 0		u	P			Е	R																	
6.		: (	)																							
7.			D																							
8.		: 0	)																							
ES (	: :		1	s	A	۷	Е	÷	Е	х	I.	т														
	B		J			-			М	٥	۷	Е		с	υ	R	s	٥	R							
SP/	4 (	) E				_			Ε	R	Α	S	Ε		с	н	Α	R	Α	C	Т	Ε	R			
Figure 8 The Edit Mode window																										

Figure 8 The Edit Mode window

#### Entering data in the Name section

You can substitute up to 60 characters in the 2 lines. A space constitutes a character.

#### Entering data in the Stations section

You can insert up to 20 characters per line.

The layout of the 16 port's OSD window extends over 2 pages. Navigate between these pages using the **Up** and **Down** arrow keys.

The OSD has fixed numbering at the start of each line. You can edit the data after this number with up to 20 characters per line.

#### Replacing or erasing data

- (i). Replace an existing character by selecting it and typing a new character.
- (ii). Erase an existing character by selecting it and pressing **Space**. Blank spaces remain in place of the erased character.

(iii).Erase a line of existing characters by navigating with the cursor to the beginning of that line and pressing Space. Keep Space depressed until the line is erased.

## 12. Configuring the Scan Setup window

Configure the scan function in the Scan Setup window as follows:

1. Press **F3**. The Scan Setup window appears. See Figure 9.

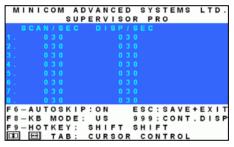


Figure 9 The Scan Setup window

Change the scanning period in the SCAN / SEC column.

Change the display period of a computer's screen with the OSD summary in the **DISP/SEC** column.

To set the above periods:

1. Place the cursor over one of the 3 digits and type a new number.

Enter a leading zero where necessary. For example, type 040 for 40 seconds.

Typing 999 in column 3 gives you a display for a continuous period of time.

2. Press **Esc** to save the changes and exit from the Scan Setup window.

Note:

- (i). Move within the Scan Setup window vertically, using the **Up** and **Down** arrow keys.
- (ii). When retyping a group of 3 digits, once you reach the third digit of that group, the cursor automatically reverts to the first digit.
- (iii).Press Tab to move horizontally, on any line between the first digit in the SCAN / SEC column and the first digit in the DISP / SEC column.
- (iv). You cannot use the Home or the End keys.

## 13. Changing the Hotkey from Shift to Ctrl

By pressing **Shift** twice, the OSD appears. You can replace **Shift** with **Ctrl**.

To do so:

- 1. Press Shift twice. The OSD appears.
- 2. Press **F3**. The Scan Setup window appears displaying the F9 hotkey definition as **Shift Shift**.
- 3. Press **F9**. The displayed definition of hotkey F9, changes from **Shift Shift** to **Ctrl Ctrl**. The hotkey is now **Ctrl**.
- 4. Press **Esc** or **Enter**. The OSD disappears. To display the OSD in future press **Ctrl** twice.

To revert to the **Shift** key, repeat the above, substituting **Shift** for **Ctrl**, and **Ctrl** for **Shift**.

### 14. Changing the Keyboard language

The keyboard is preset to US English, but you can interchange between three languages - US English, German, and French, as follows:

 From the Scan Setup window, press F8. The KB language changes from US English to German. The displayed definition of hotkey F8, changes from US to DE.

- 2. Pressing **F8** twice changes the KB language from US English to French. The displayed definition of hotkey **F8**, changes from US to **FR**.
- 3. Press Esc or Enter. The OSD window disappears.

#### 15. Setting Autoskip

To activate Autoskip:

- 1. Press Shift. The OSD window appears.
- 2. Press **F3** key. The Scan Setup window appears displaying **F6** Autoskip as **Off**.
- 3. Press F6. The displayed definition of Autoskip F6, changes from Off to On. Autoskip is now On.

#### 16. Using the OSD HELP

To access the HELP window

Press F1. The HELP window appears, see Figure 10.

ADVANCED COM SYSTEMS SUPERVISOR PRO MENU HELP SCAN-ON/OFF F6: AUTOSKIP-ON/OFF DIT ETUP F8:KB-US/DE/FR SETUP-- SHIFT 1 CTRL-CTRL R : MOUSE RESET : KB / MOUSE HOTSWAP WWW, MINICOM. COM 11.MAR.2003 OSD VER 3.1 Figure 10 The HELP window

#### 17. Operating the Smart system

You operate the Smart system through the OSD or using the front panel touch pads.

## 18. Operating the system with the OSD

Press Shift twice. The OSD appears. See Figure 7 above.

The OSD's operating functions include:

- Selecting a computer
- Activating and deactivating the Scan

#### Selecting a computer

To select a computer:

- 1. Press the Up or Down arrow keys.
- 2. Press Enter. The OSD window disappears, and the selected computer's screen appears. An OSD tag appears on the screen showing which computer is accessed. When the selected computer is switched off, the screen appears dark.
- (i). When Autoskip is *On*, all the active computers appear in yellow letters. The arrow keys access only the active computers.
- (ii). When Autoskip is *Off*, The arrow keys access both active and inactive computers.
- (iii).Autoskip On is the default.

#### **19. Scanning computers**

After configuring the Scan Setup window, as explained above, you can scan the computers.

To activate scanning:

- Press **Shift** twice. The OSD appears.
- Press F4. Your screen displays each active computer sequentially, with the Scan label appearing in the top left corner.

To deactivate scanning:

- Press F4
- Or
- Press **Shift** twice The scan deactivates

## 20. Closing the OSD

To close the OSD

Press **Esc** The OSD closes

## 21. Operating the system with the front panel touch pads

The following operations can be carried out using the front panel touch pads (as well as through the OSD).

## 22. Accessing the next computer

To access the next computer in the system:

Press

The next computer in the system is accessed.

# 23. Accessing the previous computer

To access the previous computer in the system:

Press . The previous computer in the system is accessed.

## 24. Setting the scan time

To set the scan time:

- 1. Press . The current scan time is displayed on the front panel.
- 2. Press to increase the scan-time.

Press to decrease the scan-time.

With the touch pads you can increase or decrease the scantime by 15, 30, 45, 60, 75, 90 seconds, and 2, 3, 4, and 5 minutes.

# 25. Scanning

To start scanning:

Press . The Scan light on the front panel illuminates and the scanning activates.

## 26. End scanning

To end scanning:

Press . Scanning ends.

## 27. Settings mode

Enter the Settings mode to:

- Make advanced adjustments
- View settings

To enter the Settings mode:

Press Shift then, F2. Release Shift before pressing F2.

#### Making advanced adjustments

The Smart operates with:

- Windows, Linux, Novell or UNIX systems
- 2 or 3 or 5 button PS/2 mouse, Intellimouse or Wheel mouse

When connected and switched on as set out above, the Smart automatically operates with the computer and mouse types connected to it.

#### **Replacing a computer**

When a computer is replaced with a different computer type while the Smart is in use, we recommend turning the new computer off before connecting it to the Smart.

When turning the computers off is inconvenient, do the following:

In the Settings mode adjust the Smart keyboard and mouse modes to be compatible with the new computer. See the tables below.

#### Keyboard settings when replacing a computer

For	Type the letters
PC (Windows, Linux, Novell)	PC
UNIX console mode	UC
UNIX graphics mode	UG

Set the keyboard mode setting to:

- **PC** when operating Intel based computers.
- UC when operating UNIX computers in console mode.
- UG when operating UNIX computers in graphics mode.

#### Mouse driver settings when replacing a computer

For	Type the letters
Wheel mouse or Intellimouse	IN
2 or 3 button mouse	PS
5-button mouse	EP

Set the mouse setting to **IN** when the computer has an operating system that supports Wheel mouse functionality: (Windows 98 and Linux\*).

Set the mouse setting to **PS** when the computer has an operating system that does not support Wheel mouse functionality: (Windows 95, NT4, DOS, Linux\*, UNIX and Novell).

\*Depending on the version.

Set the mouse setting to **EP** when the computer has an operating system that supports Explorer mouse functionality: (Windows – ME, 2000, and XP).

#### Viewing the settings

View the settings and firmware revision in any text editor. To view the settings:

- 1. Before entering to the Settings mode switch the keyboard layout to English.
- 2. Open any text editor, e.g. Notepad.
- 3. Press Shift, followed by F2 to enter the Settings mode.
- 4. Press F. The settings appear in the text editor.

#### **Exiting the Settings mode**

To save changes and exit the Settings mode:

Press Esc.

## 28. Technical specifications

Video Interface	Video Signal	Analog signal Red Green Blue 0.7Vp-p/75 $oldsymbol{\Omega}$ positive
	Sync	TTL compatible
	Horizontal	Sync. positive/negative
	Vertical	Sync. positive/negative
Resolution	Monitor	Up to 1280 x 1024 pixels
	Horizontal frequency	30-100 KHz
	Vertical frequency	43-100 Hz

Transmission	From KVM to Smart 4.5m/14.8ft
distances	From computer to Smart 4.5m/14.8ft

Dimensions							
Smart 8 port	44.5mm x 430 mm x 180 mm 1.8 " x 16.9 " x 7.1 "						
Smart 16 port	81mm x 430 mm x 180 mm 3.20 " x 16.9 " x 7.1 "						

Power supply	
Smart 8 port	AC adapter: 220/9V 2A; 110/9V 2A
Smart 16 port	AC adapter 100-240V 0.4A

Operating temperature	0°C to 40°C/32°F to 104°F
Storage temperature	-40°C to 70°C/-40°F to 158°F
Humidity	80% non-condensing relative humidity

