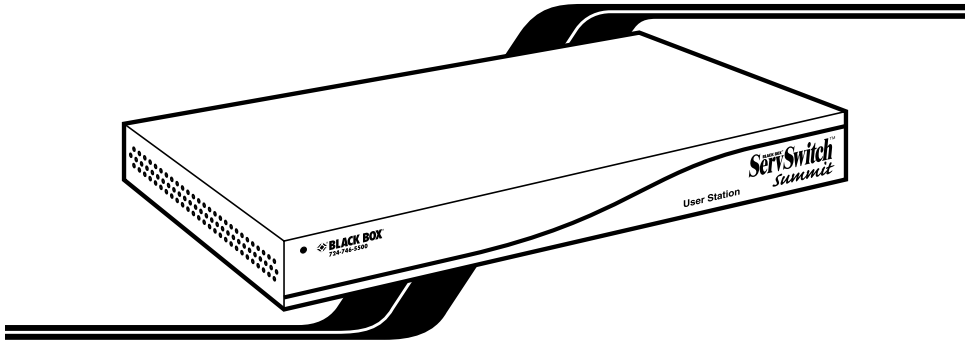




User Guide for the ServSwitch™ Summit User Station Module



You can use the ServSwitch™ Summit system to manage any practical number of computer CPUs, from just a few to thousands. This user guide describes how to configure and operate a keyboard/video/mouse user station attached to a ServSwitch™ Summit User Station Module (“USM,” product code KV1510A). For USM specifications, installation instructions, system-administrator functions, etc., see the manual for the ServSwitch™ Summit Base Units (KV1500A through KV1503A).

1. Logging In

You need to login in order to access computers and other devices connected to the Summit system. The Login Menu (shown in Figure 1 on the next page) is automatically displayed on every user-station monitor after the attached Summit Base Unit is powered on; to bring up the Login Menu on a user-station monitor at any other time, press the system’s hotkey (the factory default is [Scroll Lock]) twice in quick succession to bring up the On Screen User Interface (“OSUI”), then press function key [F9].

NOTE

If a user-station monitor displays the message “...No Connection to Summit...” instead of the Login Menu, either the USM isn’t connected properly to the Base Unit, the Base Unit is powered off, or the Base Unit is malfunctioning. Notify your system administrator.

The Device ID field in the login menu will initially contain the attached Base Unit's default device name: "Summit" followed by "2x42" for a KV1500A, "4x42" for a KV1501A, "8x32" for a KV1502A, or "16x64" for a KV1503A. (The administrator can assign it a different name.) The User Port is the number of the user port on the Base Unit—from 1 to 16 depending on the model—that this USM and user station are attached to.

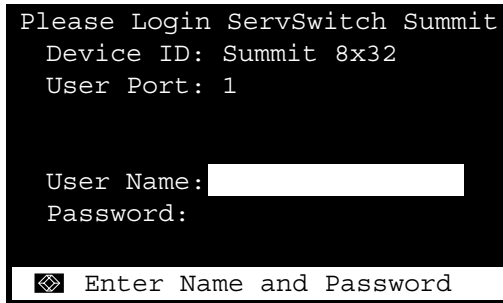


Figure 1. The Login Menu for a KV1502A.

To login at the Login Menu and start operating the system, take these steps:

1. Type in the user name that you've been assigned by the system administrator. (If user names haven't been assigned yet, the defaults are `user01` through `user15`—depending on the model—for regular users and `admin` for the administrator. User names are not case-sensitive.) When you finish, press [Enter].
2. If a password is necessary, you'll be prompted to enter a password as well. Type the password you've been assigned by the system administrator and press [Enter]. (Passwords are case-sensitive.)
3. The Selection Menu will be displayed, as shown in Figures 2 and 3. To go to other menus, use the function keys as described in **Section 4**.

You can log out of the Summit system by pressing function key [F9] while the OSUI is displayed.

2. Selecting a Computer

Immediately after you login, the Summit's OSUI displays the Selection Menu. If you're already logged in, you'll need to bring up the Selection Menu by pressing the hotkey (the factory default is [Scroll Lock]) twice in quick succession, then pressing function key [F2].

The Selection Menu lists devices sorted either by channel-ID number ("Ch. ID"), as shown in Figure 2, or alphabetically by the name of the computer or other device on that channel ("Name"), as shown in Figure 3 on the next page. Toggle between these two views by pressing [F12]. Default sorting is by channel-ID number, but unless the system is re-initialized, the last selected sort order will be shown the next time that the Selection Menu is activated. As for the other columns in the channel-ID view, "No" is the channel's "key number" (internally assigned by the Summit and not changeable by the user) and "Scn" is its current individual scan-delay time in seconds (set by the admin) unless the channel has a subsidiary Base Unit attached to it, in which case the Scn column will show "--".

The Selection Menu can display eight channels per page; it will show you how many total pages there are, and which of them you're viewing, in its upper right-hand corner ("Page 2/5" for the second of five pages, for example). Use the [PageUp] and [PageDown] keys on your keyboard to move between the pages. Once you've selected a CPU as described on the following pages, the Summit system will switch to that channel; if you've enabled it (see **Section 3**), an "ID Display" (shown in Figure 4) will pop up on screen to identify the chosen channel for the number of seconds you've set.

Selection Menu			
Main_16x64			Page 1/8
No	Ch. ID	Name	Scn
1	01		03
2	02	NT40-Mail	03
3	03	Wins95_Bob	03
4	04	→ Wins98_Jack	03
5	05	Matrls_8x32	--
6	06	NT40-Fax	03
7	07	Mrktng_8x32	--
8	08	PubSrv_8x32	--

⊞	⏴	Page FKey Ent Esc	
ScrlLock		Scan	Skip NCSL

Figure 2. The Selection Menu ordered by channel number.

Selection Menu by Name		
Main_16x64	Page	1/8
Name	Ch. ID	
Mrktng_8x32	07	
Matrls_8x32	05	
NT40-Fax	06	
NT40-Mail	→02	
PubSrv_8x32	08	
Wins95_Bob	03	
Wins98_Jack	04	
	01	

ⓧ [i]	Page	PCName FKey Ent Esc
ScrlLock	Scan	Skip NCSL

Figure 3. The Selection Menu ordered by name.

Main_16x64.02	NT40-Fax
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Figure 4. The ID Display that appears on screen after a selection.

To choose a computer from the Selection Menu, take these steps:

1. Press [F12] to toggle the menu to your desired sort-order view (by channel-ID number or alphabetically by device name). The entry for the channel you currently have selected (if any) will be highlighted and will have a small red arrow to the left of its channel name.

NOTE

In the channel-ID view only, the Selection Menu can display either all channels or only those channels that you're allowed to select. The latter is the default, but if the system administrator has set the "Display All Computers" admin option to "Yes," you can press [F10] to toggle between the restricted and unrestricted views. In the unrestricted "all channels" view, the Summit displays a red "S" next to the scan rate of any channel that you aren't allowed to access.

2. Use the up- and down-arrow keys (and, in large systems, the [PageUp] and [PageDown] keys) to move the highlight bar to the channel you want to select, then press [Enter]. Note that although the highlight will move, the small red arrow to the left of the channel name will remain where it was and continue to indicate your currently selected channel until you choose a new one.

In the channel-ID (sorted by ID) view, once your desired channel's page is on screen, you can also press the desired channel's key number ([1] through [8]) to move the highlight to that channel instantly.

In the name view, you can also type the first few characters of the desired channel's name to move the highlight to the first channel whose name begins with that character sequence. If you type enough characters, the highlight should eventually move to the precise channel you want.

3. When you press [Enter] to select a channel, and there's a computer CPU attached to that channel that you are allowed to access, the Summit automatically switches you to that channel for normal computer operation and the OSUI disappears. If there's a cascaded Base Unit attached to that channel, an additional dedicated OSUI Selection Menu will appear for that Base Unit; keep moving through the Selection Menu layers until you reach the CPU you want. (To return to the main Selection Menu from any second- or third-tier Base Unit's Selection Menu, press the [Home] key on your keyboard once, or press [Esc] once or twice depending which tier you're on.)

Once you've switched to a different channel, you can continue switching by pressing the hotkey (factory default is [Scroll Lock]) twice in quick succession to bring the Selection Menu back on screen. If instead you want to go back to your previously selected channel without seeing any OSUI menus, you can press the "previous channel" command key (factory default is [Num Lock]) twice in quick succession.

In the Selection Menu, each channel's availability is visually indicated by the following text colors. (For more information about Private Mode, Public View Mode, and PC Share Mode, refer to the Base Unit manual.)

- Black = No device is connected or the connected device is powered down.
- Green = Computer CPU is connected and the channel is active and available. However, if the Summit system is in PC Share Mode, another user may currently be accessing the computer.
- Red = Channel is unavailable, currently being accessed by another user. (This only happens when the Summit system is in Private Mode.)
- Yellow = Channel is unavailable for control (being controlled by another user), but video can be viewed. (This only happens when the Summit system is in Public View Mode. Also refer to the information on the next page about other OSUI displays that appear when the system is in Public View Mode.)
- Purple = A second- or third-tier cascaded Base Unit is connected to this channel.
- White = Channel's current status is unknown. This should not happen if the Summit is operating normally.

When the Summit system is set to Public View Mode by the administrator, if one user has already selected a computer, another user can also select it, but the second user will only be able to view its video output; they won't be able to control it or input any data with the keyboard and mouse. While the system is in this mode, if the "ID Display" parameter is enabled for your account (see **Section 3**), message boxes will appear on screen as you and other users select various CPUs:

- When you select a computer that someone else is already controlling, the message below (showing the name of the computer being viewed) will be displayed on your monitor for the currently set "ID Display" interval. Press [Esc] to return to the main Selection Menu.

P-View	Win95.Bob
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- If another user chooses to view the video of a computer you have already selected, you will see the messages shown below, bearing that user's name, for the currently set "ID Display" interval. You'll see the top message when the second user begins viewing; you'll see the bottom message when they stop viewing because they've switched to another channel or logged out.

P-View	Active - Jason
--------	----------------

P-View	Off - Jason
--------	-------------

3. Customizing How the USM Operates for You

When the OSUI is active, you can bring up the User Profile Menu, shown in Figure 5, by pressing function key [F4]. This menu is for displaying the Summit's configuration and for setting preferred operating parameters for individual user accounts.

```

User Profile
Connected: Main_16x64
User: User01      User Port: 2
Admin: No
Group: 00
Scan Mode: Global
Global Scan Rate: 03 Seconds
ID Display: On   03 Seconds
Green Mode: Off  05 Minutes
Hotkey:      Scroll Lock
Display Position: Menu ID
Previous Channel Key: NumLck
Help : Single LineLocalPC:Off
[Enter] Edit P S Fkey Esc
ScrlLock | Scan | Skip  NCSL

```

Figure 5. The User Profile Menu.

To view or change your user profile, take these steps:

1. If the OSUI isn't already active, activate it by pressing the hotkey (factory default is [Scroll Lock]) twice in quick succession.
2. Press [F4] to access the User Profile screen. The topmost fields are identifiers that can't be changed by the user:
 - The Connected field displays the name and channel ID of the currently selected device or computer, if you're currently connected to a channel.
 - The User field displays the user name you entered at login.
 - The User Port field shows which user port on the Base Unit your USM and user station are attached to.
 - The Admin field shows whether or not you have administrator privileges.
 - The Group field displays your group ID(s) (see **Appendix A** of the Base Unit manual).

3. If you want to change the value of any of the other fields, use your keyboard keys to select the field you want to edit: Press [Tab] to move forward through the editable fields, [Shift]+[Tab] to move backward, the up- and down-arrow keys to move up and down, and the left- and right-arrow keys to move left and right.

Press [Enter] to begin editing; the highlighted area will turn green, and the prompt in the prompt/message bar will change to “-Change Ent-Done ESC-Cancel”. Follow the instructions below for interpreting and editing each specific User Profile parameter.

When you're finished, either press [Enter] to retain the changes (the highlighted area will turn yellow) or press [Esc] (or any function key that would cause you to leave this screen) to cancel the changes. The prompt in the prompt/message bar will change to “Save the changes (Y/N/ESC)”. (It will do this before you leave the screen if you pressed a function key.) Press “S” to save the changes to long-term memory, “N” to discard your changes, or [Esc] to discard your changes and exit the menu.

Here's what the User Profile parameters mean and how you can change their settings:

- **Scan Mode:** The method the system uses to determine how long to pause at each channel during autoscanning (refer to the Base Unit manual). The two possible settings are “Global” (the default), in which the system pauses at each channel for the same length of time (which you choose—see the next paragraph), and “Individual,” in which the system pauses at each channel for the length of time that the administrator has set for that individual channel (as displayed in the Selection Menu). Use any of the arrow keys to toggle between these values.
- **Global Scan Rate:** If Scan Mode is set to “Global” (see the previous paragraph), this parameter determines the length of time that the system pauses at each channel while scanning. Using leading zeroes if necessary, type in a two-digit number of seconds from 01 to 24, or use the up- and down-arrow keys to increment and decrement the current value by 1 respectively. The default setting is 03.

- **ID Display:** The ID Display is a small window that can pop up on screen to show you the name and ID of each channel as you switch between them or scan them. You can edit the two fields of this parameter to determine how the system will show you this window:
 - Possible values in the first field are “On” (ID Display is shown, the default value) and “Off” (ID Display isn’t shown). Use any of the arrow keys to toggle between these values.
 - If the ID Display is set to “On,” the number in the second field is how many seconds it will stay on screen. Using leading zeroes if necessary, type in a two-digit number of seconds from 01 to 24, or use the up- and down-arrow keys to increment and decrement the current value by 1 respectively. If you type in a number greater than 24, the second field will be filled with a “-”, indicating that the ID Display will be shown at all times. The default setting is 03. If the ID Display is set to “Off,” the number in this field will have no effect.

The setting of this parameter also controls whether and for how long the Public View Mode message boxes are displayed on screen (see **Section 2**).

- **Green Mode:** A “power-saving mode” that blanks the monitor screen if the user station is idle (no keyboard or mouse activity) for the specified amount of time. You can edit the two fields of this parameter to determine how the system handles this feature:
 - Possible values in the first field are “On” (Green Mode is enabled and the screen is blanked after a period of inactivity) and “Off” (Green Mode is disabled and the screen displays normal video indefinitely). Use any of the arrow keys to toggle between these values.
 - If Green Mode is set to “On,” the number in the second field is how many minutes of inactivity must elapse before it’s triggered and the screen is blanked. Using leading zeroes if necessary, type in a two-digit number of minutes from 01 to 99, or use the up- and down-arrow keys to increment and decrement the current value by 1 respectively. The default setting is 05. If Green Mode is set to “Off,” the number in this field will have no effect.
- **Hotkey:** The keyboard key that, when quickly pressed twice, activates the OSUI. The five alternatives are [Scroll Lock] (the default), [Caps Lock], [Num Lock], left [Shift], and left [Alt]; use any of the arrow keys to switch between them. You can’t select the key that’s currently being used as the Previous Channel Key (see the **Previous Channel Key** entry on the next page).

- **Display Position:** Use this parameter to move the OSUI menus and ID Display to the desired position on your monitor screen. First move the highlight to “Menu” (for the OSUI) or “ID” (for the ID Display, which will pop up if it’s not already on screen while the OSUI temporarily disappears) and press [Enter] to highlight it, then use the arrow keys to move the chosen window as desired: the left-arrow key to move the whole window to the left, for example. When you’re finished, press [Enter] to save the change.
- **Previous Channel Key:** The keyboard key that, when quickly pressed twice, causes the Summit to switch back to the previously selected channel without going through the OSUI, provided that that channel is still available. The six alternatives are [Scroll Lock], [Caps Lock], [Num Lock] (the default), left [Shift], left [Alt], and “None” (no Previous Channel Key—disables this function); use any of the arrow keys to switch between them. You can’t select the key that’s currently being used as the hotkey (see the earlier **Hotkey** entry).
- **Help:** This parameter determines the format of the help message at the bottom of each OSUI menu. It’s always set to “Single Line”; it can’t be selected or altered.
- **Local PC:** Use any of the arrow keys to toggle Local PC Mode on or off (the default) for the attached USM. Only turn this on if you’ve used a KV1519A CIM to attach a local PC between the USM and the Base Unit; see **Section 6** for more information.

You can also change your password (or delete or reinstate it if the administrator sets “Allow Blank Password” to “yes”) while the User Profile Menu is on screen by pressing “P” to bring up a prompt window. Type your old password at the first prompt. At the next prompt, type a new password up to eight characters long and press [Enter] (or just press [Enter] without typing anything in the field to delete your password). Confirm the new password by typing it in again at the third prompt; either press [Enter] to save the new password or [Esc] to abort the change and continue using the old password.

NOTES

Be careful when you change your password! If you forget or lose it, administrators have no way of recovering or erasing it for you—your account will have to be deleted and recreated.

4. Keyboard-Controlled OSUI Functions

Use the following function keys to access the Summit's OSUI functions:

Press...	When you want to...
[F1]	View the Help Menu (shown in Figure 6 on the next page).
[F2]	Access the Selection Menu (see Section 2) in order to view or select channels or view group IDs or scan rates.
[F4]	Access the User Profile Menu (see Section 3) in order to view and change user-specific operating parameters.
([F5], [F6], and [F7] are usable by administrators only.)	
[F8]	View the Information Menu (see Section 5) in order to see the version numbers of the Summit's firmware and hardware, the number of accessible Base Units, the total number of accessible computers, etc.
[F9]	Log out of the Summit system (logs user out and causes the login screen to be displayed).
[Shift] + [F9]	<i>If any OSUI screen is displayed:</i> Disconnect yourself from the active channel without logging out.
[F10]	<i>If the administrator has set "Display All Computers" to "Yes" and the Selection Menu is sorted by channel ID:</i> Toggle the display of all channels (including inaccessible ones) on or off.
[F12]	<i>If you are at the Selection Menu:</i> Toggle the Selection Menu between sorting the channel entries by name or by channel ID.
[Esc]	Exit the OSUI (returns user to the Selection Menu, or to the login screen when no channel is selected).

NOTES

If a user does not have administrator privileges, then they will see functions [F5], [F6], and [F7] displayed in red in the Help Menu, indicating that these functions aren't available to them.

If a system administrator has set Display All Computers to "No," then [F10] will be displayed in red in the Help Menu for all users, indicating that this function is not available (even for administrators).

We recommend that you use a Sun keyboard if there are any Sun CPUs in your system; if you must control Sun CPUs with a PS/2 keyboard, refer to Appendix H of the Base Unit manual for how to produce a Sun keyboard's special characters.

```
Help
F1 Help / ESC Exit
F2 Channel Selection
  -F12 Sort by Channel/Name
F4 User Profile
F5 Administrative Functions
F6 Toggle Scan On/Off
F7 Toggle Skip On/Off
F8 Information Screen
F9 Logout
  -Shift+F9 Release Channel
F10 Toggle Disp All Ch. On/Off

◊ FKey Esc
ScrlLock | Scan | Skip NCSL
```

Figure 6. The Help Menu.

5. The Information Menu

When the OSUI is active, you can bring up the Information Menu, shown in Figure 7, by pressing function key [F8]. This menu displays the “vital statistics” of the USM that your user station is attached to, including its firmware and hardware revisions, its serial number, which console port (user port) on the Base Unit it’s attached to, and the number of KVM switches and PC CPUs that can be accessed through it.

```
Information Menu

Firmware Ver:      4L3
Hardware Ver:      0B
FPGA Ver:          0C
Serial Number:     D3C80002
Console Port:      1
Accessible KVM Sws:2
Accessible PCs:    105

◊ Edit P S FKey Esc
ScrlLock | Scan | Skip NCSL
```

Figure 7. The Information Menu.

6. Local PC Mode (Optional)

It's possible for the system administrator to install a KV1519A Computer Interface Module ("CIM") between your USM and the Base Unit, as shown in Figure 8. This would give you sole access to a local computer CPU in addition to your shared access to the other CPUs in the system. See **Appendix C** in the Base Unit manual for details.

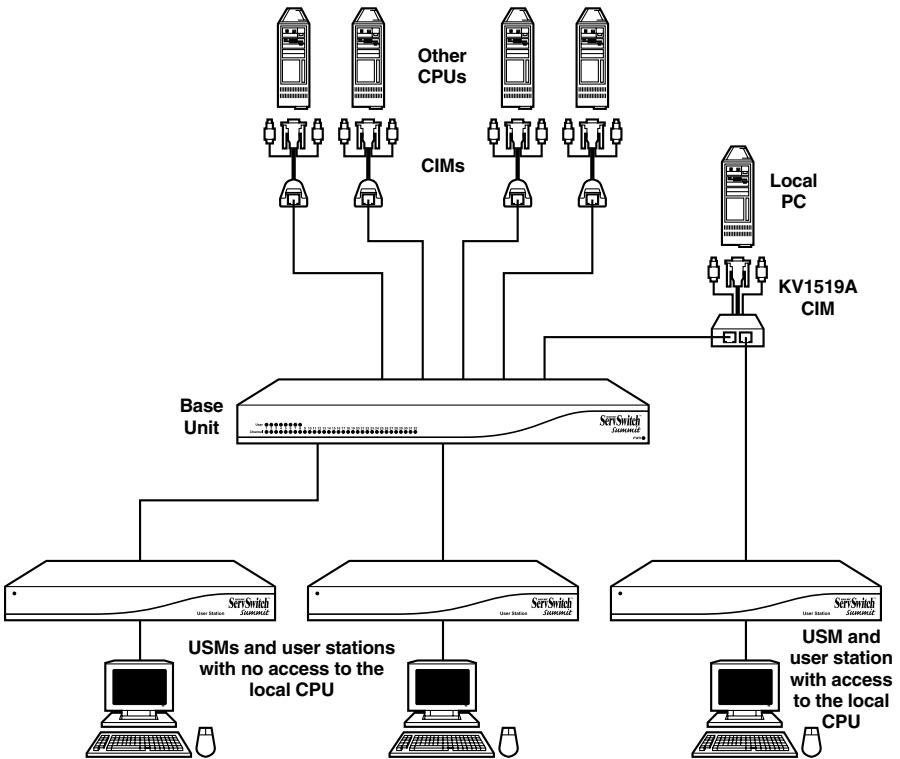


Figure 8. A Summit system that uses a KV1519A to support a local CPU.

If this has been done at your user station, you can control the local PC by activating Local PC Mode on your USM. Take these steps:

1. Login at the attached user station.
2. Press the hotkey ([Scroll Lock] is the default) twice in quick succession to bring up the OSUI.
3. Press [F4] to bring up the User Profile Menu (see **Section 3**).

4. Use [Tab] or the up- and down-arrow keys to move the highlight to the “Local PC” field.
5. Press [Enter]. The Local PC field will turn green.
6. Use the up- or down-arrow key to toggle the value of the field to “On.”
7. Press [Enter]. The highlight will turn yellow.
8. Press “S” to save the change and return to the User Profile Menu. If you really don’t want to do this at this time, press [Esc] to abort the change and return to the User Profile Menu.

Once you’ve turned on Local PC Mode, you can access the dedicated local PC CPU from this user station by pressing the [Home] key twice in quick succession while the OSUI is on screen. The USM will immediately switch you to the local PC. (Only *you* can use the local PC. Even if they log in from your user station, other users will not be able to access the local PC unless they log in using your user name and password.) To return to the Summit system and its switched CPUs, bring up the OSUI by pressing the hotkey twice ([Scroll Lock] is the factory default), then press [F2] to bring up the Selection Menu and access any of the listed computers.

7. Calling Black Box

If you determine that your ServSwitch™ Summit USM is malfunctioning, *do not attempt to alter or repair the unit*. It contains no user-serviceable parts. Contact your system administrator; if they aren’t available, contact Black Box Technical Support at 724-746-5500.

Before you do, make a record of the history of the problem. We will be able to provide more efficient and accurate assistance if you have a complete description, including:

- the nature and duration of the problem;
- when the problem occurs;
- the components involved in the problem;
- any particular application that, when used, appears to create the problem or make it worse; and
- the results of any testing you’ve already done.

8. Shipping and Packaging

If you need to transport or ship your USM:

- Package it carefully. We recommend that you use the original container.
- If you are returning it, make sure you include everything you received with it. Before you ship for return or repair, contact Black Box to get a Return Authorization (RA) number.

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