



Apex PC Solutions Inc

ViewPoint[®]
S Y S T E M
User Guide

ViewPoint User Guide

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Make and model of computers used.

Name and version of operating systems used.

■ Note

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■ Note

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ENGLISH

Federal Communications Notice (Class A Equipment)

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable interference when the equipment is operated in a commercial environment.

Radio Interference

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at personal expense.

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This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus as set out in the interference-causing equipment standard entitled "Digital Apparatus," ICES-003 of the Department of Communications.

FRANÇAIS

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DEUTSCH

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1 FEATURES of **ViewPoint** SYSTEM

THE VIEWPOINT SYSTEM OFFERS FLEXIBILITY IN CONTROLLING YOUR NETWORK

- Allows network administrators at a local console to pass keyboard and mouse commands to as many as 32 remote computers.
- Accommodates Apex OutLook Concentrators to expand your control to as many as 256 remote computers. Multiple ViewPoints expand your control to as many as 1024 computers. Incorporates new boards in the core to meet future needs.
- Shares control with another remote unit, the Apex SwitchBack system.
- Features an administration terminal that allows you to display all connections, system types, and names, switch cooperatively or preemptively between computers, and optimize video quality.
- Allows user pods to be located up to 600 feet away from the core, system pods 250 feet away from the core, enabling the user and the system pods to be up to 850 feet away from one another.
- Switches any user to selected computer in either Full control mode or Watch mode.
- Allows you to send messages to other consoles.
- Provides security against unauthorized users.
- Displays system-related information on the Apex On-Screen Configuration and Activity Reporting (OSCAR) screen.

2 INSTALLATION AND SETUP *for* **ViewPoint** S Y S T E M

INSTALLATION CHECKLIST

- ViewPoint components
(quantity of each depends on your system needs)
 - user pods
 - system pods
 - core
- Interconnecting cables*
(not included in kit)
 - two male Cat5 cables for each user pod to core
 - two male Cat5 cables for each system pod to core
 - keyboard, video, and mouse interconnecting cables to each computer
 - keyboard, monitor, and mouse cables to each user pod
- Your computers, monitors, keyboards, mice
- Your administration terminal with serial cable

*See Appendix B *Options and Accesories* for purchasing information.

See Appendix E for diagrams of the monitor, mouse, keyboard, and Cat5 connector pin specifications.

2 Installation and Setup

IDENTIFYING COMPONENTS

The User Pod

Each user console, consisting of a keyboard, mouse, and monitor, connects to a user pod. The user pod encodes mouse and keyboard data then transmits it, via the Cat5 cables, to the output cards in the core, and on to the selected system pod. OSCAR (On-Screen Configuration and Activity Reporting), which is used to operate the ViewPoint system, is accessed at the user pod.

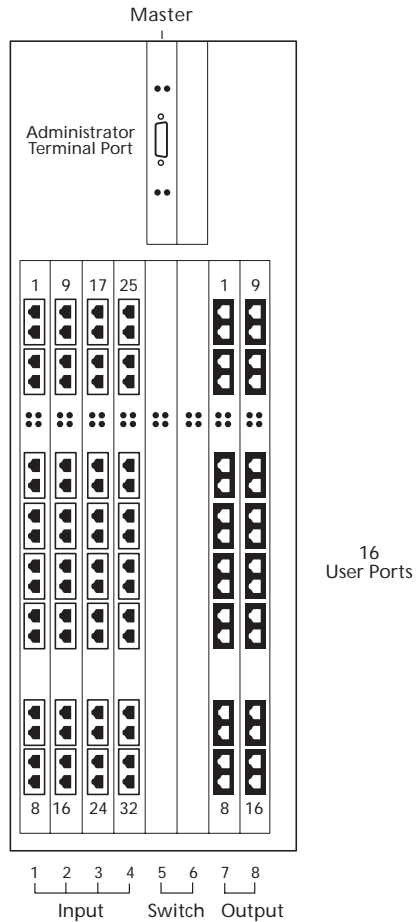
The System Pod

Each system pod can attach to two computers. The system pod decodes the keyboard and mouse commands it receives, via the Cat5 cables, from the input cards in the core, and forwards the data to the selected computer.

The Core

Each ViewPoint system contains a core that connects to user pods, system pods, and an administration terminal. The core contains the

Core Card and Port Diagram

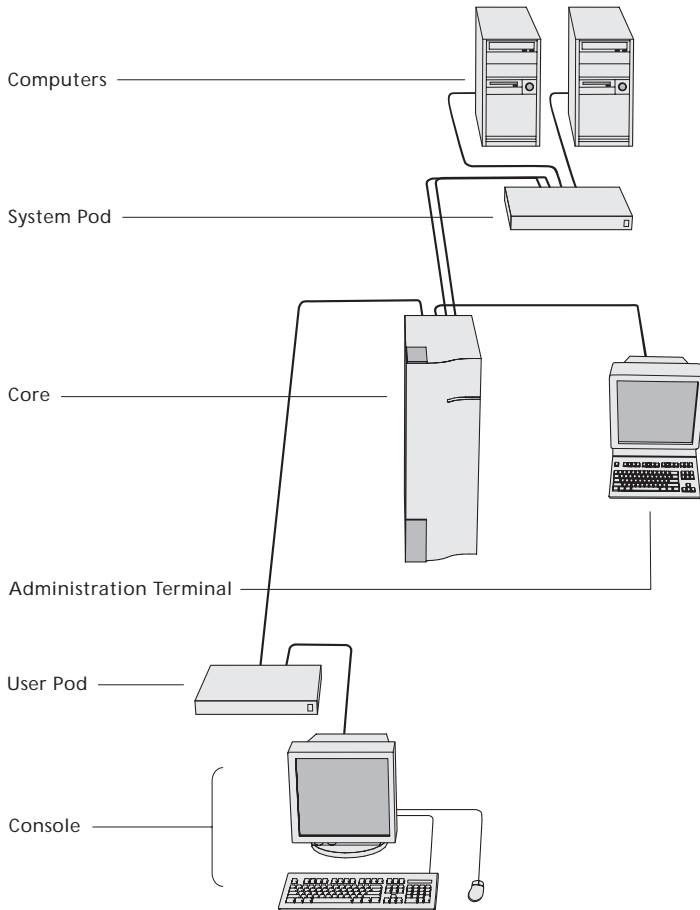


internal input and output cards that provide the connection between user pods and system pods. Its master card provides the connection to the administration terminal.

The Administration Terminal

The administration terminal connects to the core. From the terminal the system administrator monitors and controls ViewPoint connections.

Basic Components of the ViewPoint System



2 Installation and Setup

PLANNING THE SYSTEM LAYOUT

Cable length and location

Choosing good locations for each component enhances the benefits of the ViewPoint system. For example, in your office space if you place the core 250 feet away from the system pods and 600 feet away from the user pods, then you can locate each user and system pod up to 850 feet away from each other; whereas, if you place the core next to the user pods, then the maximum distance between user and system pods can be only 250 feet.

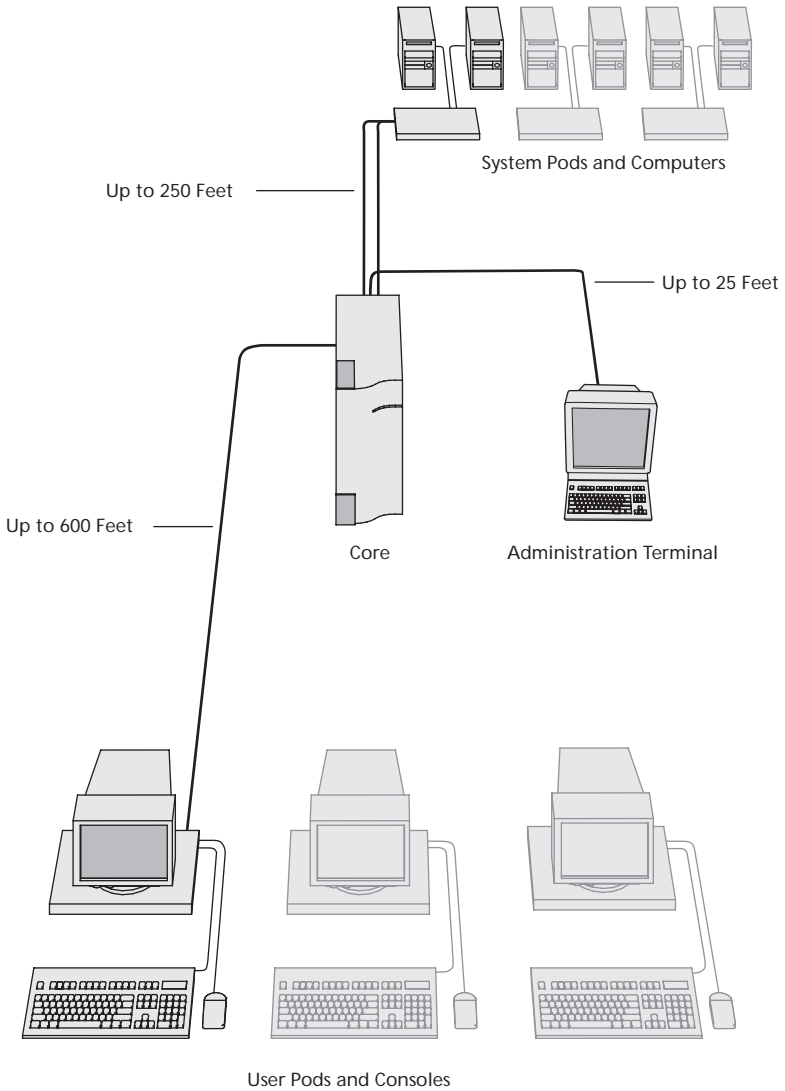
Cable length and video quality

All ViewPoint components arrive configured for cable lengths of 100 feet or less. If you will be using cables longer than 100 feet, you can improve video quality by changing the default configuration. High quality video transmission requires a “tuned circuit.” To adjust video settings for the user pods you must access OSCAR, while the system pods adjustments are accessed through the administration terminal.

Cable type and video quality

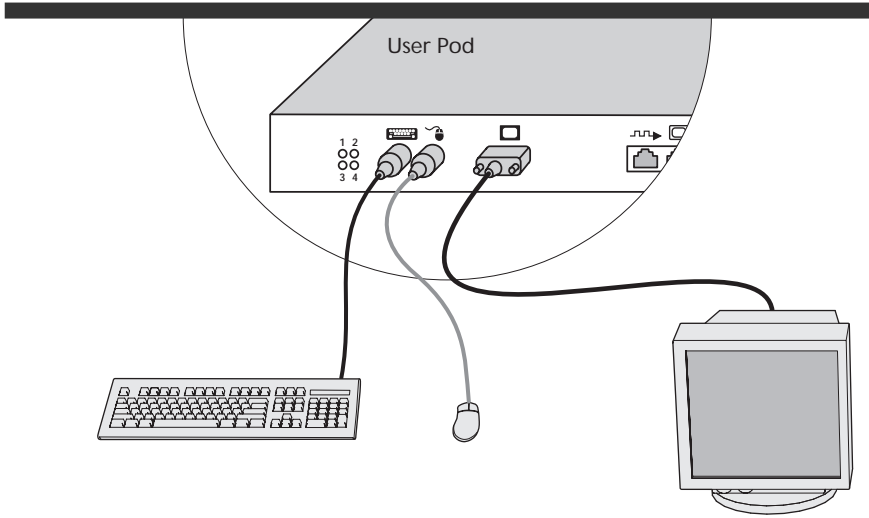
For best video quality use UTP Cat5 or better cables with high quality RJ45 male connectors. Select high quality cables because of their superior electrical and mechanical properties.

Example of a ViewPoint System



2 Installation and Setup

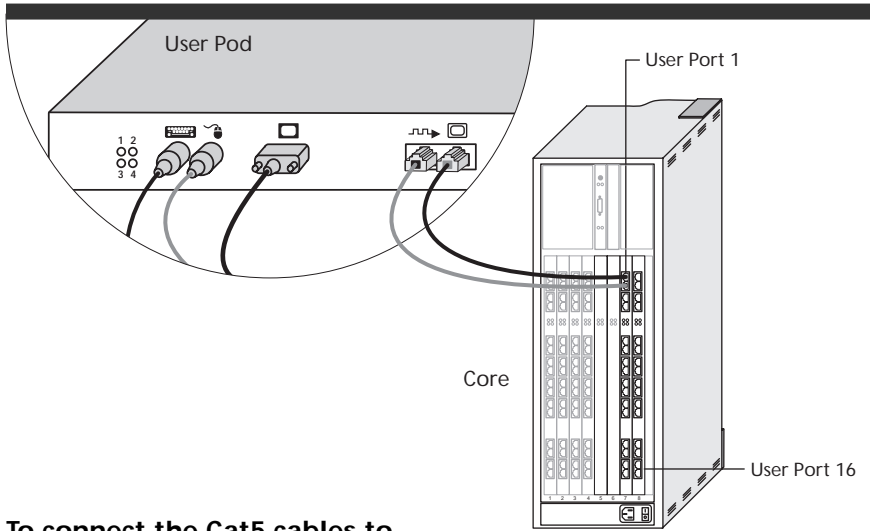
CONNECTING THE USER POD TO THE CONSOLE



To connect the user pod to a monitor, keyboard, and mouse:

- Connect the monitor, keyboard, and mouse to the jacks that show the monitor, keyboard, and mouse symbols on the back panel of the user pod.

CONNECTING THE USER POD TO THE CORE



To connect the Cat5 cables to the user pod:

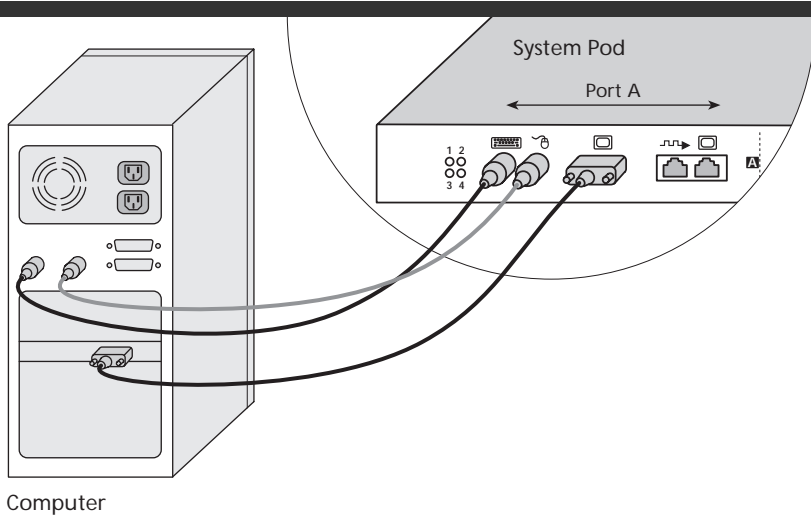
- 1 Locate the RJ45 jacks on the back panel.
- 2 Connect one end of the video Cat5 cable to the RJ45 jack with a monitor symbol.
- 3 Connect one end of the data Cat5 cable to the RJ45 jack with a data symbol.
- 4 Repeat steps for all user pods.

To connect the Cat5 cables to the core:

- 1 Locate the output cards (slots 7 and 8).
- 2 Connect the other end of the video Cat5 cable to one of the user ports with a monitor symbol.
- 3 Connect the other end of the data Cat5 cable to the port with the data symbol in the same user port number.
- 4 Route and bundle cables to facilitate removal of the input and output cards.
- 5 Repeat steps for all user pods.

2 Installation and Setup

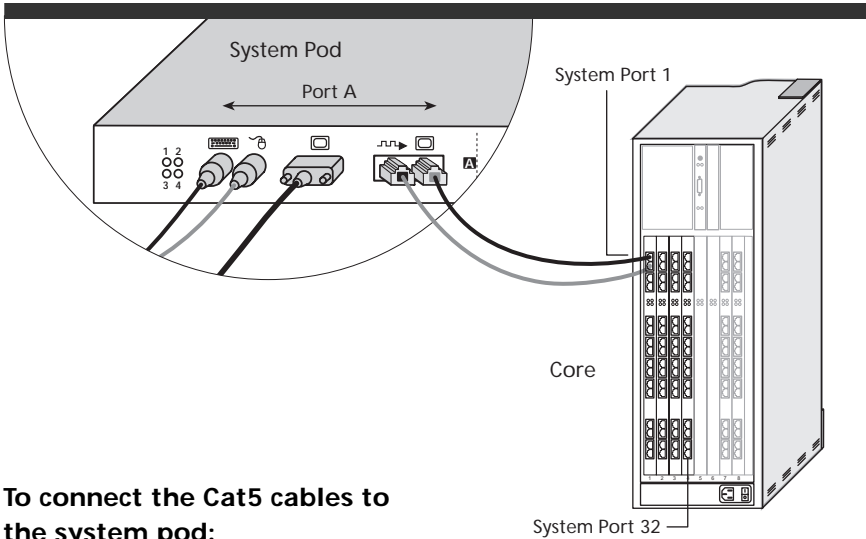
CONNECTING THE SYSTEM POD TO YOUR COMPUTER



To connect the system pod to your computer:

- Connect the monitor, keyboard, and mouse cables between the computer and the jacks with the monitor, keyboard, and mouse symbols in one of the ports on the system pod.

CONNECTING THE SYSTEM POD TO THE CORE



To connect the Cat5 cables to the system pod:

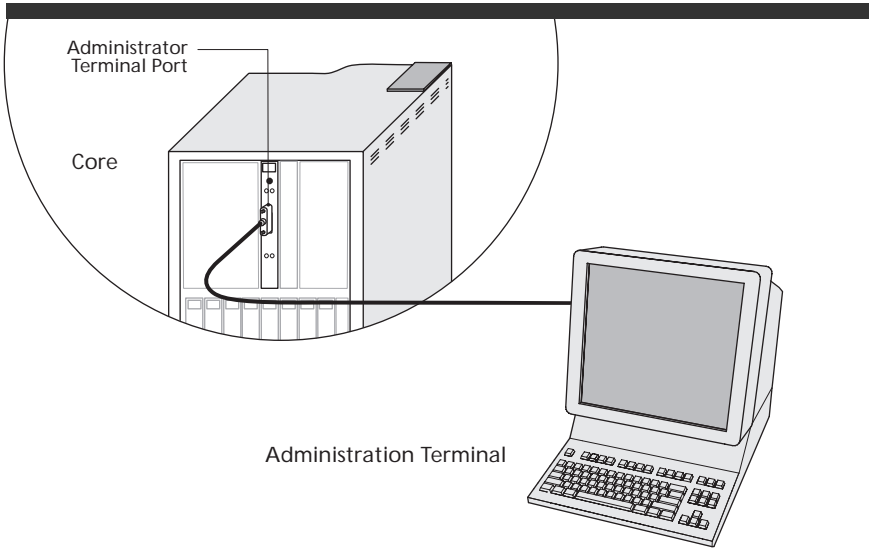
- 1 On the back panel of the system pod locate the RJ45 jacks in the same port label where you connected the monitor, keyboard, and mouse cables earlier.
- 2 Connect one end of the video Cat5 cable to the RJ45 jack with a monitor symbol.
- 3 Connect one end of the data Cat5 cable to the RJ45 jack with a data symbol.
- 4 Repeat steps for additional system pods.

To connect the Cat5 cables to the core:

- 1 At the back of the core locate the input cards (slots 1–4).
- 2 Connect the other end of the video Cat5 cable to the RJ45 jack with the monitor symbol in one of the system ports.
- 4 Connect the other end of the data Cat5 cable to the RJ45 jack with the data symbol in the same port number.
- 5 Route and bundle cables to facilitate removal of the input and output cards.
- 6 Repeat steps for additional system pods.

2 Installation and Setup

CONNECTING THE ADMINISTRATION TERMINAL



To connect the administration terminal:

- 1 On the master card at the back of the core, connect the female end of the DB9 null modem cable to the administrator terminal port.
- 2 Connect the other end of the null modem cable to the serial port on the back of your terminal.
- 3 Set terminal settings to read the ViewPoint software:

| | |
|--------------|--------------------------|
| Baud rate | 19200 |
| Data bits | 8N1 |
| Parity | none |
| Flow control | none |
| Emulation | 132 column VT100 mode |

TURNING ON THE SYSTEM

Startup Behavior and the Status Flag

When you turn on the ViewPoint system, it performs the following actions:

- Displays each pod's particular identification number on the user console monitor.
- Identifies the mouse and keyboard and puts them into default states; the keyboard LEDs illuminate.
- Starts up the user pods with no user consoles connected to any computers.
- Displays a status flag on each user console monitor that appears similar to that shown below. (On startup there is no system connection.) For more information about status flags, see in Chapter 3, *Interpreting the Status Flag* and *Changing Status Flag Attributes*.



If the monitor does not display the status flag, make sure that the monitor is connected and turned on.

To start the system:

- 1 With the power switch (located on the back panel) of each component in the Off (0) position, connect each component to an AC power source using the supplied three-wire grounded power cords.
- 2 Turn on the ViewPoint core by pushing the power switch located on the back panel to the On (1) position.
- 3 Turn on each pod by pushing the power switch located on the back panel to the On (1) position.
- 4 Turn on the console monitors.
- 5 Turn on the computers.

■ Note

Always turn on the core and pods before the computers. Then the pods can store in memory the device settings the computers send when they boot.

CONNECTING COMPUTERS WHILE THE SYSTEM IS RUNNING

You can connect additional computers to the ViewPoint system while it is running. When you turn on a newly connected computer, its system pod recognizes it and you can switch users to the new computer without taking any additional steps.

You can also connect a new user console to the system while it is running. When you connect the new keyboard, mouse, and monitor to the new user pod, the pod configures automatically.

This technique allows replacement of failed devices without having to restart the system. It also allows the user to move input devices from one console to another if necessary.

OPERATION GUIDE

3

for
ViewPoint
S Y S T E M

You'll operate the ViewPoint system using OSCAR (On-Screen Configuration and Activity Reporting).

Keyboard Conventions for Navigating OSCAR

| THIS KEY | DOES THIS |
|-------------------|--|
| PRINT SCREEN | Opens OSCAR Selection screen. |
| F1 | Opens OSCAR Help screen. |
| F2 | When in OSCAR Selection screen, opens OSCAR Advanced Menu screen. |
| ARROWS | Moves highlight to select command feature or setup. |
| + / - | Changes the value of the selected option. |
| ENTER | Saves current settings or changes and returns to OSCAR Advanced Menu screen. |
| ESCAPE | Cancels unsaved changes and returns to OSCAR Advanced Menu screen. When in OSCAR Selection or Advanced Menu screens, ESCAPE exits OSCAR. |
| NUMERIC KEYPAD | Always in the numeric state, although the indicator on the keyboard may indicate otherwise. |
| CAPS LOCK | Disabled (Use the SHIFT key to change case) |
| PAGE UP/PAGE DOWN | Displays previous or next screen, respectively. |
| HOME/END | Displays first or last item in a list, respectively. |

NAVIGATING WITH OSCAR

| OSCAR SELECTION | |
|------------------------|------------|
| Port | Name |
| 1 | COMPUTER 1 |
| 2 | COMPUTER 2 |
| 3 | COMPUTER 3 |
| 4 | COMPUTER 4 |
| 5 | COMPUTER 5 |
| 6 | COMPUTER 6 |
| 7 | COMPUTER 7 |
| 8 | COMPUTER 8 |
| F1 Help F2 Advanced | |

OSCAR Selection Screen

Basic functions such as selecting computers and checking port/computer status are performed from the OSCAR Selection screen. The OSCAR Selection lists all the ports in the system, the associated computer names, and the status of each port. It can be organized either by port number or by computer name. (To assign names see in Chapter 4 *Assigning Unique Names to Computers*. To change the order in which the computers are listed, see *Changing Menu Attributes* found later in this chapter.) On large systems, you may need to use the ARROW keys or the PAGE DOWN key to scroll through the list of ports.

■ Note

The OSCAR Selection screen above shows the default screen. Your screen will show the computer names and port numbers assigned to your system.

To open the OSCAR Selection screen:

- Press the PRINT SCREEN key.
Because the PRINT SCREEN key is used to activate the OSCAR menus, you cannot use it to print a screen in the usual way. To print the screen, press PRINT SCREEN twice.

■ Note

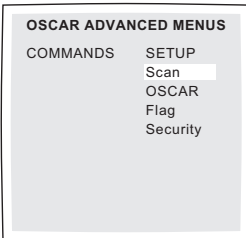
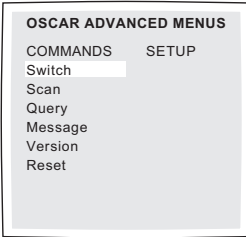
If you press PRINT SCREEN and receive the message "Names out of date," press ENTER to update your user pod. The OSCAR Selection screen appears when the update is complete. See *Assigning Unique Names to Computers* in Chapter 4.

To exit OSCAR:

- Press ESCAPE.

OSCAR Advanced Menu Screen

All commands other than selecting computers are performed from the OSCAR Advanced Menus. The Advanced Menu screen contains two menus. The Commands menu shows the commands that cause an action to take place. The Setup menu shows the commands that have screens to set configurations.



To open the OSCAR Advanced Menus:

- 1 Press PRINT SCREEN to open *OSCAR Selection*.

■ Note

If you press PRINT SCREEN and receive the message "Names out of date," press ENTER to update your user pod. The OSCAR Selection screen appears when the update is complete. See *Assigning Unique Names to Computers* in Chapter 4.

- 2 Press F2.

The *OSCAR Advanced Menu* screen appears showing the commands listed under the *Commands* menu. Pressing the RIGHT ARROW key to move the highlight to *Setup* will show the commands listed under the Setup menu.

Moving the highlight with the UP and DOWN ARROW keys in either menu selects a command.

To cancel unsaved changes and retain previous settings:

- Press ESCAPE.

To exit OSCAR:

- Press ESCAPE.

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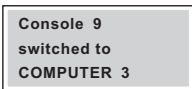
INTERPRETING THE STATUS FLAG

The monitor of the user console displays a small screen, referred to as the status flag, that indicates the connection status of the user console and mode of operation. It can be set to show the connection by port number or by name. When operating the ViewPoint system with OSCAR, the status flag disappears from the display and reappears when the operation is completed.



```
C9
at
S3
```

ABBR mode



```
Console 9
switched to
COMPUTER 3
```

LONG mode

Two Display Modes

The status flag can be displayed in either an abbreviated, ABBR, or in LONG mode, as shown in these examples. The status flag in the abbreviated mode indicates that Console 9 is connected to Computer 3. In ABBR mode **S** stands for computer. The status flag in the long mode indicates the same information without abbreviations. See *Changing Status Flag Attributes* later in this chapter if you want to change the appearance of the status flag.

SWITCHING TO A COMPUTER

The most common ViewPoint operation is switching either a user's keyboard, mouse, and monitor or just the monitor (video) between computers. Switching disconnects either the keyboard, mouse, and monitor or only the video from one computer and connects them to another. When switching any user to a selected computer, ViewPoint reconfigures the keyboard, mouse, and monitor to suit the newly connected computer, while saving each computer's keyboard settings for the next use.

To switch to a computer:

- 1 Press PRINT SCREEN; the *OSCAR Selection* screen appears.
- 2 Use the ARROW keys (or PAGE UP, PAGE DOWN, HOME, and END keys) to select the computer to which you want to switch.

—*or in port mode*—

Press the key that corresponds to computer's port number, then press ENTER.

For example, to select the computer connected to Port 2, press PRINT SCREEN, 2, ENTER. If the computers are listed by their assigned names, they will be in alphabetical order.

—*or in names mode*—

Type the first few letters of the computer name to establish it as unique, then press ENTER.

For example, to select "Accounting," type ACC, then press ENTER.

- 3 The status flag displays one of two messages: **Switch Completed**: computer is now connected.

—*or*—

Access Denied: another user has control over the computer.

| OSCAR SELECTION | |
|---------------------|------------|
| Port | Name |
| 1 | COMPUTER 1 |
| 2 | COMPUTER 2 |
| 3 | COMPUTER 3 |
| 4 | COMPUTER 4 |
| 5 | COMPUTER 5 |
| 6 | COMPUTER 6 |
| 7 | COMPUTER 7 |
| 8 | COMPUTER 8 |
| F1 Help F2 Advanced | |

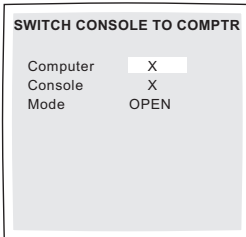
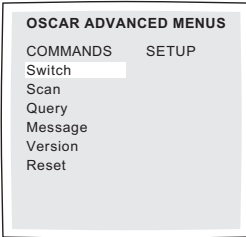
SWITCH COMPLETED
from MASTER

ACCESS DENIED
from MASTER

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To switch any user to a selected computer:

- 1 From the *Commands* menu in the *Advanced Menus* screen, (*Switch* is highlighted by default) press the number key that corresponds to the port number of the computer to which you wish to switch; the *Switch Console to Computer* screen appears with the computer port highlighted.



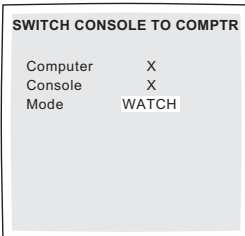
■ Note

If you press the wrong number (*Computer* is highlighted by default), enter the number of the desired computer.

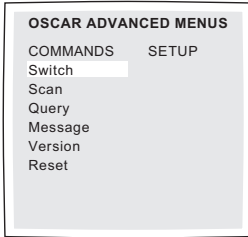
- 2 Move the highlight down to *Console* and use the + or – keys to scroll through the available consoles until the desired user console number is displayed.
- 3 Highlight *Mode* and use the + or – keys to select the connection mode from either *Full*, which gives keyboard and mouse control of the selected computer,
—or—
Watch, which displays the video of the selected computer but provides no keyboard or mouse control,
—or—
Open, which disconnects a user console.
- 4 Press ENTER.

To switch video only:

- 1 From the *Commands* menu in the *Advanced Menus* screen (*Switch* is highlighted by default), press the number key that corresponds to the port number of the computer to which you wish to switch; the *Switch Console to Computer* screen appears with the computer port highlighted.
- 2 Move the highlight down to *Console* and use the + or – keys to scroll through the available user consoles until the desired user console number is displayed.
- 3 Highlight *Mode* and use the + or – keys to select *Watch*, which displays the video of the selected computer but provides no keyboard or mouse control.
- 4 Press ENTER.



DISCONNECTING ANY USER



To disconnect the currently selected computer:

- From the *Commands* menu in the *Advanced Menus* screen (*Switch* is highlighted by default), press ENTER.

To disconnect any user:

- 1 From the *Commands* menu in the *Advanced Menus* screen (*Switch* is highlighted by default), press the number key that corresponds to the port number of the computer to which you wish to disconnect; the *Switch Console to Computer* screen appears with the computer port highlighted.

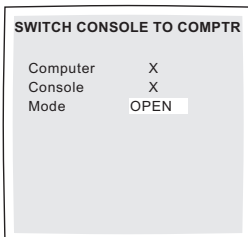
■ **Note**

If you press the wrong number (*Computer* is highlighted by default), enter the number of the desired computer.

- 2 Move the highlight down to *Console* and use the + or – keys to scroll through the available user consoles until the desired user console number is displayed.

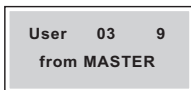
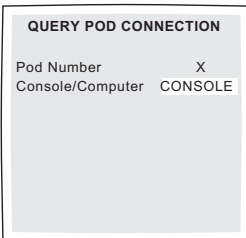
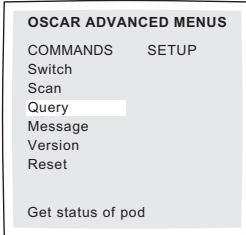
To determine which user console is currently connected to the computer, see *Querying Pod Status* in this chapter.

- 3 Highlight *Mode* and use the + or – keys to select *Open*, which disconnects a user console.
- 4 Press ENTER.



QUERYING POD STATUS

You can check the connection status of any user pod or system pod in the ViewPoint system. This may be useful when you want “full” connection (control of keyboard and mouse) to a computer and need to determine if another user is already connected.

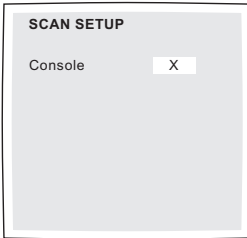
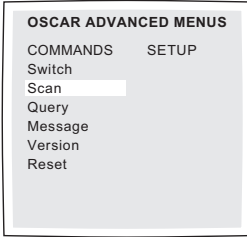


To query pod status:

- 1 From the *Commands* menu in the *Advanced Menus* screen, use the DOWN ARROW key to move the highlight to *Query*.
- 2 Press ENTER to display your own switch status —or— press the number key that corresponds to the console or computer you want to query; the *Query Pod Connection* screen appears with pod number highlighted.
- 3 Move the highlight to *Console/Computer* to find out if a console or computer is connected. Use + or – keys to toggle between *Computer* or *Console*.
- 4 Press ENTER to begin the query; the status flag appears. In the example shown, the status flag shows console connection: Console 03 is connected to Computer 9.

SCANNING THE COMPUTERS

When placed in the scan mode, the specified user console automatically switches from computer to computer in a selected scan sequence, and in watch mode. You can scan the entire system sequentially or designate a custom scan pattern by specifying computers and durations.



To place in scan mode:

- 1 From the *Commands* menu in the *Advanced Menus* screen, use the DOWN ARROW key to move the highlight to *Scan*.
- 2 Press ENTER to operate scan mode from the current console
—or—
press the number key of the console from which you want to operate the scan mode; the *Scan Setup* screen appears with the console number highlighted.
- 3 Press ENTER.
The default duration time is 15 seconds.

To cancel scan mode:

- Switch to any computer.

| OSCAR ADVANCED MENU | |
|---------------------|----------|
| COMMANDS | SETUP |
| | Scan |
| | OSCAR |
| | Flag |
| | Security |

| SCAN PATTERN SETUP | | |
|--------------------|-----|------------|
| Port | Sec | Name |
| 1 | 15 | COMPUTER 1 |
| 2 | 15 | COMPUTER 2 |
| 3 | 15 | COMPUTER 3 |
| 4 | 15 | COMPUTER 4 |
| 5 | 15 | COMPUTER 5 |
| 6 | 15 | COMPUTER 6 |
| 7 | 15 | COMPUTER 7 |
| F2 for defaults | | |

To create a custom scan pattern:

- 1 In the *Advanced Menus* screen, press the RIGHT ARROW key to move the highlight to the **Setup** menu.
- 2 Use the DOWN ARROW key to move the highlight to **Scan** and press ENTER; the *Pattern Setup* screen appears with the first port position or computer name highlighted.

In the *Scan Pattern Setup* screen shown, the order-by-port mode is selected. Your screen may appear different. See *Changing Menu Attributes* found later in this chapter.

- 3 Use the DOWN ARROW key to select the port number of the first computer to be included in the scan
—or—
if your computers are listed by name, select the name of the first computer to be included in the scan.
- 4 Press the RIGHT ARROW key to highlight the **Sec** column, and then type the number of seconds (255 is maximum) that you want this computer to be selected before switching to the next computer in the sequence.
- 5 Press the DOWN ARROW key to move the highlight to the next computer you want to include in the scan and repeat steps 3 and 4.
- 6 Press ENTER to start the scan sequence.

3 Operation Guide

To remove a computer from the scan list:

- 1 In the *Scan Pattern Setup* screen, move the highlight to the port number of the computer to be removed from the scan list

—or—

if your computers are listed by name, to the name of the computer.

- 2 Press the RIGHT ARROW key to highlight the **Sec** column.
- 3 Type **0** for the number of seconds.
Pressing DELETE while in the *Scan Pattern Setup* screen deletes the highlighted computer and all entries below it.
- 4 Press ENTER.

■ Note

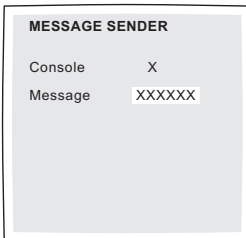
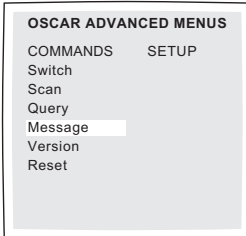
To return all Port and Sec values to factory defaults, press the F2 key while in the Scan Pattern Setup screen.

| SCAN PATTERN SETUP | | |
|--------------------|-----|------------|
| Port | Sec | Name |
| 1 | 15 | COMPUTER 1 |
| 2 | 15 | COMPUTER 2 |
| 3 | 15 | COMPUTER 3 |
| 4 | 15 | COMPUTER 4 |
| 5 | 15 | COMPUTER 5 |
| 6 | 15 | COMPUTER 6 |
| 7 | 15 | COMPUTER 7 |

F2 for defaults

SENDING A USER MESSAGE

You can send a brief text message to any other user consoles for display on their monitors. This feature may be useful when another user has a “full” connection to the computer you want to switch to, and you need to request that the current user relinquish control.



To send a user message:

- 1 From the *Commands* menu in the *Advanced Menus* screen, use the DOWN ARROW key to move the highlight to *Message*.
- 2 Type the number of the console to which you want to send a message; the *Message Sender* screen appears with the console number highlighted.
- 3 Move the highlight with the DOWN ARROW key to *Message* and enter a message of up to 14 characters.
- 4 Press ENTER to send the message.

ESTABLISHING SECURITY

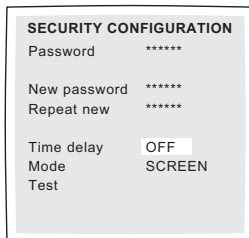
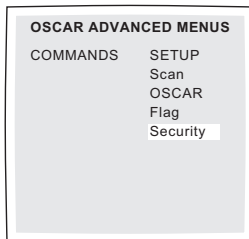
Advanced computer applications should usually be protected against unauthorized users. ViewPoint's security features enable you to lock the keyboard and monitor, requiring you to type a password before resuming operation. You can also set a time delay before the system is locked.

You must always provide a password to access the fields in the Security Configuration screen. After you type the correct password, the other fields on the screen are activated. The table, *Effects of Settings on Security Configuration*, describes the menu attributes.

To lock the screen and keyboard:

- 1 In the *Advanced Menus* screen, press the RIGHT ARROW key to highlight the *Setup* menu.
- 2 Use the DOWN ARROW key to move the highlight to *Security*, and press ENTER; the *Security Configuration* screen appears.
- 3 Type your password and press RETURN. Passwords can be up to 8 characters (case sensitive). You must enter the new password twice for confirmation.

■ Note
The factory default password is OSCAR. Because the CAPS LOCK is disabled in OSCAR, you must hold down the SHIFT key as you type each letter.
- 4 Highlight *Time Delay* and use the + or – keys to obtain the desired value in minutes.
- 5 If you want to immediately activate the security screen, highlight *Test* and press ENTER.
- 6 Press ENTER to save settings.



Effects of Settings on Security Configuration

| | |
|----------|--|
| PASSWORD | Enter current password to activate other fields. |
|----------|--|

| | |
|--------------|--------------------|
| NEW PASSWORD | Type new password. |
|--------------|--------------------|

| | |
|------------|---------------------------------|
| REPEAT NEW | Retype new password to confirm. |
|------------|---------------------------------|

| | |
|------------|------------------------------------|
| TIME DELAY | Set a value from 0 to 254 minutes. |
|------------|------------------------------------|

| | |
|------|------------------------------|
| MODE | Not selectable in ViewPoint. |
|------|------------------------------|

| | |
|------|--|
| TEST | Immediately activates security screen. |
|------|--|

3 Operation Guide

OPTIMIZING VIDEO QUALITY FOR THE USER POD

If your cable lengths are more than 25 feet, you can optimize the video quality for the user pod. Interconnecting system cables of less than 25 feet require no compensation adjustments. The cable length entry will maximize video performance in most cases.

If you cannot obtain satisfactory video by entering the cable length, contact Apex PC Technical Support, because changing the settings values can greatly affect other adjustments. The technician can step you through the video compensation settings. When instructed, use the + or – keys to obtain the desired value or type in the number. The table, *Video Compensation Settings for the User Pod*, describes the available menu attributes.

To optimize video quality for the user pods:

- 1 In the **Advanced Menus** screen press the RIGHT ARROW key to highlight the **Setup** menu.
- 2 Use the DOWN ARROW key to move the highlight to **Video**, and press ENTER; the **Video Compensation** screen appears with the cable length field highlighted.
- 3 Use the + or – keys to enter the length of cable from the core to the user pod or type in the number.
- 4 Press ENTER to save the changes.
- 5 Repeat the steps at each console for each user pod.

| OSCAR ADVANCED MENUS | |
|----------------------|----------|
| COMMANDS | SETUP |
| | Scan |
| | OSCAR |
| | Flag |
| | Security |
| | Video |

| VIDEO COMPENSATION | | |
|--------------------|-----|-----|
| Cable Length | | XXX |
| DC | ON | XXX |
| ELF | ON | XXX |
| VLf | ON | XXX |
| Vid Hi C | OFF | XXX |
| Vid Hi F | ON | XXX |
| Vid MF | ON | XXX |
| Vid LF | OFF | XXX |

Video Compensation Settings for the User Pod

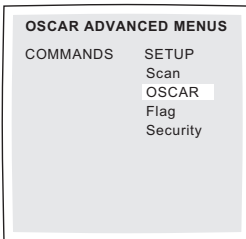
| ON-SCREEN DISPLAY | STATUS | RELATIVE NUMBER | ADJUSTMENT |
|-------------------|--------|-----------------|-------------------------------|
| DC | ON/OFF | XXX | DC gain |
| ELF | ON/OFF | XXX | Extremely low frequency |
| VLF | ON/OFF | XXX | Very low frequency |
| Vid Hi C | ON/OFF | XXX | Video high frequency – Coarse |
| Vid Hi F | ON/OFF | XXX | Video high frequency – Fine |
| Vid MF | ON/OFF | XXX | Video mid frequency |
| Vid LF | ON/OFF | XXX | Video low frequency |

■ Note

If changes to settings makes video unreadable, press ESCAPE to return to previous settings.

CHANGING MENU ATTRIBUTES

It is not necessary to change any of the default settings before using ViewPoint; however, you can set several options to suit your preferences or specific application. For example, you may want to change the position, color, and other display attributes of the OSCAR screens. See the table, *Effects of Settings on Screen Appearance*, for available menu attributes.



| OSCAR ATTRIBUTES | |
|------------------|------|
| Resolution | 640 |
| Height | 16 |
| Horizontal | 5 |
| Vertical | 10 |
| Background | 1 |
| Highlight | 4 |
| Text | 6 |
| Delay Time | 0 |
| Order | PORT |

To change menu attributes:

- 1 In the **Advanced Menu** screen, press the RIGHT ARROW key to highlight the **Setup** menu.
- 2 Use the DOWN ARROW key to move the highlight to **OSCAR** and press ENTER; the **OSCAR Attributes** screen appears.
- 3 Highlight the setting(s) you want to change and use the + or – keys to obtain the desired value or type in number. As you select different values, the effect of the changes is reflected immediately.
- 4 Press ENTER to save the changes.

Effects of Settings on Screen Appearance

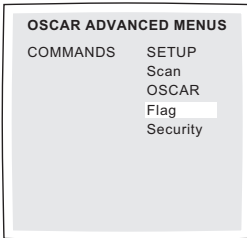
| TO CHANGE THIS | SELECT THIS SETTING | CHOOSE VALUES |
|--|---------------------|--|
| Size of screen | RESOLUTION | Select either 320, 480, or 640; the lower the value, the larger the size. |
| Size of text | HEIGHT | Higher values display larger sized text. |
| Location of screen | HORIZONTAL | 0-127 |
| | VERTICAL | 0-255 |
| Color of screen and text | BACKGROUND | 0-7 |
| | HIGHLIGHT | 0-7 |
| | TEXT | 0-7 |
| Timing of OSCAR Selection screen display | DELAY TIME | Time in seconds the OSCAR Selection screen is delayed before appearing after PRINT SCREEN is pressed. Increasing delay can prevent the screen from being a distraction when performing simple computer switching operations. |
| Order of computers | ORDER | Choose to list computers by port number or alphabetically by name. |

■ Note

It is possible, while changing the menu attributes, to render the menu and windows invisible, making it difficult to choose attributes that correct the problem. If this occurs, reset the user pod to its default values by pressing: ESCAPE, PRINT SCREEN, F10, Y, ENTER.

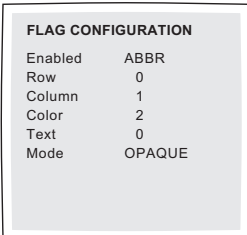
CHANGING STATUS FLAG ATTRIBUTES

The status flag indicates the name or port number of the currently selected computer. You can choose to display the status flag at all times, for a few seconds after switching, or not at all. You can also change the color of the status flag and its location on the screen. The table, *Values and Effect on Flag Appearance*, describes the available menu attributes.



To change status flag attributes:

- 1 In the *Advanced Menu* screen, press the RIGHT ARROW key to highlight the *Setup* menu.
- 2 Use the DOWN ARROW key to move the highlight to *Flag*, and press ENTER; the *Flag Configuration* screen appears.
- 3 Highlight the settings you want to change, and use the + or – keys to adjust the values.
- 4 Press ENTER to save the settings.

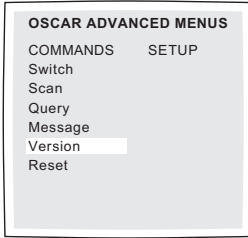


Values and Effect on Flag Appearance

| TO CHANGE THIS | SELECT THIS SETTING | CHOOSE EFFECT |
|---------------------------------------|---------------------|---|
| Timing, size, and indications of flag | ENABLED | <p>FLAG OFF Flag does not appear.</p> <p>ABBR Flag indications are abbreviated; flag is smaller.</p> <p>LONG Flag indications are not abbreviated; flag is larger.</p> <p>ABBR TIMED Looks like ABBR and displays 5 seconds.</p> <p>LONG TIMED Looks like LONG and displays 5 seconds.</p> |
| | ROW | 0–12 values position flag vertically on screen. |
| | COLUMN | 0–25 values position flag horizontally on screen. |
| | | |
| Color of flag and text | COLOR | 0–7 |
| | TEXT | 0–7 |
| Display mode of flag | MODE | OPAQUE |
| | | TRANSPARENT |

DISPLAYING FIRMWARE VERSION AND SETTINGS

To facilitate system troubleshooting and support, you can display the firmware version and settings information.

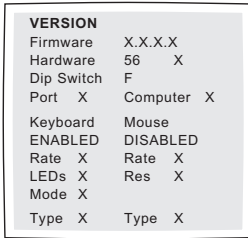


To display firmware version and settings:

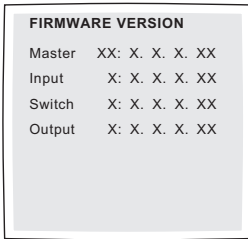
- 1 From the *Commands* menu in the *Advanced Menus* screen, use the DOWN ARROW key to move the highlight to *Version*.
- 2 Press ENTER; the *Version* screen appears.

■ Note

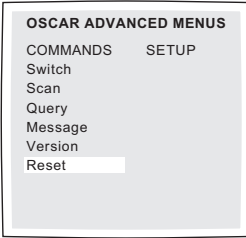
Both the *Version* and the *Firmware Version* screens shown here use X to indicate your firmware version numbers.



- 3 From the *Version* screen press F2 to access the *Firmware Version* screen which shows hardware version information on the core.
- 4 Press ESCAPE to exit.



RESETTING THE MOUSE AND KEYBOARD



Resetting the mouse and keyboard attempts to restore the correct settings for the selected computer.

To reset the mouse and keyboard values:

- 1 From the *Commands* menu in the *Advanced Menus*, use the DOWN ARROW key to move the highlight to *Reset*.
- 2 Press ENTER.

4 ADMINISTRATION TOOLS *for* **ViewPoint** S Y S T E M

VIEWPOINT ENABLES SYSTEM ADMINISTRATORS TO MONITOR AND CONTROL CONNECTIONS

- Display computer/console connections
- Control switch connection mode
- Display and modify device types and system names
- Adjust video quality for the system pods
- Create names for each user and/or computer for ease of tracking

■ **Note**

In order to use the administration functions, you need to set up an administration terminal. See procedure in Chapter 2 *Connecting the Administration Terminal*.

4 Administration Tools

OPTIMIZING VIDEO QUALITY FOR THE SYSTEM POD

If your cable lengths are more than 25 feet, you can optimize the video quality for the system pod. Interconnecting system cables of less than 25 feet require no compensation adjustments. The cable length entry will maximize video performance in most cases.

If you cannot obtain satisfactory video by entering the cable length, contact Apex PC Technical Support, because changing the settings values can greatly affect other adjustments. The technician will step you through the video compensation settings. When instructed, use the + or – keys to obtain the desired value or type in the number. The table, *Video Compensation Settings for the System Pod*, describes the available menu attributes.

To optimize video quality for system pods:

- 1 At the prompt “>” in the *Display Matrix* screen type DS and press ENTER to access the *Display Systems* screen.

| Designate computer pod | | | | | | | |
|------------------------|---------|------------|--------------|-------|-------|-------|-------|
| Computer | Device | Name | Cable Length | DAC 0 | DAC 1 | DAC 2 | DAC 3 |
| 1 | Default | Computer 1 | XXX | 255 | 255 | 255 | 255 |
| 2 | Default | Computer 2 | XXX | 255 | 255 | 255 | 255 |
| 3 | Default | Computer 3 | XXX | 255 | 255 | 255 | 255 |
| 4 | Default | Computer 4 | XXX | 255 | 255 | 255 | 255 |
| : | : | : | : | : | : | : | : |
| : | : | : | : | : | : | : | : |

- 2 Press the RIGHT ARROW to move the highlight to cable length. Then with the DOWN ARROW, move the highlight to the desired computer.
- 3 Use the + or – keys to select the length of cable from the core to the system pod or type in the number.
- 4 Press ENTER to save your changes.
- 5 Repeat the steps for additional system pods.

Video Compensation Settings for the System Pod

| DAC NUMBER | RELATIVE NUMBER | ADJUSTMENT |
|------------|-----------------|-----------------------------|
| DAC0 | XXX | Video high frequency-Coarse |
| DAC1 | XXX | Video high frequency-Fine |
| DAC2 | XXX | Video mid frequency |
| DAC3 | XXX | Video low frequency |

■ Note

If changes to settings makes video unreadable, press ESCAPE to return to previous settings.

ASSIGNING SPECIFIC DEVICE TYPES

When you have a tiered configuration, that is, if your system includes one or more external devices such as an Apex OutLook or another ViewPoint, you must make the ViewPoint core aware of these external devices by assigning a specific device type. You designate the device types in the Display Systems screen. The possible device types are 4 port, 8 port, 10 port, or 32 port. The “Default” setting indicates no external device is connected. For more information on tiering, see Appendix C.

To assign a device type:

- 1 At the prompt “>” in the *Display Matrix* screen type DS and press ENTER to access the *Display Systems* screen.

| Designate computer pod | | | | |
|------------------------|---------|------------|--------------|-------|
| Computer | Device | Name | Cable Length | DAC 0 |
| 1 | Default | Computer 1 | XXX | 255 |
| 2 | Default | Computer 2 | XXX | 255 |
| 3-1 | 4 port | SLAVE 3-1 | XXX | 255 |
| 3-2 | | SLAVE 3-2 | XXX | 255 |
| 3-3 | | SLAVE 3-3 | XXX | 255 |
| 3-4 | | SLAVE 3-4 | XXX | 255 |
| 4 | Default | Computer 4 | XXX | 255 |
| . | . | . | . | . |
| . | . | . | . | . |

- 2 Use the ARROW keys to highlight “Default” in the *Device* column and the + or – keys to choose from the following settings: 4 port, 8 port, 10 port, or 32 port. Your selection is immediately reflected on the screen.

- 3 Press ENTER to save types, or ESCAPE to return to previous values.

■ Note

After pressing ENTER, do not turn off the core until you see **UPDATE COMPLETE** on your terminal screen or you will lose all your updates.

ASSIGNING UNIQUE NAMES TO COMPUTERS

You may find it easier to identify the computers in a system by name, rather than by port number. You can assign unique names to computers in the Display Systems screen. Computer names are listed by number, 1 through 32, until you make changes. Each screen shows 16 entries, and you can scroll or page down to see the next page.

To assign names to computers:

- 1 At the prompt “>” in the *Display Matrix* screen type **DS** and press ENTER to access the *Display Systems* screen.

| Designate computer pod | | | | |
|------------------------|---------|------------|--------------|-------|
| Computer | Device | Name | Cable Length | DAC 0 |
| 1 | Default | Computer 1 | XXX | 255 |
| 2 | Default | Computer 2 | XXX | 255 |
| 3 | Default | Computer 3 | XXX | 255 |
| 4 | Default | Computer 4 | XXX | 255 |
| . | . | . | . | . |
| . | . | . | . | . |

- 2 Use the ARROW keys to move the highlight to the **Name** column and then to the port number for which you want to enter or change a computer name.
- 3 Type a name for the computer. Computer names may be up to 12 characters long, including only A–Z, 0–9, the +, *, ., /, :, -, and the space character.
- 4 If necessary, repeat steps 2 and 3 for each computer or tiered device in the system.
- 5 Press ENTER to save names, or ESCAPE to return to previous values.

■ Note

After pressing ENTER, do not turn off the core until you see **UPDATE COMPLETE** on your terminal screen or you will lose all your updates.

APPENDICES

for

ViewPoint SYSTEM

A SPECIFICATIONS

Dimensions

| | | | |
|----------|--------|----------|------------|
| User Pod | HEIGHT | 1.71 in | (4.45 cm) |
| | DEPTH | 9.00 in | (22.86 cm) |
| | WIDTH | 12.75 in | (32.39 cm) |
| | WEIGHT | 5 lbs | (2.3 kg) |

| | | | |
|------------|--------|----------|------------|
| System Pod | HEIGHT | 1.71 in | (4.45 cm) |
| | DEPTH | 9.00 in | (22.86 cm) |
| | WIDTH | 17.00 in | (43.18 cm) |
| | WEIGHT | 6 lbs | (2.7 kg) |

| | | | |
|------|--------|----------|------------|
| Core | HEIGHT | 25.50 in | (64.77 cm) |
| | DEPTH | 20.12 in | (51.12 cm) |
| | WIDTH | 8.75 in | (22.22 cm) |
| | WEIGHT | 35 lbs | (15.9 kg) |

| | | |
|----------------|---------------|----------------------|
| Voltage | INPUT VOLTAGE | 100–120, 200–240 VAC |
| | POWER SUPPLY | 50/60 Hz |

| | | | |
|--------------------|---------------|-----------|------------|
| Temperature | AMBIENT RANGE | 50–105° F | (10–50° C) |
|--------------------|---------------|-----------|------------|

B OPTIONS AND ACCESSORIES

| | DESCRIPTION | PART NUMBER |
|-----------|--|-------------|
| COMPONENT | Core (to support 8 x 8 configuration) | ELC-0808VP |
| | User Pod | ELC-00UP |
| | System Pod | ELC-00SP |
| CARD | Input | ELC-00IM |
| | Output | ELC-000M |
| | Switch | ELC-1616SM |
| CABLE | 25 ft (7.62 m) | CT-025 |
| | 50 ft (15.24 m) | CT-050 |
| | 100 ft (30.48 m) | CT-100 |
| | 150 ft (45.72 m) | CT-150 |
| | 250 ft (76.20 m) | CT-250 |
| | 350 ft (106.68 m) | CT-350 |
| | 500 ft (152.40 m) | CT-500 |

The Apex PC product line is highly adaptable. For more information on system configuration using Apex options and accessories, please contact your sales representative at 800 861-5858.

C TIERING WITH OTHER APEX SWITCH SYSTEMS

In lieu of computers, you can connect ViewPoint to other Apex switching devices like the OutLook concentrator; this is called tiering. In order for tiering to work, ViewPoint must be made aware of the external device first in order to transmit commands and the external device must be able to read and execute those commands. See Chapter 4 for the procedure *Assigning Specific Device Types*.

To transmit commands with a tiered system:

- 1 Press PRINT SCREEN; the *OSCAR Selection* screen appears. Move the highlight with the DOWN ARROW key to select the Apex external device port number to which you want to switch.

| OSCAR SELECTION | |
|-----------------|-------------|
| Port | Name |
| 1 | COMPUTER 1 |
| 2-1 | SLAVE 2-1 |
| 2-2 | SLAVE 2-2 |
| 2-3 | SLAVE 2-3 |
| 2-4 | SLAVE 2-4 |
| 3 | COMPUTER 3 |
| 4 | COMPUTER 4 |
| 5 | COMPUTER 5 |
| 6 | COMPUTER 6 |
| 7 | COMPUTER 7 |
| 8 | COMPUTER 8 |
| F1 Help | F2 Advanced |

—*or in port mode*—

Type the number of the computer port and press ENTER.

For example, to select Port 2-3 by keyboard, press 2, -, 3 and ENTER.

—*or in names mode*—

Type the first few letters of the computer name to establish it as unique, then press ENTER.

For example, to select “Accounting,” type ACC, then press ENTER.

- 2 The status flag appears showing that the console is switched to an Apex external device. For example, the bottom illustration shows that Console 9 is switched to Port 2-3 of an Apex external device.

```
C9
at
2-3 SLAVE 2-3
```

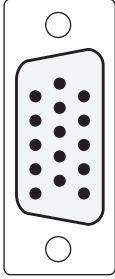
D TROUBLESHOOTING

| SYMPTOM | PROBABLE CAUSE | RECOMMENDED SOLUTION |
|--|------------------------------------|--|
| No OSCAR or video on any computer | Loose monitor connection | Reconnect monitor |
| | No power to ViewPoint core | Check power switch Reconnect power cable Check AC outlet for power |
| | OSCAR colors or setup incompatible | Reset OSCAR colors to defaults |
| No video on one computer | Loose video connection | Reconnect video cable |
| | Defective video cable | Replace video cable |
| | Computer off | Turn on the computer connected to that port |
| Can't select computers | Keyboard did not initialize | Disconnect then reconnect keyboard to pod |
| | Keyboard incompatible | Replace keyboard |
| | Computer off | Turn on computer connected to that port |
| Keyboard error on boot, all computers | Loose keyboard connection | Check that all cables are well seated |
| | Incompatible or defective keyboard | Replace keyboard |

| SYMPTOM | PROBABLE CAUSE | RECOMMENDED SOLUTION |
|---|---|---|
| Keyboard error on boot, one computer | Loose keyboard connection | Check that all cables are well seated Ensure mouse and keyboard cables are not swapped |
| | Defective cable | Replace keyboard cable |
| Keyboard strokes shifted (swaps upper case for lower case) | Computer left keyboard in shifted state when last connected | Press both SHIFT keys |
| Mouse error on boot, all computers | Loose mouse connection | Check that all cables are well seated Ensure that mouse/ keyboard cables are not swapped |
| | Incompatible or defective mouse | Replace mouse with PS/2 or mouse-port compatible mouse |
| Mouse error on boot, one computer | Loose mouse connection | Check that all cables are well seated Ensure that mouse/ keyboard cables are not swapped |
| | Defective mouse cable | Replace mouse cable |
| | Using serial port on computer | Install PS/2-to-serial protocol converter |
| Mouse displays erratic behavior | Computer left mouse in indeterminate state | Reset mouse through OSCAR |
| Mouse pointer frozen on display | Mouse not initialized | Reset mouse through OSCAR |

E CONNECTOR PIN SPECIFICATIONS

DB-15 HD Video Cable, Male



| | | |
|-----------------|--------------|-------------|
| 11 | 6 | 1 |
| Monitor Sense 0 | Red Ground | Red Drive |
| 12 | 7 | 2 |
| Monitor Sense 1 | Green Ground | Green Drive |
| 13 | 8 | 3 |
| Horizontal Sync | Blue Ground | Blue Drive |
| 14 | 9 | 4 |
| Vertical Sync | Plug | Reserved |
| 15 | 10 | 5 |
| Reserved | Ground | Ground |

IBM PC 5-Pin DIN Keyboard Cable, Male



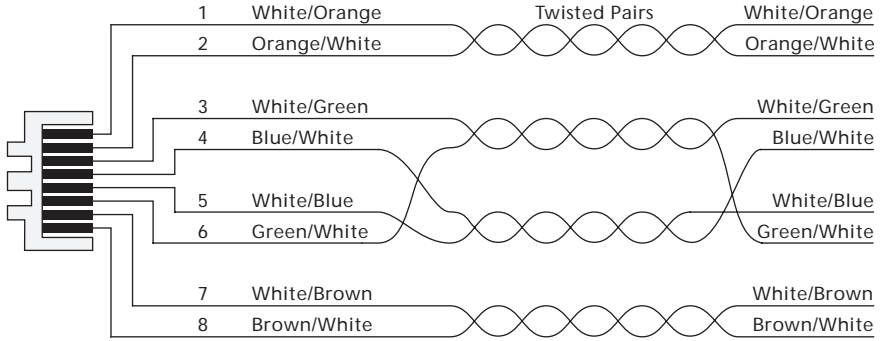
| | |
|----------------|----------------|
| 1 | 3 |
| Keyboard Clock | Keyboard Reset |
| 4 | 5 |
| Ground | +5 Volts |
| 2 | |
| Keyboard Data | |

IBM PS/2 6-Pin Mini DIN Keyboard Cable, Male



| | |
|----------------|----------|
| 5 | 6 |
| Keyboard Clock | Reserved |
| 3 | 4 |
| Ground | +5 Volts |
| 1 | 2 |
| Keyboard Data | Reserved |

UTP Cat5 or Better Cable W/RJ45 Connectors, Male



Belden equivalent cable
#1538a with male connectors Kycon #MP-88R-1000K

