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DECwindows 4125 Emulator

Installation and User's Guide

The book describes how to install and use the DECwindows 4125 Emulator on a VMS, ULTRIX/VAX, or ULTRIX/RISC system.

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About This Guide

Purpose of This Guide

This guide describes how to install and use the DECwindows 4125 Emulator (DW4125 Emulator) software on the VMS and ULTRIX operating systems.

Who Should Use This Guide

This guide is intended for system managers and users who install the DECwindows 4125 Emulator software and for all DECwindows users who create or use Tektronix applications with the DECwindows 4125 Emulator.

Structure of This Guide

This guide covers the following topics:

- Chapter 1 provides an overview of the DECwindows environment as it applies to the DW4125 Emulator.
- Chapter 2 contains software installation instructions.
- Chapter 3 describes the DW4125 Emulator functions.
- Chapter 4 provides a summary of DW4125 Emulator features.
- The Glossary contains definitions of technical terms used in the text that pertain to the DECwindows environment and the DW4125 Emulator.

For More Information

To increase your understanding of DECwindows concepts, consult the following documents:

- *DECwindows User's Guide*
- *DECwindows Applications Guide*

For detailed information on the Tektronix 4125 Terminal, consult the Tektronix documentation, available through Tektronix, Inc.

Conventions

The following conventions are used in this guide:

mouse	The term *mouse* is used to refer to any pointing device, such as a mouse, a puck, or a stylus.
MB1, MB2, MB3	MB1 indicates the left mouse button, MB2 indicates the middle mouse button, and MB3 indicates the right mouse button. (The buttons can be redefined by the user.)
Ctrl/*x*	A sequence such as Ctrl/*x* indicates that you must hold down the key labeled Ctrl while you press another key or a pointing device button.
PF1 *x*	A sequence such as PF1 *x* indicates that you must first press and release the key labeled PF1, then press and release another key or a pointing device button.
Return	A key name is shown enclosed to indicate that you press a key on the keyboard.
blue-green ink	Blue-green ink indicates information that you must enter from the keyboard or a screen object that you must choose or click on.
. . .	A vertical ellipsis indicates the omission of items from a code example or command format; the items are omitted because they are not important to the topic being discussed.
boldface text	Boldface text represents the introduction of a new term. It also indicates ULTRIX commands and files.
italic	Italic characters indicate elements for which you supply a value.
ULTRIX	The term ULTRIX refers to ULTRIX Worksystem Software.
UPPERCASE TEXT	Uppercase letters indicate the name of a command, a routine, the name of a file, the name of a file protection code, or the abbreviation for a system privilege.

Note *The term DW4125 Emulator, used throughout the guide, indicates the DECwindows 4125 Emulator.*

1

Windowing and Mouse Techniques

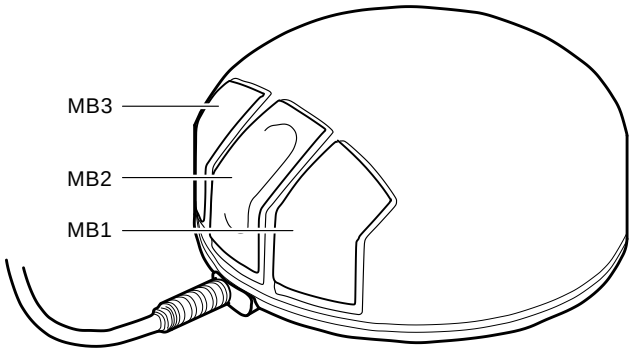
You work with the DECwindows 4125 Emulator (DW4125 Emulator) using the same mouse and windowing techniques as other DECwindows applications.

This chapter summarizes some basic techniques you will use to operate the emulator.

- Using the Mouse
- Starting a Session
- Using Windows
- Selecting Windows
- Changing the Size of Windows
- Shrinking Windows
- Expanding Icons to Windows
- Moving Windows
- Stacking Overlapping Windows
- Choosing Items from Pull-Down Menus
- Supplying Information in Dialog Boxes
- Getting Help
- Putting a Session on Hold
- Ending a Session

Using the Mouse

You use the mouse to communicate with your Tektronix 4125 application, to choose commands from a menu, to expand and shrink windows, and to rearrange windows on your screen. The mouse has three buttons. Unless you specify otherwise, MB1 (for ‘‘mouse button 1’’) is on the left, MB2 is in the middle, and MB3 is on the right. This button arrangement naturally suits right-handed users. If you are left-handed, you can easily rearrange this configuration by changing the button arrangement setting in the Session Manager’s Customize Pointer dialog box.



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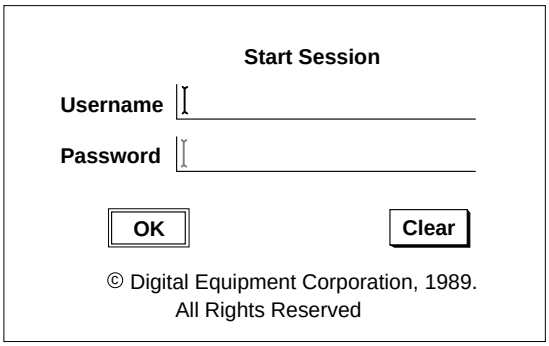
You can do all your work with the mouse by mastering the following techniques:

- **Point**: Using the mouse, move the cursor to where you want the next action to occur.
- **Click**: Quickly press and release MB1.
- **Press**: Point to the menu name, stepping arrow, or wherever you want the action to occur and without moving the mouse, press and hold MB1 or MB2. If you are pointing at a menu name, pressing MB1 pulls down a menu and keeps it down until you release MB1.
- **Drag**: Press and hold MB1, move the pointer, and release MB1. If you are displaying a pull-down menu, cancel the drag by moving the pointer outside the menu and releasing MB1.
- **Double click**: Point to the object and click MB1 twice in quick succession.

- **Shift click**: Point to the object. Press and hold the Shift key and click MB1. Release the Shift key.

Starting a Session

If the system startup procedure has been successful, your screen looks like this:



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The Start Session **dialog box** prompts you for your user name and password. A dialog box is displayed whenever the system needs information from you.

You type your user name and password in the appropriate **text entry fields**. A **text insertion cursor** is visible in each field. The text cursor in the Username field blinks to indicate this field has **input focus**. When a text field or window has input focus, you see your keystrokes echoed there. The text cursor in the Password field is dimmed, indicating that you cannot currently enter text in it.

To start a session:

1. Type your user name.

   If you make a typing mistake, press the Delete key (< x|) to erase the character to the left of the text cursor. To insert a character in the middle of text you already typed, point where you want the text inserted and click MB1. Or use the right and left arrow keys to move the text cursor right or left. The new characters you type push existing ones to the right.

2. Select the Password field by pointing to the Password field and clicking MB1 or by pressing Tab or Return. The blinking text cursor indicates that the Password field has input focus.

3 Type your password.

To preserve the secrecy of your password, the characters you type are not displayed on the screen.

If you make a typing mistake, click on the Clear button. This erases all text in both the Username and Password fields so that you can retype your information correctly. Clicking on buttons in dialog boxes enables you to specify what to do with the information.

4 Click on the OK button or press Return.

The double outline around the OK button in the Start Session dialog box indicates it is the default option. Default options are those you choose most frequently. You can use a shortcut to choose default options: Whenever you see a button with a double outline, pressing Return achieves the same results, in most cases, as clicking on that button.

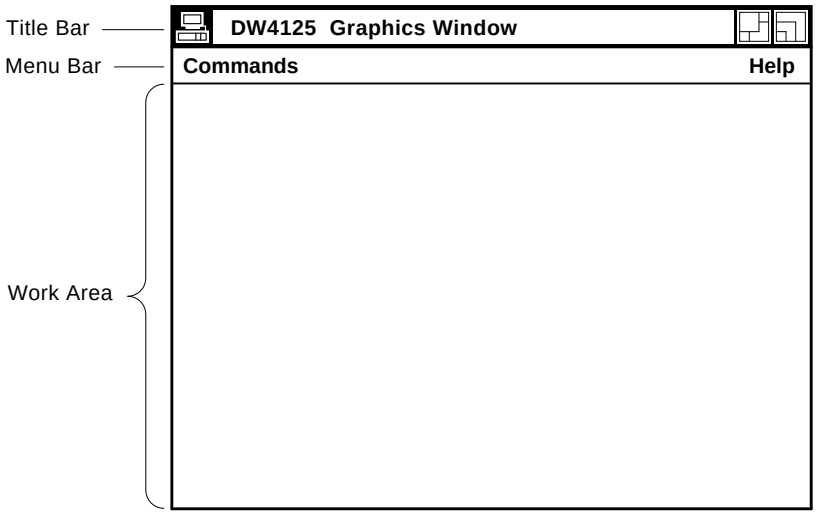
If you provide incorrect information, or make a typing mistake and do not correct it, you cannot start a session. Instead, a Problem Report dialog box is displayed as a warning that some information is incorrect.

Click on the Acknowledged button or press Return to try again.

If the information you supplied is correct, your session begins.

Using Windows

A **window** is an area on your workstation screen that represents all or part of an application. For example, the DW4125 Emulator graphics window is one of several windows available in the DECwindows system.



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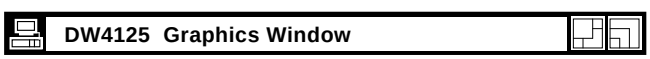
- The **title bar** at the top identifies the DW4125 window.
- The **menu bar** directly beneath the title bar enables you to access the DW4125 Emulator.
- The **work area** in the remaining space displays the DW4125 Emulator text and graphics.

Selecting Windows

When you have more than one window open, you indicate which window you want to work with by selecting it. The window moves to the front of the ''stack'' of overlapping windows. Its title bar is highlighted to indicate it has input focus. For many applications, any keystrokes you type are displayed in this window. When you select another window, the new window is given input focus. Only one window can have input focus at a time.

Window with Input Focus

Window without Input Focus



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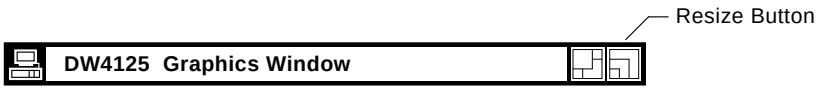
To select a window:

1. Point to a location in the title bar.
2. Click MB1.

Changing the Size of Windows

You may want very large windows so you can display more information or you may want to work with small windows, such as when several applications are running simultaneously. You can change the size of your windows by using the resize button.



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To change the size of a window:

1. Point to the window's resize button.
2. Press and hold MB1.

   The pointer changes into a small resize cursor.
3. Drag the resize cursor until the window is the size you want.

   To make the window larger, drag the resize cursor beyond the window border. To make the window smaller, drag the resize cursor beyond the window border and then back in. The outline stops moving when the window is the smallest size it can become.
4. Release MB1.

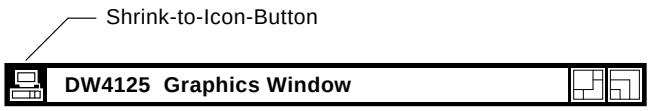
You can change the size of a window in one dimension (height or width) or in both dimensions simultaneously. To change the size in one dimension, drag the resize cursor across one border of the window. As long as you cross only one border, the outline that follows the resize cursor changes in only one dimension. If after crossing one border you cross an adjacent border, you see an outline that can change in both dimensions.

If you drag the resize cursor through one border and then through the *opposite* border, the first border you crossed reverts to its original location, and the other border becomes an outline that follows the resize cursor.

To cancel a window-resizing operation in progress, click another mouse button before releasing MB1. The outline disappears, and the window retains its original size.

Shrinking Windows

You can shrink a window to an icon if you want to free some space on your screen to run other applications without exiting from an application. When you shrink a window to an icon, the application it represents continues to run in memory and remains accessible. Any processes continue to execute while the application is stored as an icon.



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When a window is on the screen, its icon is dimmed. The icon appears bold when the window is stored in the Icon Box. If the Icon Box contains more icons than can be displayed at once, **scroll bars** are displayed. You use scroll bars to view the icons that do not fit in a single window.

To shrink the DW4125 Graphics window to an icon:

1. Point to the window's shrink-to-icon button.
2. Click MB1.

   The window disappears and its icon in the Icon Box appears bold.

You cannot shrink the Icon Box to an icon.

As you stop applications, your Icon Box develops gaps where icons used to appear. You can rearrange the icons in the Icon Box in two ways:

- By moving the icons. To move an icon, drag it to a new location.
- By clicking on the Icon Box's shrink-to-icon button. Clicking on this button in an application window shrinks the window to an icon. Clicking on this button in the Icon Box, however, eliminates the gaps between icons that may develop when you stop applications.

Expanding Icons to Windows

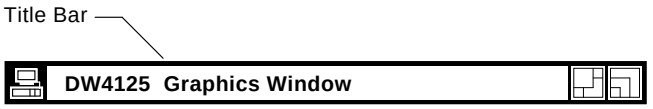
When you expand an application icon, you restore a window for that application. If you have more than one window open and expand an icon to a window, that new window is placed at the front of the stack of overlapping windows. If the window accepts text entry, it is also given input focus.

To expand an icon to a window:

1. Point to the icon in the Icon Box.
2. Click MB1.

Moving Windows

If one window partially obscures another, you might want to arrange the windows so that each is completely visible. To move a window, drag it by its title bar.



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To move a window:

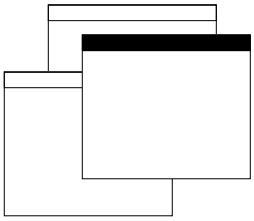
1. Position the pointer anywhere in the window's title bar (except in the shrink-to-icon, push-to-back, or resize buttons).
2. Press and hold MB1.

   An outline of the window is displayed.
3. Drag the window to the new location.
4. Release MB1.

   If the window was partially obscured by other windows, it moves to the front of the stack of windows and is given input focus.

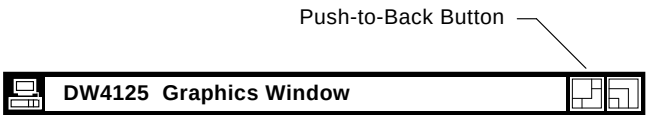
To cancel a window-moving operation in progress, click another mouse button before releasing MB1. The outline disappears and the window is not moved.

Stacking Overlapping Windows



When you are working with stacked windows and select a window, it moves to the front of the stack and is given input focus. But if a larger window completely obscures a smaller window, you cannot select that small window without moving the larger window out of the way. If you use the title bar to move the larger window, you disrupt your window arrangement.

By clicking on the visible window's push-to-back button, you can push that window to the back of the stack and expose the window underneath. Without moving the windows to another location on the screen, you can push one window out of the way or retrieve another to work with.



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To push the front window to the back of a stack of overlapping windows:

1. Point to the front window's push-to-back button.
2. Click MB1.

If you try this repeatedly with three or more windows, you see that the windows cycle through the stacking order, moving up one position in the stack each time a window is moved to the back of the stack.

Locking Overlapping Windows in the Stacking Order

When you are working with overlapping windows and select one window, it moves to the front of the stack and is given input focus. You can, however, prevent a partially obscured window from moving to the front of the stack when you select it by arranging the windows to display only what you need to see and then securing them in place.

To lock overlapping windows in the stacking order:

1. Point to a window's push-to-back button.
2. Shift click on the button.

   That window is pushed to the back of the stack.

The lower right-hand corner of the push-to-back button is filled to indicate that the window is fixed in the stacking order. Although the window is given input focus when you select it, it does not pop to the front of the stack.

You can still push to the back or bring to the front any window that you have fixed in the stacking order to see it unobscured.

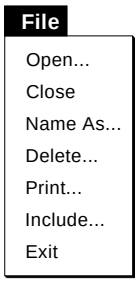
To move overlapping windows in the stacking order:

- Click on a window's filled push-to-back button to move that window to the opposite position in the stack, but not give the window input focus.
- Click on a filled push-to-back button to push an unobscured window to the back of the stack.
- Click on a filled push-to-back button to move a partially obscured window to the front of the stack.

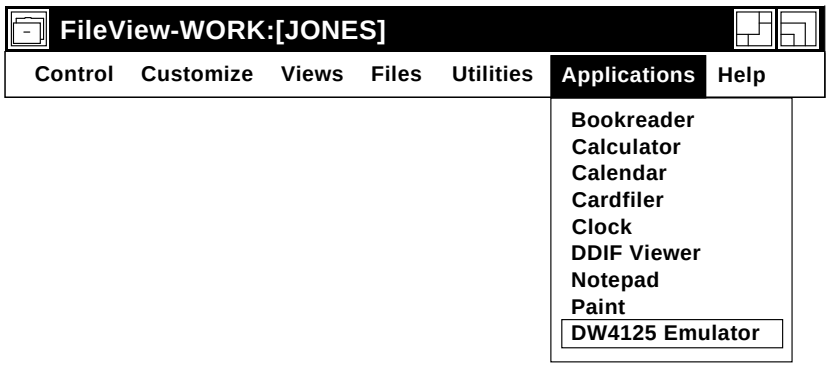
Releasing Windows Locked in the Stacking Order

To release a window locked in the stacking order, shift click on the window's push-to-back button. If the window was at the back of the stack, it moves to the front; if the window was at the front, it is pushed to the back. The push-to-back button is no longer filled.

Choosing Items from Pull-Down Menus



The names of menus available in an application are displayed on the menu bar. When you press MB1 on a menu name, the menu's contents are displayed or pulled down.



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You choose commands or menu items from **pull-down menus**. An ellipsis (. . .) following a menu item indicates that a dialog box is displayed if you choose that menu item.

To choose an item from a pull-down menu:

1. On the menu bar, point to the name of the menu you want to display.
2. Press and hold MB1.

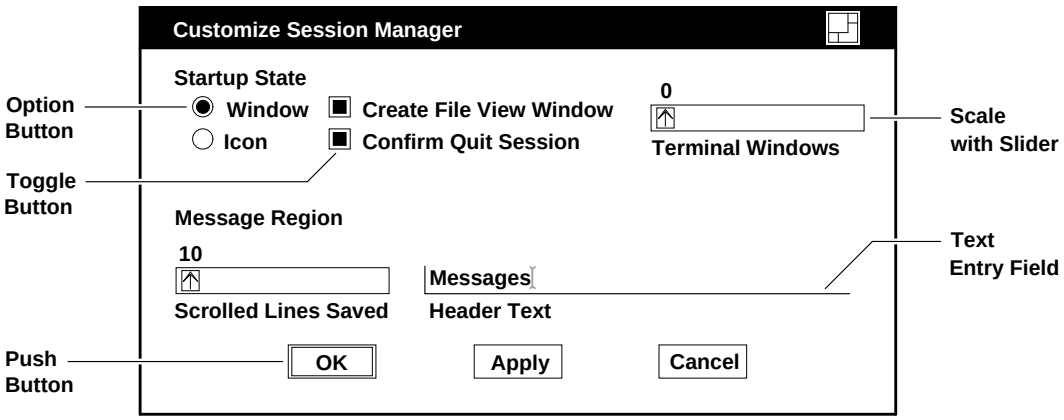
   This highlights the menu name and pulls down a menu.
3. While holding MB1, drag to the menu item you want.
4. Release MB1.

If you change your mind while looking at a pull-down menu, drag outside the menu and release MB1. The menu disappears and no action is taken.

Some applications offer rectangular **push buttons** to duplicate frequently used commands that are also available as menu items. Push buttons are usually found underneath an application's work area. To execute these commands quickly, click MB1 on the push button.

Supplying Information in Dialog Boxes

A dialog box is displayed whenever additional information is needed to carry out a task. Sometimes you need to type text; other times, you need only click on a button to change a setting. Some dialog boxes display settings you chose earlier.



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Dialog boxes offer various ways to supply information to an application:

- By typing text in a text entry field. The blinking text cursor shows you where the text you type is displayed. What you type is displayed to the left of the text cursor.
- By clicking on **option buttons** or square **toggle buttons**. Option buttons let you select one option from many. Toggle buttons let you turn a setting on or off.
- By dragging the slider in a **scale**. Dialog boxes often contain a scale and slider when you need to supply a numeric value. The arrow in the slider points to the current value.
- By selecting choices, for example, file names, from a **list box**. A list box contains a list of items you can choose. Scroll bars are displayed if the choices do not fit in the list box.
- By clicking on push buttons. Push buttons, such as OK, Cancel, or Filter, tell the DECwindows system what to do with the information you supplied in the dialog box.

  In a dialog box, the OK button is usually the default option. You can press Return to achieve the same result as clicking on OK.

Getting Help

The DECwindows Help system provides brief information about screen objects, concepts, and tasks. You get help on specific screen objects, for example, scroll bars and menu items, by pressing the Help key and MB1.

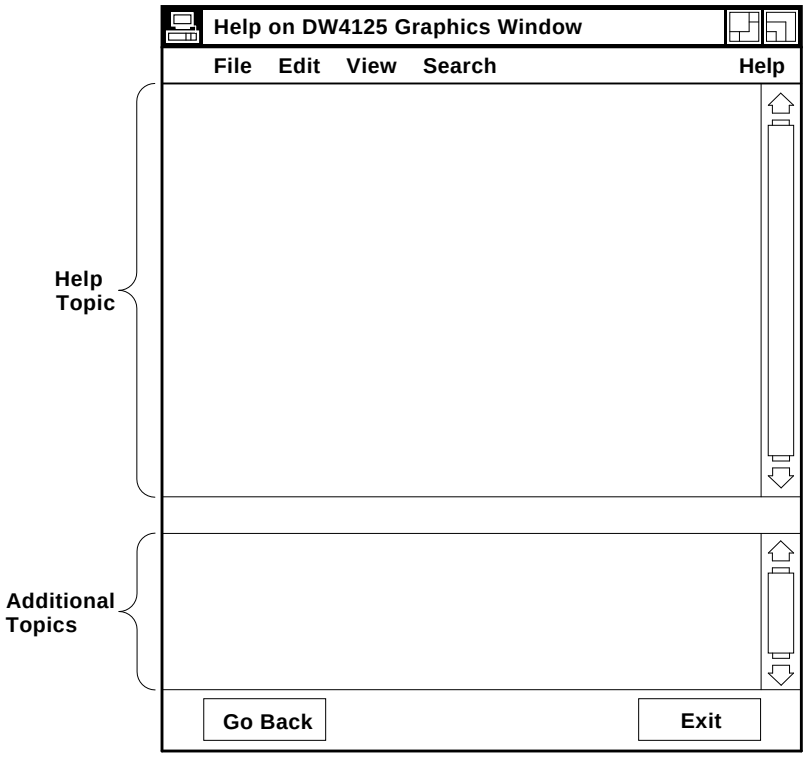
Help is designed to let you request general information and quickly narrow the focus of your inquiry. In Help, you can:

- Navigate quickly through help topics. Help keeps track of the path you used to get to a particular topic, which makes it easy for you to retrace your steps and follow a different path.
- Search Help for a keyword or topic supplied by the application.

Invoking Help

To get help, choose Overview from the Help menu.

A help window opens with the Overview topic displayed, including a list of additional topics that explain how to do common tasks.



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- The Help topic describes the task or object about which you requested help. Scroll bars are displayed if the text does not fit in one frame.
- The Additional topics list contains related topics that you can select to display more information. You select these topics by pointing to them and double clicking MB1.
- The help buttons, Go Back and Exit, let you display the previous help frame or exit from Help.

To get help on screen objects such as menu names, scroll bars, and dialog boxes, point to the screen object, and press and hold the Help key on your keyboard while you click MB1. Note that help on objects is not available in all DECwindows applications.

To get help on a menu item, press the Help key while you press and hold MB1 on the menu item, then release MB1. A help window opens, displaying information on the object you specified.

You can display product information about your application, such as the software version number, by choosing About from the application's Help menu. In some applications, the Help menu also contains a Glossary menu item, which you can use to look up terms specific to your application.

For more information about using Help, choose Help from the Help menu in each application's help window.

Navigating in Help

When you select a topic from the Additional topics list in the Overview window, you start down a path that is limited only by your own curiosity. You can follow a path of topics by continuing to select additional topics, retrace your steps and branch off to a different topic, or return to the Overview frame and start down another path.

To display an additional topic:

1. Select the item from the list of additional topics.
2. Choose Go To from the View menu.

You can also double click on the topic you want. Double clicking on a topic is a shortcut for selecting the topic and choosing Go To.

Help displays the selected topic. You can continue to select other topics from the Additional topics list or display the topic you last saw by clicking on the Go Back button.

If you want to display the current topic and a new topic simultaneously:

1. Select another topic from the list of additional topics.
2. Choose Visit from the View menu.

Instead of replacing the current help topic with the new topic, another help window opens that displays information about the new topic. You can then explore other topics from the new help window and keep the current topic open for reference.

To see the path you followed to get to your current topic:

1. Choose History... from Help's Search menu.

   Help displays a dialog box that lists the topics you have already seen.
2. Double click on a topic to replace the current topic or select a topic and click on the Visit button to open another help window without replacing the current topic.

When you finish looking at a topic and want to close the help window, click on the Exit button. To return to the Overview frame, choose Go To Overview from the View menu in any help window.

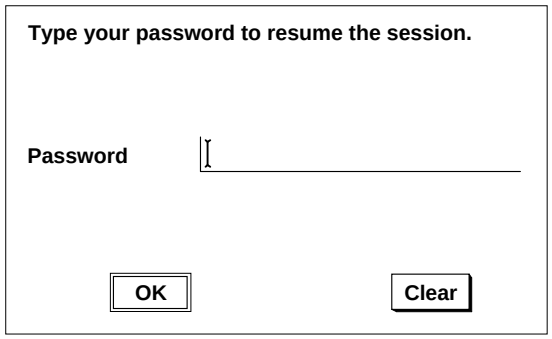
Exiting from Help

To exit from Help, click on the Exit button. If you have multiple help windows open, you must close each one.

Putting a Session on Hold

You can put your current session on hold without ending the session. When you put your session on hold, your screen is cleared, but your session is maintained. Any applications you started continue to run.

To put your current session on hold, choose Pause from the Session Manager's Session menu. Your screen is cleared and the Continue Session dialog box is displayed.



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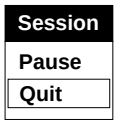
To continue your session, type your password and press Return. Once the system verifies your password, your session resumes. If the Continue Session dialog box remains on your screen, you probably made a typing mistake. Click on the Clear button and type your password again.

Ending a Session



You can end a session at any time. When you end a session all applications stop running, the screen clears, and the Start Session dialog box is displayed.

To end your DECwindows session:

1. Choose Quit from the Session Manager's Session menu.

   If the Session Manager displays a dialog box asking you to confirm that you want to end the session:

2. Click on OK or press Return.

2

Installing the DW4125 Emulator

This chapter explains how to prepare your VMS or ULTRIX system for installation and contains the installation procedures for the following software:

- DECwindows 4125 Emulator for VMS, Version 1.0
- DECwindows 4125 Emulator for ULTRIX/VAX, Version 1.0
- DECwindows 4125 Emulator for ULTRIX/RISC, Version 1.0

This chapter discusses the following topics related to installing the DW4125 Emulator:

- Preparing to Install the Software on a VMS System
- Installing the Software on a VMS System
- Preparing to Install the Software on an ULTRIX System
- Installing the Software on an ULTRIX System
- Updating the Applications Menu

Preparing to Install the Software on a VMS System

The VMS operating system comes with a variety of support options, or classes. Classes include features such as networking. The DW4125 Emulator requires the same classes as required for the DECwindows environment. For a complete list of the required classes for the DECwindows 4125 Emulator for VMS, see the *Software Support Addendum (SSA)*, which comes with the *Software Product Description (SPD)*.

Before you install the emulator software:

- Your system must be running DECwindows on VMS Version 5.2 or 5.3.
- You must register and load your license for DECwindows 4125 Emulator for VMS in order to run the Installation Verification Procedure (IVP) and use the software.

  To register under VMS, first log in to the system manager's account, SYSTEM. Perform the registration in either of the following ways:

  - Invoke the SYS$UPDATE:VMSLICENSE.COM procedure. When it prompts you for information, respond with data from your License PAK.

    ```
    $  @SYS$UPDATE:VMSLICENSE.COM
    ```

  - At the DCL prompt, enter the LICENSE REGISTER command with the appropriate qualifiers that correspond to License PAK information.

    ```
    $  LICENSE REGISTER
    ```

  If you plan to use the DW4125 Emulator on more than one node in a VAXcluster system, you need to load the license on the other nodes after you complete the installation.

  For complete information on using the License Management Facility (LMF), see the *VMS License Management Utility Manual*.
- Make sure you have a backup copy of your system disk. See the section on the Backup Utility in the VMS System Management Subkit for detailed information.
- Check your disk space. The emulator requires 4000 blocks of free disk space.

  To determine the number of free blocks on your system, enter:

  ```
  $  SHOW DEVICE SYS$SYSDEVICE
  ```

  If you do not have enough disk space, delete or tailor files that you do not need (see your VMS installation and operations guide for further information).

Installing the Software on a VMS System

You use the VMSINSTAL installation procedure to install the emulator. The installation takes approximately 10 minutes.

To display or print release notes, specify OPTIONS N on the VMSINSTAL command line:

```
$  @SYS$UPDATE:VMSINSTAL DW4125010 device-id OPTIONS N
```

To install the emulator:

1. Locate the DECwindows 4125 Emulator for VMS Version 1.0 Software Media Kit.
2. To start the VMSINSTAL procedure, enter:

   ```
   $  @SYS$UPDATE:VMSINSTAL DW4125010 device-id OPTIONS N
   ```

   Press Return.

   @SYS$UPDATE:VMSINSTAL

	specifies the installation procedure.
DW4125010	specifies Version 1.0 of the emulator software.
device-id	specifies the device on which you plan to mount the media.
OPTIONS N	selects the release notes option.

   For example, to install the emulator from a magnetic tape, enter:

   ```
   $  @SYS$UPDATE:VMSINSTAL DW4125010 MTA0: OPTIONS N
   ```

   Once you press Return the following message appears:

   ```
   VAX/VMS Software Product Installation Procedure V5.X

   It is dd-mmm-yyyy at hh:mm
   Enter a question mark (?) at any time for help.
   ```

3. Confirm system backup:

   ```
   * Are you satisfied with the backup of your
   system disk [YES]?
   ```

   If you have completed the system backup, press Return. Otherwise, enter NO to exit from VMSINSTAL and refer to your VMS installation and operations guide for system backup instructions.

Note *To exit the installation procedure at any time, press Ctrl/Y. The installation procedure deletes all files it has created up to that point and exits.*

4 If you choose to continue, you are asked to mount the media:

```
Please mount the first volume of the set on DDCU: YES
* Are you ready? Return
```

Insert the media into the disk drive, enter YES, and press Return.

VMSINSTAL displays information similar to the following:

```
The following products will be processed:

   DW4125 V1.0

Beginning installation of DW4125 V1.0 at hh:mm

%VMS-I-RESTORE, Restoring product saveset A  . . .
```

5 If you specified OPTIONS N in the command line, VMSINSTAL displays the following:

```
Release notes included with this kit are always copied
to SYS$HELP.

Additional Release Notes Options:

1. Display release notes
2. Print release notes
3. Both 1 and 2
4. None of the above

* Select option [2]:
```

If you select option 1, VMSINSTAL displays the release notes immediately on your screen. You can terminate the display anytime by pressing Ctrl/C.

If you select option 2, VMSINSTAL prompts you for the name of the print queue:

```
* Queue name [SYS$PRINT]:
```

You can enter Return to send the file to the default output print device or enter another queue name.

Select option 4 if you reviewed the release notes and are restarting the installation.

Next, VMSINSTAL displays the following question:

```
* Do you want to continue the installation [N]?
```

To continue the installation, enter YES. Otherwise, press Return. In either case, the release notes are copied to a file in the SYS$HELP directory SYS$HELP:DW4125010.RELEASE_NOTES.

```
%VMSINSTAL-I-RELMOVED, the product's release notes have
been successfully moved to SYS$HELP.
```

To print the release notes after installation of the product, enter the following command:

```
$  PRINT/QUEUE=queue SYS$HELP:DW4125010.RELEASE_NOTES
```

6 If you are reinstalling the software, VMSINSTAL asks if you wish to purge files from an older version:

```
* Do you want to purge files replaced by this
installation [YES]?
```

7 VMSINSTAL asks if you wish to run the Installation Verification Procedure (IVP). The IVP for the DW4125 Emulator for VMS checks to be sure the installation is successful.

```
* Do you want to run the IVP after the installation
[YES]?
```

8 The installation procedure displays license information about your product and asks you if you have registered and loaded your Product Authorization Key (PAK).

```
Product:      DW-4125-EMULATOR-VMS
Producer:     DEC
Version:      1.0
Release Date: 15-AUG-1990

* Does this product have an authorization key
registered and loaded?
```

You must register and load your PAK to successfully complete the installation. If you have not done so, do either of the following:

- Answer NO to the question, stop the installation, register and load your PAK, and restart the installation.
- Do not answer the question. Register and load your PAK on another terminal (a second DECterm window on your workstation). Return to the installation procedure and answer YES to continue the installation procedure.

9 At this point, the installation procedure displays a number of informational messages that report the progress of the installation. There are no further questions. The VMSINSTAL procedure moves files to their target directories.

```
%VMSINSTAL-I-MOVEFILES, Files will now be moved to
their target directories . . .
```

10 If you answered yes to running the Installation Verification Procedure (IVP), it runs now. The procedure issues a successfully completed message:

```
DW4125 Emulator V1.0 successfully installed
```

When the installation is complete, the following message is displayed:

```
Installation of DW4125 V1.0 completed at hh:mm

VMSINSTAL procedure done at hh:mm
```

11 The installation procedure is complete and you can log out of the privileged account.

The following files are added during the installation procedure:

File Name	Directory
DW4125.EXE	SYS$SYSTEM
DW4125.UID	SYS$LIBRARY
DW4125010.RELEASE_NOTES	SYS$HELP

To run the Installation Verification Procedure (IVP) after installing the emulator, enter the following command at the prompt:

```
$  @SYS$TEST:DW4125$IVP
```

The VMSINSTAL procedure issues the following message, which indicates a successful installation:

```
DW4125 Emulator V1.0 successfully installed
```

If you are running the emulator on a cluster node other than the node on which the software was installed, you may want to run the IVP on your node to verify the installation.

Preparing to Install the Software on an ULTRIX System

Before starting the installation procedure on an ULTRIX/RISC or ULTRIX/VAX system:

- Make sure that your system is running ULTRIX Worksystem Software Version 2.2 or 4.0.
- Make a backup copy of your system disk. See the *ULTRIX-32 Guide to System Backup and Restore* for detailed information.
- Locate the DECwindows 4125 Emulator Version 1.0 Software Media Kit for your operating system.

- Determine the name of the device on which you will mount the media. On most workstations, the location of the TK50 tape drive is **/dev/rmt0h**.
- Load the tape into your drive.
- Log in to the root account. You must be in superuser mode to install the emulator.
- Check your **/usr** disk space using the **df** command. The disk space required for installation is 1400 kbytes. The permanent disk space required for use is 1400 kbytes.
- Delete any installation of the same kit with the following command:

  ```
  #  /etc/setld -d DWREM100
  ```

  The following is displayed on your screen.

  ```
  Deleting DECwindows 4125 Emulator for ULTRIX (DWREM100).

  #
  ```

Installing the Software on an ULTRIX System

To install the DECwindows 4125 Emulator for ULTRIX/VAX Version 1.0 or the DECwindows 4125 Emulator for ULTRIX/RISC Version 1.0 software you use the system software subset utility **setld**. The installation requires approximately 10 minutes.

To print release notes after the installation, issue the following command:

```
%  lpr -Pprintername /usr/doc/dw4125_100.release_notes
```

To install the emulator on an ULTRIX system, do the following:

1 Start the installation procedure by entering the following command at the # prompt:

  ```
  #  /etc/setld -l /dev/rmt0h
  ```

Note *Enter the command with a lowercase l (-l) not the numeral 1.*

A message is displayed asking you to confirm that the tape is mounted and on line:

```
Please make sure your installation tape is mounted
and on-line.

Are you ready (y/n)?
```

2 Enter y and press Return. When you answer y, the following message is displayed:

```
Positioning tape
```

3 Select and verify the subsets you are installing. If you want to read the release notes before installing the emulator, only select subset 1.

```
*** Enter Subset Selections ***

The subsets listed below are optional:

 1 DECwindows 4125 Emulator Release Notes
 2) DECwindows 4125 Emulator for ULTRIX
 3) DECwindows 4125 Emulator Manual Pages
 4) All of the Above
 5) None of the Above
 6) Exit without installing subsets

Enter your choice(s):)  4 Return

You are installing the following subsets:

  DECwindows 4125 Emulator Release Notes
  DECwindows 4125 Emulator for ULTRIX
  DECwindows 4125 Emulator Manual Pages

Is this correct (y/n)?
```

Enter y and press Return.

The system copies the new files from the kit and displays the following message:

```
Copying DECwindows 4125 Emulator Release Notes
(DWRREL100) from tape
Verifying DECwindows 4125 Release Notes
(DWRREL100)

Copying DECwindows 4125 Emulator for ULTRIX
(DWREM100) from tape
Verifying DECwindows 4125 Emulator for ULTRIX
(DWREM100)

Copying DECwindows 4125 Emulator Manual Pages
(DWRMAN100) from tape
Verifying DECwindows 4125 Emulator Manual Pages
(DWRMAN100)

You are now in directory /

Rewinding Tape . . .

#
```

4 Run the Installation Verification Procedure (IVP) to ensure that the emulator has been correctly installed on your system:

```
#  setld –v DWREM100
```

The screen displays:

```
DW4125 Emulator Installation Verification Procedure
beginning . . .
```

When the IVP completes, the procedure issues the following message, which indicates a successful installation:

```
DW4125 Emulator V1.0 successfully installed
```

The following files are added during the installation procedure:

- **/usr/bin/dw4125**
- **/usr/lib/X11/uid/dw4125.uid**
- **/usr/doc/dw4125_100.release_notes**

Updating the Applications Menu

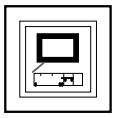
At this point you can add the DW4125 Emulator menu item to the Applications menu.

- For a VMS system: RUN SYS$SYSTEM:DW4125
- For an ULTRIX system: dw4125

For instructions on adding menu items, see the *DECwindows User's Guide*.

3

Using the DW4125 Emulator



This chapter describes how to create emulator windows and use the Commands menu items on a VMS or ULTRIX system. It also provides information on DW4125 Emulator functionality as it compares to a Tektronix 4125 terminal. The chapter discusses the following topics:

- Creating Emulator Windows
- Preparing to Use the Emulator
- Using the Emulator
- Exiting from the Emulator
- Managing Error Messages

This chapter does not provide instructions on Tektronix 4125 terminal functions. See your Tektronix documentation for specific functions.

Creating Emulator Windows

After installing the DECwindows 4125 Emulator software and, optionally, adding the DW4125 Emulator menu item to the Application menu, you are ready to create emulator windows. (For directions for adding the menu item to the Applications menu, see the *DECwindows User's Guide*.)

You can start the DW4125 emulator by:

- Using the DCL or shell command interface
- Using the Applications menu (after you have added the DW4125 Emulator menu item)

- Customizing autostart (after you have added the DW4125 Emulator menu item)

On a VMS system, to create emulator windows using the DCL command interface, enter:

```
$  RUN SYS$SYSTEM:DW4125
```

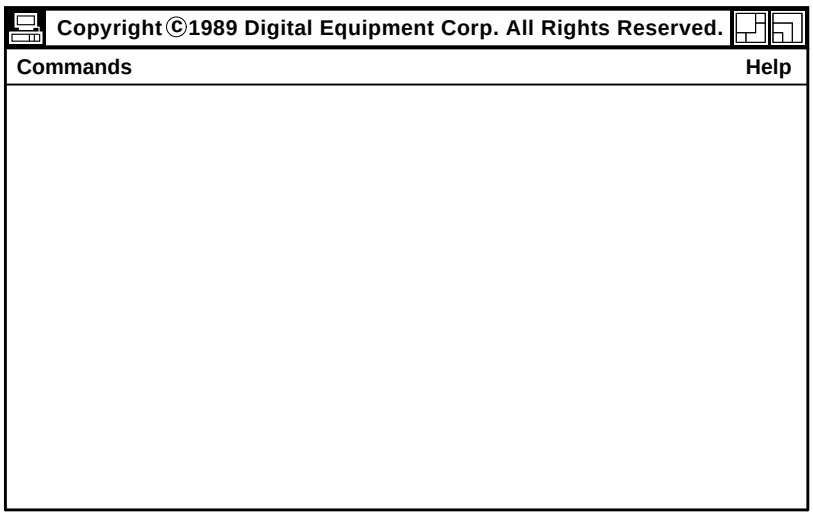
On an ULTRIX/VAX or ULTRIX/RISC system, to create an emulator window using the shell command interface, enter:

```
% dw4125
```

In either a VMS or an ULTRIX environment, to create an emulator window using the Applications menu do the following:

1. On the menu bar, point to the Applications menu.
2. Press and hold MB1.
3. While holding MB1, drag to the DW4125 menu item.
4. Release MB1.

An emulator window with the Digital copyright is displayed along with an emulator dialog window.



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Give the emulator graphics window input focus by pointing to it and clicking MB1. The DW4125 Graphics window is displayed.

The dialog area of the DW4125 Emulator is a separate DECwindows standard window, unlike the Tektronix 4125 terminal dialog area that overlays the graphics area. Therefore, you can move, resize, and iconify the DW4125 Dialog Area window. The Dialog Area window can be positioned anywhere on the screen, including partially off the screen. Using the mouse to resize and relocate the Dialog Area window is similar to using dialog area **escape sequences**. The DW4125 Emulator saves the size and uses it to create future dialog windows. The application or user can specify up to 64 dialog windows.

Preparing to Use the Emulator

This section contains information on setting up special application modes, toggling between color maps, and providing comparable Tektronix 4125 functionality with the DW4125 Emulator.

Setting Up Special Application Modes

Default settings on the DW4125 Emulator are the same as the factory defaults for a Tektronix 4125 terminal. In general, application software sets up the DW4125 Emulator in the particular mode that it requires. However, if you use an application that requires that you set up a particular 4125 initialization or mode, you will need to do either of the following to ensure that the mode is correct. (The DW4125 Emulator does not have a SAVE feature.)

- Create a program to generate the appropriate escape sequences and run it in the DW4125 dialog area before running the application
- Store the escape sequences in a file and display the file in the DW4125 dialog area before running the application

Toggling Between Color Maps

The DW4125 Emulator uses the default Tektronix 4125 terminal color model. During a DW4125 graphics session, other colors on the workstation may change. You can toggle between the default DECwindows color map and the emulator color map by pressing Ctrl/Shift/F10 in an emulator window.

Providing Thumbwheel Functionality

Use the arrow keys on the Digital LK201 and LK401 keyboards to provide the same functionality as the thumbwheel on the Tektronix 4125 keyboard. The graphics cursor moves in the direction indicated by the arrow. You can vary the speed of the graphics cursor as follows:

- Shift/*arrow* — faster speed
- *arrow* — medium speed
- Ctrl/*arrow* — slower speed

On the Tektronix 4125 terminal, holding down the Shift key during thumbwheel action causes slower motion.

Providing Tablet Functionality

Use the mouse to provide tablet input to Tektronix 4125 applications. For most applications that request tablet input, the mouse can be used instead of the stylus or puck.

Providing Tektronix 4125 Terminal Key Functionality

This section lists the Tektronix 4125 terminal function keys and explains how the DW4125 Emulator provides the same features. For a description of the functionality of the 4125 terminal keys, see the Tektronix documentation.

Table 3–1 lists the command keys on the Tektronix 4125 terminal and the corresponding DW4125 Emulator functionality.

Table 3–1 Command Key Functions

Key	Emulator Function
PAGE	Select Renew Current from the Commands menu.
CAPS LOCK	Press Lock on the LK keyboard.
SET UP	Select Setup . . . from the Commands menu and enter Setup commands in the DW4125 Setup window that is displayed.
DIALOG	Use the davisibility command in the DW4125 Setup window to make the dialog area visible or invisible. Point to the DW4125 Dialog Area and click MB1 for input focus. Dialog areas are separate windows and can be moved, stacked, or iconified.

(continued on next page)

Table 3–1 (Cont.) Command Key Functions

Key	Emulator Function
CLEAR	Enter the cleardialog (LZ) command in the DW4125 Setup window.
LOCAL	No equivalent functionality.
CANCEL	Enter the cancel (KC) command in the DW4125 Setup window.
HARDCOPY	Select the Print Screen option from the Session Manager for similar functionality.

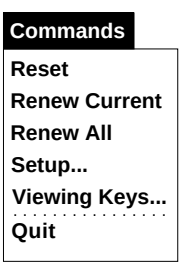
Keys F11 to F14 and F17 to F20 on the Digital LK201 and LK401 keyboards correspond to the eight programmable keys labeled F1 to F8 on the 4125 terminal keyboard.

Managing the Graphics Area

To manage the graphics area of the DW4125 Emulator, consider the following:

- When you resize the graphics area, the emulator erases previous designs. However, if you defined views with the application, you can redraw the graphic designs with Renew Current and Renew All from the Commands menu. To ensure against the loss of previous designs, resize the DW4125 Graphics window before starting the application.
- When an application sends a graphics design to the DW4125 Emulator, the emulator scales (never clips) the design to fit the usable area of the graphics window. The usable graphics area is the largest square that fits in the available window space.
- If text in the graphics area is too small or overlaps, increase the size of the DW4125 Graphics window and rerun the application.

Using the Emulator



Once you have created the emulator windows, you can run your Tektronix 4125 application and use the graphics window's Commands menu.

To start your application in the DW4125 Graphics window, do the following:

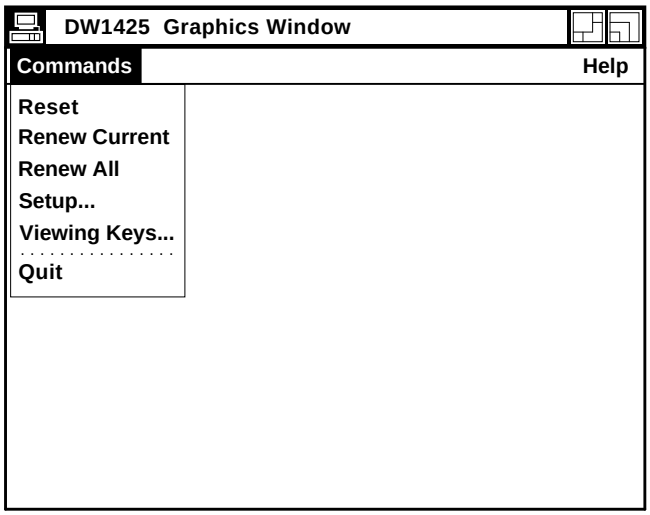
1 Give input focus to the DW4125 Dialog Area window

2 Enter the system command to start the application

For example, if you have a graphics application in the system area named SKETCH, you would enter the following in the active dialog window:

- For a VMS system — RUN SYS$SYSTEM:SKETCH
- For an ULTRIX system — sketch

From the Commands menu, you can choose any of the following features.



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Reset

Choose the Reset menu item to clear all information from the emulator windows and reset the emulator to the factory defaults.

Renew Current

Choose the Renew Current menu item to update the current view.

Renew All

Choose the Renew All menu item to update all views.

Setup . . .

Choose the Setup . . . menu item to enter Setup mode. Enter and execute all 4125 setup commands here.

As you enter commands in the Setup window:

- The leading escape character in the escape sequence format is not required.
- The commands are not case-sensitive.
- Enter floating point numbers normally (10.5).
- Enclose arrays in angle brackets (< >).

Entering HELP *command-name* in the DW4125 Setup window provides a summary of the named command. You can enter the command name, a recognized abbreviation of the command name, or the two-character escape sequence. For example, you can enter either, HELP DAVIS or HELP LV.

```
help davis
LV  davisibility
           visibility     YES or NO        (no,yes)

help lv
LV  davisibility
           visibility     YES or NO        (no,yes)
```

Entering STATUS in the Setup window provides a report on the following:

- General terminal status
- Status of related groups of parameters
- Settings of individual terminal parameters

To see all the status entries, enlarge the Setup window before entering the command.

Entering STATUS *option* in the Setup window provides a report on the option requested. Information is available for the following status command options:

- report/input
- general
- optional (optional communications)
- dialog (dialog area)

For example, the emulator provides a report of the following parameters when you enter STATUS DIALOG in the Setup window:

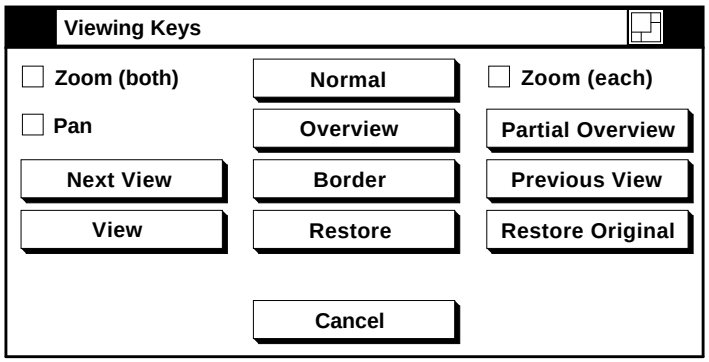
```
status dialog
                                  Dialog
dabuffer                             24
dachars                              80
daindex                              1 0 0
da2index                             7
dalines                              5
damode                               replace
dasurface                            1
davis                                YES
daposition                           10 854
```

Select the Cancel button with the mouse to remove the Setup window from the screen. Alternatively, shrink the Setup window to an icon by clicking on the shrink-to-icon button. Click on the icon in the Icon Box to restore the Setup window.

See Chapter 4 for a list of setup commands supported by the DW4125 Emulator. See your Tektronix documentation for detailed information on setup commands.

Viewing Keys . . .

Choose Viewing Keys . . . to select functions equivalent to the four viewing keys on the right side of the Tektronix 4125 keyboard.



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You can choose the following Viewing Keys options:

- Zoom (both)—Clicking on this option turns on the zoom option. A rectangle is displayed and positioned around the viewpoint. Use the up and right arrow keys to increase the height and width of the window (zoom out). Use the down and left arrow keys to decrease the height and width of the windows (zoom in). In both cases, the image maintains its aspect ratio, or current height and width. To change the aspect ratio, use the Zoom (each) option.

- Pan—Clicking on the Pan option lets you focus on a specific part of the image and then enlarge the selected portion of the image.
- Next View—Clicking on this option selects the next view on the display.
- View—Clicking on this option updates the current view.
- Normal—Clicking on this option restores the original height and width ratio.
- Overview—Clicking on this option displays the complete view.
- Border—Clicking on this option turns the window border on and off.
- Restore—Clicking on this option restores the original view.
- Cancel—Clicking on this option cancels the Viewing Keys menu item.
- Zoom (each)—Clicking on this option allows the height and width (aspect ratio) to be changed when using the zoom feature.
- Partial Overview—Clicking on this option displays four-fifths of the overview image.
- Previous View—Clicking on this option moves the input focus to the previously displayed view.
- Restore Original—Clicking on this option restores the original view.

Exiting from the Emulator

Choose the Quit menu item to exit from the DW4125 Emulator and to close all Emulator windows.

Managing Error Messages

When the emulator detects an error in either a setup command or an escape sequence, it displays an error message that corresponds to the error message displayed on the Tektronix 4125 terminal. If you request a Tektronix 4125 feature or setup command that the emulator does not support, the emulator issues an error message indicating that the feature is not supported.

If error messages on the screen are distracting and you determine that the level of the error is harmless to the Tektronix 4125 application, you can stop the output of these messages to the screen with either the KT (SET-ERROR-THRESHOLD) escape sequence or its equivalent setup command ERRORLEVEL *n*. The *n* indicates the severity level of the errors to be silenced. For example, to silence all errors, enter either of the following in the DW4125 Setup window:

```
errorlevel 4
```

```
KT 4
```

For more information on error messages and codes, see the Tektronix documentation.

4

DW4125 Emulator Features

This chapter consists of the following tables that list the Tektronix 4125 Terminal escape sequences and features in the first two columns, name the associated setup commands in the third column, and indicate in the fourth column, whether or not the functionality is supported on the DW4125 Emulator.

- Table 4–1 Communications Support
- Table 4–2 Dialog Ares Support
- Table 4–3 General Support
- Table 4–4 Graphics Input Support
- Table 4–5 Graphics Output Support (Primitives and Attributes)
- Table 4–6 Hardcopy Support
- Table 4–7 Local Storage Support
- Table 4–8 Local Viewing Support
- Table 4–9 Macros Support
- Table 4–10 Optional Communications (Block Mode) Support
- Table 4–11 User-Defined Patterns Support
- Table 4–12 Pixel Operation Support
- Table 4–13 Plotter Support
- Table 4–14 Peripheral Port Support
- Table 4–15 Reports Support
- Table 4–16 Segments Support

- Table 4–17 Stroke Text Support
- Table 4–18 Multiple view Support
- Table 4–19 3D Support

Table 4–1 Communications Support

Escape Sequence	Feature	Setup Command	Emulator Support
KR	crlf	crlf	Yes
KI	Ignore delete	ignoredel	Yes
KF	lfcr	lfcr	Yes
NM	Prompt mode	promptmode	No
NR	Set baud rates	baudrate	No
NK	Set break time	breaktime	No
NU	Set bypass cancel character	bypasscancel	Yes
KE	Set echo	echo	Yes
NE	Set EOF string	eofstring	Yes
NT	Set EOL string	eolstring	Yes
NC	Set EOM characters	eomchars	Yes
NF	Set flagging mode	flagging	No
NP	Set parity	parity	Yes
NS	Set prompt string	promptstring	No
NQ	Set queue size	queuesize	No
UY	Set snoopy format	snoopyformat	No
KS	Set snoopy mode	snoopy	No
NB	Set stop bits	stopbits	No
ND	Set transmit delay	xmtdelay	No
NL	Set transmit rate limit	xmtlimit	No

Table 4–2 Dialog Area Support

Escape Sequence	Feature	Setup Command	Emulator Support
LZ	Clear dialog scroll	cleardialog	Yes
KK	Delete dialog area	dadelete	Yes
KA	Enable dialog area	daenable	Yes
LJ	Set dialog area alt index	da2index	Yes
LB	Set dialog area buffer size	dabuffer	Yes
LC	Set dialog area characters	dachars	Yes
TF	Set dialog area color map	dacmap	No
LI	Set dialog area index	daindex	Yes
LL	Set dialog area lines	dalines	Yes
LX	Set dialog area position	daposition	Yes
LS	Set dialog area surface	dasurface	Yes
LV	Set dialog area visibility	davisibility	Yes
LM	Set dialog area writing mode	damode	Yes
KB	Set tab stops 4–5	tabs	No
JM	Map devices	dmap	No
%/	Select code (Group 2)		No
JH	Set DMA block size	dmablocksize	No

Table 4–3 General Support

Escape Sequence	Feature	Setup Command	Emulator Support
#!	[Report] syntax mode		No
–	Bell (bel)		Yes
KC	Cancel	cancel	Yes
JC	Copy	copy	No
KG	Dim enable	dim	No

(continued on next page)

Table 4–3 (Cont.) General Support

Escape Sequence	Feature	Setup Command	Emulator Support
–	Enquiry (enq)		Yes
–	Enter alpha mode		Yes
–	Enter bypass mode (esc can)		Yes
–	Enter marker mode (fs)		Yes
–	Enter vector mode (gs)		Yes
KL	Lock keyboard	lockkeyboard	No
–	Page		Yes
KV	Reset	reset	Yes
JV	Save	save	No
KU	Save nonvolatile parameters	nvsave	No
%!	Select code (Group 1)	code	Yes
TD	Set alpha cursor, 1 to 4 indices	acursor	No
TB	Set background color	cbackground	Yes
RB	Set background gray level	backgray	Yes
TM	Set color mode	cmode	Yes
UX	Set coordinate mode	coordinatemode	Yes
KZ	Set edit characters	editchars	Yes
KT	Set error threshold	errorlevel	Yes
RF	Set fixup level	fixup	Yes
KP	Set page full action	pagefull	Yes
JS	Spool	spool	No
JE	Stop spooling	stop	No
OI	Tekheader character	tekheader	No

Table 4–4 Graphics Input Support

Escape Sequence	Feature	Setup Command	Emulator Support
–	Disable 4953 tablet gin (esc)		No
ID	Disable GIN	gindisable	Yes
–	Enable 4010 GIN (esc sub)		Yes
IE	Enable GIN	ginenable	Yes
–	Enter 4953 tablet GIN (esc)		No
IP	Report GIN point	ginreportpoint	Yes
IV	Set GIN area	ginarea	Yes
IC	Set GIN cursor	gincursor	Yes
TC	Set GIN cursor color	gcursor	No
IJ	Set GIN cursor speed	gspeed	No
IX	Set GIN display start point	ginstartpoint	Yes
IG	Set GIN gridding	gingridding	Yes
II	Set GIN inking	gininking	Yes
IU	Set GIN rates	ginrates	No
IK	Set GIN report format	ginreport	Yes
IR	Set GIN rubber banding	ginrubberband	Yes
IF	Set GIN stroke filtering	ginfiltering	Yes
IW	Set GIN window	ginwindow	Yes
IA	Set pick aperture	ginpickaperture	Yes
IH	Set tablet header characters	ginsheaderchars	No
IN	Set tablet size	gintabletsize	No
–	Supports mouse		Yes
–	Supports tablet		No
–	Supports thumbwheel (arrow keys)		Yes
–	Up/down mode		Yes

Table 4–5 Graphics Output Support (Primitives and Attributes)

Escape Sequence	Feature	Setup Command	Emulator Support
LA	Alphatext	alphatext	Yes
LP	Begin panel boundary	beginpanel	Yes
RM	Define marker	mdefine	No
–	Display alpha text		Yes
LG	Draw	draw	Yes
UC	Draw curve	curve	Yes
LH	Draw marker	marker	Yes
UR	Draw rectangle	rectangle	Yes
LE	End panel	endpanel	Yes
LT	Graphic text	gtext	Yes
LF	Move	move	Yes
LD	Poly draw	polydraw	Yes
LR	Poly marker	polymarker	Yes
MP	Select fill pattern	fillpattern	Yes
–	Set 4014 alphatext size		Yes
–	Set 4014 line style		Yes
–	Set alphatext font		No
MB	Set background indices	backindex	Yes
UG	Set curve smoothness	csmooth	Yes
UB	Set draw boundary mode	boundarymode	Yes
MG	Set graphics area writing mode	gamode	Yes
ML	Set line index	lineindex	Yes
MV	Set line style	linestyle	Yes
MX	Set line type	linetype	No
MW	Set line width	linewidth	No
MM	Set marker type	markertype	Yes
MS	Set panel filling mode	fillmode	Yes
MT	Set text index	gtindex	Yes
–	Shift in (si)		Yes

(continued on next page)

Table 4–5 (Cont.) Graphics Output Support (Primitives and Attributes)

Escape Sequence	Feature	Setup Command	Emulator Support
–	Shift out (so)		Yes

Table 4–6 Hardcopy Support

Escape Sequence	Feature	Setup Command	Emulator Support
–	4010 hardcopy (esc eyb)		No
KH	hardcopy	hardcopy	No
QI	Map index to print	hcmap	No
QQ	Report color hardcopy staus	hcstatus	No
QR	Reserve color copier	hcreserve	No
QU	Select color hardcopy density	hcdensity	No
QD	Select hardcopy interface	hcinterface	No
QB	Set color copier data resolution	hcdatares	No
QT	Set color copier repaint	hcrepaint	No
QM	Set color hardcopy dithering	hcdither	No
QF	Set color hardcopy width	hcformwidth	No
QA	Set copy size	hcsize	No
QL	Set dialog area hardcopy att	hcdaattributes	No
QX	Set hardcopy features	hcfeatures	No
QE	Set hardcopy memo attrs	hcmonochrome	No
QQ	Set image orientation	hcstatus	No
QN	Set number of copies	hccopies	No
PT	Set port copier repaint	prepaint	No

Table 4–7 Local Storage Support

Escape Sequence	Feature	Setup Command	Emulator Support
JB	Activate lpos	lpos	No
JK	Delete file	delete	No
JD	Directory	directory	No
JJ	Dismount	dismount	No
JF	Format volume	format	No
JL	Load	load	No
JP	Protect file	protect	No
JR	Rename file	rename	No
JU	Set user number	usernumber	No

Table 4–8 Local Viewing Support

Escape Sequence	Feature	Setup Command	Emulator Support
RJ	Lock viewing keys	lockviewingkeys	No

Table 4–9 Macros Support

Escape Sequence	Feature	Setup Command	Emulator Support
KD	Define macro	define	Yes
KO	Define nonvolatile macro	nvdefine	No
KW	Enable key expansion	keyexpand	Yes
KX	Expand macro	expand	Yes
KY	Set key execute character	keyexchar	Yes

Table 4–10 Optional Communications (Block Mode) Support

Escape Sequence	Feature	Setup Command	Emulator Support
OB	Arm for block mode	blockmode	No
OC	Set block continue characters	bcontinuechars	No
OE	Set block end characters	bendchars	No
OH	Set block headers	bheaders	No
OS	Set block length	blength	No
OL	Set block line length	blinelength	No
OM	Set block master characters	bmasterchars	No
ON	Set block non xmt characters	bnonxmtchars	No
OP	Set block packing	bpacking	No
OT	Set block timeout	btimeout	No
OD	Set duplex mode	duplex	No

Table 4–11 User-Defined Patterns Support

Escape Sequence	Feature	Setup Command	Emulator Support
MD	Begin fill pattern	beginpattern	Yes
ME	End fill pattern	endpattern	Yes

Table 4–12 Pixel Operations Support

Escape Sequence	Feature	Setup Command	Emulator Support
RU	Begin pixel operations	pxbegin	Yes
RX	Pixel copy	pxcopy	Yes
RP	Raster write	pxrasterwrite	Yes
RR	Rectangle fill	pxrectangle	Yes

(continued on next page)

Table 4–12 (Cont.) Pixel Operations Support

Escape Sequence	Feature	Setup Command	Emulator Support
UK	Restore pixels from memory	pxrestore	Yes
RL	Run length write	pxrunlengthwrite	Yes
UJ	Save pixels to memory	pxsavemem	Yes
RH	Set pixel beam position	pxposition	Yes
RS	Set pixel viewport	pxviewport	Yes
RT	Set pixel writing factors	pxfactors	Yes

Table 4–13 Plotter Support

Escape Sequence	Feature	Setup Command	Emulator Support
PI	Map index to pen	pmap	No
PL	Plot	plot	No

Table 4–14 Peripheral Port Support

Escape Sequence	Feature	Setup Command	Emulator Support
PA	Port assign	passign	No
PC	Port copy	pcopy	No
PQ	Report port status	pstatus	No
PR	Set port baud rate	pbaud	No
PJ	Set port black white invsn	pinversion	No
PE	Set port EOF string	peof	No
PM	Set port EOL string	peol	No
PF	Set port flagging mode	pflag	No
PO	Set port image orientation	porient	No

(continued on next page)

Table 4–14 (Cont.) Peripheral Port Support

Escape Sequence	Feature	Setup Command	Emulator Support
PN	Set port number of copies	pcopies	No
PP	Set port parity	pparity	No
PS	Set port queue size	pqueue	No
PB	Set port stop bits	pbits	No

Table 4–15 Reports Support

Escape Sequence	Feature	Setup Command	Emulator Support
–	Report 4010 status		No
JQ	Report device status	dstatus	No
KQ	Report errors	reporterrors	Yes
IQ	Report terminal settings	settings	Yes
IM	Set report EOM frequency	reom	Yes
IL	Set report max line length	rlinelength	Yes
IS	Set report signature characters	rsigchars	Yes

Table 4–16 Segments Support

Escape Sequence	Feature	Setup Command	Emulator Support
SN	Begin higher segment	sgup	Yes
SB	Begin lower segment	sgdown	Yes
SE	Begin new segment	sgnew	Yes
SO	Begin segment	sgopen	Yes
SF	Call segment	sgcall	Yes
UD	Delete part of segment	sgremove	Yes

(continued on next page)

Table 4–16 (Cont.) Segments Support

Escape Sequence	Feature	Setup Command	Emulator Support
SK	Delete segment	sgdelete	Yes
SC	End segment	sgclose	Yes
LK	Include segment copy	sginclude	Yes
UI	Insert into segment	sginsert	Yes
SR	Rename segment	sgrename	Yes
UE	Replace part of segment	sgreplace	Yes
SQ	Report segment status	sgstatus	Yes
SL	Set current matching class	sgmatchingclass	Yes
MI	Set pick ID	sgpickid	Yes
SP	Set pivot point	sgpivot	Yes
SA	Set segment class	sgclass	Yes
SD	Set segment detectability	sgdetect	Yes
SS	Set segment display priority	sgpriority	Yes
UH	Set segment edit mode	sgedit	Yes
SH	Set segment	sghighlight	Yes
SI	Set segment image transform	sgtransform	Yes
SX	Set segment position	sgposition	Yes
SJ	Set segment scale rotation	sgscalerotate	Yes
SV	Set segment visibility	sgvisibility	Yes
SM	Set segment writing mode	sgmode	Yes

Table 4–17 Stroke Text Support

Escape Sequence	Feature	Setup Command	Emulator Support
ST	Begin graph-text character	gtbegin	Yes
SZ	Delete graph-text character	gtdelete	Yes
SU	End graph-text character	gtend	Yes
MN	Set graph-text character path	gtpath	Yes
MF	Set graph-text font	gtfont	Yes
SG	Set graph-text font grid	gtgrid	Yes
MQ	Set graph-text precision	gtprecision	Yes
MR	Set graph-text rotation	gtrotation	Yes
MC	Set graph-text size	gtsize	Yes
MA	Set graph-text slant	gtslant	Yes
TG	Set surface color map	cmap	Yes
RD	Set surface definitions	sdefinitions	Yes
RG	Set surface gray	gray	Yes
RN	Set surface priorities	spriorities	Yes
RI	Set surface visibility	svisibility	Yes

Table 4–18 Multiple View Support

Escape Sequence	Feature	Setup Command	Emulator Support
RK	Delete view	vdelete	Yes
KN	Renew view	renew	Yes
RC	Select view	vselect	Yes
RE	Set border visibility	border	Yes
UW	Set overview window	overview	Yes
RA	Set view attributes	vattributes	Yes
RQ	Set view display cluster	vcluster	Yes

(continued on next page)

Table 4–18 (Cont.) Multiple View Support

Escape Sequence	Feature	Setup Command	Emulator Support
RV	Set viewport	viewport	Yes
RW	Set window	window	Yes

Table 4–19 3D Support

Escape Sequence	Feature	Setup Command	Emulator Support
UF	Draw facets	facets	No
TO	Select object surface color	objcolor	No
MO	Select translucency pattern	translucency	No
MH	Select traversal direction	traversal	No
IO	Set gin logical function	ginfunction	No
TL	Set light source	lightsource	No
TR	Set object surf color range	objcolorrange	No
WS	Set sectioning planes	splanes	No
SW	Set segment matrix xform	sgmatrix	No
WA	Set view display attributes	vdisplay	No
UV	Set viewing transform	vtransform	No

Glossary

ANSI mode

A mode in which the terminal recognizes the ANSI X3.64 command set. To specify the ANSI X3.64 command set, enter CODE ANSI (or CODE 1) in the DW4125 Setup window. See *TEK mode*.

application

A computer program that runs on the DECwindows terminal or a Tektronix 4125 graphics program that runs in the DW4125 Emulator window.

click

To press and release MB1.

dialog area

An area that stores non-graphics textual dialog between the terminal operator and the host or the terminal. The dialog area may be invisible, entirely visible, or partially visible. The visible part of the dialog area is displayed in a dialog window in the DW4125 Emulator.

dialog box

A box that is displayed whenever the DECwindows system needs information to carry out a task.

double click

To point to an object and click MB1 twice in quick succession.

drag

To press and hold MB1, move the pointer, and release MB1.

escape sequence

A terminal command (control function) that consists of ASCII characters and begins with the Escape (ESC) control character.

graphics window

A window that contains a title bar, pull-down Commands and Help menus, and the graphics work area. Tektronix applications display in the work area of the graphics window.

input focus

A window that is ready to accept user input has input focus.

keywords

In the DECwindows Help system, predefined words and phrases that you can search.

list box

Part of a dialog box that contains a list of items from which you can choose. Scroll bars are displayed if the choices do not fit in the list box.

menu bar

Part of a window beneath the title bar that lets you access the application's commands.

mouse

A pointing device that is used to communicate with DECwindows applications, to choose commands from windows, to expand and shrink windows, and to rearrange windows on the screen.

option button

A button in dialog boxes that let you select one option from many.

option menu

A pop-up menu that appears in a dialog box. To see other options you can choose from a dialog box, you display the option menu.

point

To move the cursor to where you want the next action to occur.

pop-up menu

A menu that appears at the current pointer position when you press MB1. Pop-up menus duplicate commands and functions available on pull-down menus.

press

To point to the menu name, stepping arrow, or wherever you want the action to occur, and without moving the mouse, press and hold MB1 or MB2.

pull-down menu

A menu that is displayed when you press MB1 on a menu item.

push buttons

Rectangular buttons that are used to duplicate frequently used commands that are also available as menu items. Push buttons are usually found underneath an application's work area. To execute these commands quickly, click MB1 on the push button.

scroll bars

Part of the window that allows you to move through a block of information that is too extensive to be displayed at one time.

shift click

After pointing to an object, to press and hold the Shift key, click MB1, and then release the Shift key.

slider

Part of the scroll bar used to move a window over information that is too extensive to be displayed at one time.

stepping arrows

Part of the scroll bar used in some windows to move incrementally through information too extensive to be displayed at one time.

tablet

A device that can be used with the Tektronix 4125 terminal to send graphics information to a program. Points on the tablet correspond to points on the screen. A stylus, a one-button puck, or a four-button puck is used with the tablet to provide input to the application. If the application enables the tablet, you can use either the tablet or the mouse with the DW4125 Emulator.

TEK mode

A mode in which the terminal recognizes the Tektronix 4125 (TEK) command set. To specify the TEK command set, enter CODE TEK (or CODE 0) in the DW4125 Setup window. See *ANSI mode*.

text entry field

A dialog box control that allows the user to enter text.

text insertion cursor

The text insertion cursor is visible in each field. The text cursor in the Username field blinks to indicate this field has input focus.

thumbwheel

A device on the Tektronix 4125 keyboard that is used to position the graphics cursor on the screen. The DW4125 Emulator uses the arrow keys on the LK keyboards to provide thumbwheel functionality.

title bar

The part of the window that identifies the window name.

toggle button

A button that let you turn a setting on or off.

viewing keys

A menu option that provides the functions of viewing keys.

window

Area of the screen that represents all or part of an application.

work area

The part of the window that displays the application's text and graphics.

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