Tutorial for dClip Shareware evaluation copy.

Note: the evaluation copy does not permit captured images to be used or saved.

This guide consists of an extract from the manual, but does not contain the illustrations which are present in the full manual.

dClip - the clipboard master

# Introduction

dClip is a clipboard handler, image capture and videoshow presentation system which runs in the Microsoft Windows environment. dClip can display Windows clipboard images in text, bitmap, Device-Independent Bitmap (DIB) or metafile picture format and store them in disk files; capture screen or Window images and store them as bitmaps on the clipboard and then into disk files; load files in text, bitmap, DIB or metafile picture format directly into the clipboard for pasting into Windows application; and display a defined list of file images, either under manual control or as a sequence of timed displays.

dClip has many uses. For example, it can be used to build up a library of images obtained from the screen or by copying from other Windows applications, so that the images may be rapidly loaded and pasted into drawings, pictures or word processor documents. Individual images may be imported from or pasted to word processing applications, such as Microsoft Word for Windows, Windows Write, Ami, etc., or drawing and painting applications such as Windows Paintbrush, Windows Draw, Micrografx Designer, etc., through the clipboard. dClip is ideal for illustrating training manuals, as screen or Window images containing menus, dialog boxes, list boxes or message boxes may be captured and pasted into a training document.

dClip may also be used for videoshow presentations. Images captured by dClip or images copied to the clipboard from other applications may be saved to disk files and a list of the required images selected into a Show file. dClip is then set into Present mode and the sequence of images may be displayed either for pre-set time intervals or by moving forwards or backwards through the sequence using the mouse buttons or keys.

This manual contains four chapters. The first provides a brief outline of the Windows clipboard. The second explains how to install dClip on your system and describes how to start dClip. The third provides examples of the common uses of dClip; this chapter serves as an introductory tutorial. The fourth chapter is a reference chapter and provides a description of the facilities available through each of the pull-down menus on the dClip display.

System requirements

\* A microcomputer running Microsoft Windows (version 3.0 or later).

\* A graphics display screen compatible with Microsoft Windows (e.g. CGA, EGA, VGA, Hercules, etc.)

\* Retail version of Microsoft Windows 3.0 (or later)

Also useful, although not essential, is:

\* A mouse, tablet or pointing device compatible with Microsoft Windows (e.g. a Microsoft, Logitech, Mouse Systems, IBM or Amstrad mouse, a SummaSketch graphics tablet, a MicroSpeed FastTrap, etc.)

1. The Windows clipboard

Microsoft Windows permits users to copy information from an application program and store this information on the Windows Clipboard. From there the information may be viewed with a clipboard viewer (such as Clipbrd.exe or dClip) or pasted into another application.

Most Windows applications programs provide the Copy and Paste facilities via the EDIT menus. Windows can also copy information from many DOS applications which run either in a Window or full screen. In this case the Copy and Paste facilities are provided by the system menu (which appears when the <Alt> is pressed followed by <space> or <cursor down>).

### 1.1 Copying to the clipboard

The information which is copied during a Copy operation may be in one of several different forms: it may be text, or a picture of the screen display (a Bitmap), or a Windows Metafile (a series of instructions which describe how to draw the image). The information which forms text is relatively straightforward - its a series of characters, and it may not matter a great deal precisely how it is formatted on screen. Windows can copy text from most text-based applications such as word processors (Windows applications such as NotePad, Write, Word for Windows, Ami, Excel, etc., or DOS applications such as WordStar, Word, WordPerfect, and most text editors).

In some cases Windows applications can copy text complete with formatting information (e.g. font and size) to the clipboard (as Rich Text Format information) -Word for Windows can do this for example. In fact Word for Windows copies text to the clipboard both as plain text and as Rich Text Format information (and in fact in several other forms). On the other hand Windows NotePad copies text information to the clipboard only as plain text - no formatting information is included.

Thus a Copy operation can result in more than one form of the information being copied to the clipboard. Which forms are copied depends on the application they are copied from, and which form you can use depends on the application you wish to paste information into.

When we turn to pictures the situation is slightly more complex because there are two quite distinct ways of defining a picture. Firstly there is the bitmap, which is essentially a very large number of dots, each one of which may be white or black or. in some cases, one of a number of other colours. Virtually any image may be created from a large number of dots - after all many laser printers create their images from dots at 300 to the inch. Images may appear to contain shades of grey or shades of any other colour by having, say, alternate white and coloured dots. However, the higher the quality required of the image the more dots per inch are needed, and the more memory is consumed in storing the image. Computer programs which create bitmap images within memory are usually called painting programs (such as Windows Paintbrush) and usually have a maximum size of bitmap which they can create and store. Once the image is created any change in size can be implemented only by increasing the size of each dot - which ultimately results in the dots being objectionably visible. However, bitmaps provide a useful format for storing artistic pictures and are ideally suited to devices which work with dots - such as matrix printers and screen displays.

The other approach to pictures involves instructions on how to draw lines and curves. Many pictures can be defined as a large number of lines and curves drawn with a pen of fixed colour and size - for example, characters such as a and b can be drawn with a single pen by following a defined pattern. This approach has advantages for pictures which may need to be resized - thus we can draw a bigger a using the same pen and instructions but a larger scale. On the other hand, obtaining shades of grey or colours is more complex, since either the single pen touches the paper or it doesn't. However, the information required to reproduce the picture is now a series of instructions: which pen, which direction to move and how far, etc., rather than a memory image of dots. Such instructions are well suited to applications which require precision and scaling (such as technical diagrams, maps and plans) and to devices which actually have pens - such as plotters, but rather less suited to the creation of artistic pictures which require many shades. Programs which produce pictures using this approach are called drawing programs (such as Windows Draw).

Naturally there are programs which attempt to combine precision and scalability with shading and artistic attributes.

Windows can copy bitmap screen images only from applications which offer the facilities for exporting them, or with the aid of a screen capture facility such as dClip, which captures the bitmap which is being shown on the display screen. Most painting programs (such as Windows Paint) and many drawing programs (Windows Draw, Designer, etc.) can copy bitmap images of a selected area of the screen to the Windows clipboard. However, painting programs cannot generally copy metafiles to the clipboard because they do not store the required instructions. Drawing programs will usually copy a metafile as well as a bitmap to the clipboard (some also copy images to the clipboard using their own private information format).

### 1.2 Pasting from the clipboard

Programs which can accept information from the clipboard will generally permit the user to issue a Paste command only when the clipboard contains information in a format which the program understands. Thus many drawing programs will not accept a bitmap from the clipboard - even though they may be able to copy one to the clipboard. This is because the drawing program stores information only as a series of instructions and understands only a series of instructions. It is able to copy a bitmap to the clipboard only because Windows creates the bitmap to operate the display screen while the drawing program carries out its instructions.

Similarly a painting program which works with bitmaps will not be able to understand the instructions copied to the clipboard by a drawing program. And relatively few programs will be able to understand information placed on the clipboard by an application which uses a private information format.

#### 1.3 Bitmaps and Device independent bitmaps

Bitmaps are made up of pixels each of which will have one of the colours permitted on your Windows system. Thus if you create a bitmap on a VGA colour system it may not show up at all if displayed on a Hercules monochrome system, or if sent to a monochrome printer.

To overcome this limitation Windows can use Device Independent Bitmaps (DIBs), which can be displayed on any device capable of producing pixels. [dClip enables normal bitmaps to be converted to DIBs (and vice versa), but many older applications are unable to handle DIBs].

One consequence of the bitmap problem is that it is not as simple as it sounds to transfer a bitmap from on PC to another. You can always transfer a DIB from one PC running windows to another PC running windows and the DIB will show up correctly on both machines. However, a normal bitmap which shows up correctly on one machine may be invisible on another. Some software which provides bitmaps (e.g. Windows itself) overcomes this problem by providing bitmaps in several different formats, so that one of the formats should be suitable for display on your machines screen, or by providing DIBs.

If you propose to use dClip to produce bitmap images which are to be transferred to another computer you should be aware of the above limitation - which is a characteristic of bitmaps and not of dClip. In general transfer from one colour machine to another will work correctly, while transfer from a colour machine to a monochrome machine will run into problems. VGA monochrome systems will normally accept colour bitmaps, reproducing the colours as shades of grey.

### 1.4 Note for users of other dLSoft software

dLabel, dNvelope, dForm, dLetter and dIndex all accept text from the clipboard in plain text format. Thus text copied to the clipboard either from a Windows application or from a DOS application via the Windows System menu COPY command can be pasted in as addresses or text or fill blocks.

These programs also accept bitmap images and metafile pictures from the clipboard for incorporation as pictures. The bitmaps accepted will be converted into device independent bitmaps, so the style files from these programs may be transferred to other PCs.

Unlike painting programs, the most dLSoft programs are designed for producing multiple items of output. However, large bitmaps to be reproduced on every item will dramatically slow down the printing of your items. In most cases a relatively small bitmap should suffice and there is little to be gained from taking a full screen picture from, say, Windows Paintbrush and reducing it down to an inch square in, say, dLabel. As a general guide there is no advantage in creating a picture which is more than twice the size required of the final image.

However, remember that bitmap pictures are made of dots. So if you create a very small bitmap (by copying a small section of the screen from Windows Paintbrush) and then enlarge it dramatically within dNvelope, the quality of the printed output will be poor. In general it is wise to avoid enlarging bitmap images.

In general faster printing speeds will be achieved by using metafile pictures wherever possible.

You can determine which information formats your application will copy to the clipboard by running dClip or the CLIPBRD.EXE program provided with Windows. The formats available on the clipboard are identified in dClip's menu bar or on Clipbrd.exe's display menu.

## 2. Installing and starting dClip

2.1 dClip Installation.

Obtain a blank and formatted diskette which will become your working copy of dClip. Make the working copy by placing the distribution diskette in drive A: and copying the distribution diskette to the blank and formatted diskette by typing

COPY A:\*.\* B:

at the DOS prompt, or using the Microsoft Windows' copy facility or dFile's floppy copy to copy ALL the files on A: to B:. If you are using a single floppy drive machine you will be prompted when it is time to insert the blank disk.

Check that the working copy diskette now contains all the files which were present on the distribution diskette.

Put the original away in a safe place in case the working copy becomes damaged. Use only the working copy of dClip for the remainder of the installation.

If the working copy contains a file called README.TXT, examine the content of this file to see if it contains any additional instructions which were not available when this manual was printed. The README.TXT file may be examined using Microsoft Windows Notepad, any word processor, or the DOS command

### TYPE A:README.TXT

To install dClip on your system insert the working copy of the diskette into your machine's diskette drive. [These instructions will assume that your diskette drive is drive A; If you are using drive B: simply replace the A: for B; in the instructions below.]

Start Microsoft Windows.

From the Program Manager select RUN from the file menu and enter

A:INSTALL into the dialog box.

You will be prompted for a subdirectory into which the dClip software, help files and examples will be placed. The installation program will offer a default subdirectory, which you may change if you prefer an alternative.

When you are satisfied with the installation subdirectory press <enter> or push the CONTINUE button.

Installation will take place automatically, creating a dClip icon in a dLSoft group.

After installation you may move the dClip icon to any other group by selecting the icon and dragging it to the required destination.

Note that if you are using a version of Windows later than 3.0 you may specify a working directory which dClip will use by default by choosing PROPERTIES from the Program Manager FILE menu and entering the required subdirectory path. The working directory is the directory which will be shown in the Load or Save dialog boxes when you first attempt to load or save within dClip.

Installation without Program Manager

If you wish to install dClip without running Program Manager you may run the INSTALL.EXE program on the working copy of the distribution disk by double clicking on its file name from within File Manager, dFile or most other file management software running under Windows.

Alternatively you can create a subdirectory on your hard disk and manually copy the file from the working copy of the distribution disk to that subdirectory. You will then need to inform Program Manager of dClip's subdirectory name.

Note: DCLIP.HLP may be deleted to save disk space if required. The Help system will not be available if DCLIP.HLP is deleted.

- 2.2 Starting dClip
- 1. Using Program Manager

Open the Group Window which contains the dClip icon.

Double click on the dClip icon.

2. Using File Manager or dFile

If necessary, change to the directory containing DCLIP.EXE.

Start dClip, either by double-clicking on DCLIP.EXE or by using the cursor keys to highlight DCLIP.EXE, then pressing the <enter> key.

3. The dClip tutorial

3.1 Creating a file containing a bitmap screen image Start dClip as described above.

A window appears with "dClip from dLSoft" in its title bar; this is the dClip Window. This Window contains a view of the clipboard, so it may be empty at the moment, or it may contain something from your most recent CUT or COPY operation in another Windows application.

Click the left mouse button with the pointer over the System Menu Box (at the top left of the dClip Window). The System Menu appears. Now click on the menu item labelled CAPTURE.

dClip's clipboard information line (just below the menu bar) will list the types of data currently contained on the clipboard, and will now show the word Bitmap.

The dClip Window caption will change to indicate that dClip is showing a bitmap image, and the Window display changes to show you the image which has been copied to the clipboard. [If it doesn't, you may change the viewing mode manually. Click the left mouse button with the pointer on the menu labelled DISPLAY and then click on the menu item labelled BITMAP.] The image you obtain may not be the same as that shown on the next page - but don't worry about that at this stage.

Now select SAVE from the FILE menu. A dialog box appears prompting you to provide a filename for saving the dClip Window display. Type in a suitable name, such as FRED, and press the <enter> key or click on OK. [Do not choose the filename TEST, as a file of this name is provided with the distribution disk.] The image is saved to disk, although it also remains on the clipboard and so is visible in the dClip window.

Let's now erase the content of the clipboard so that we can check that FRED can be reloaded.

Click on the ERASE CLIPBOARD menuitem of the EDIT menu. A message box appears, requesting confirmation that you wish to discard the current content of the clipboard. Click on the OK button.

Now click on LOAD on the FILE menu. A dialog box appears showing the list of clipboard files in the current directory. You should see FRED.CLP as one of these. (If the name is not visible, click on the scroll bar to the right of the list of names to bring more into the viewing window.) Select FRED, either by double clicking on the name FRED.CLP, or by clicking once on FRED.CLP and then once on the OK button.

The image saved in FRED will be reloaded into the Windows clipboard and will be

visible in the dClip window.

## 3.2 Scrolling the image

The screen image you saved into FRED was an image of the whole screen. However, unless you have changed the size of the dClip window since starting dClip, the dClip window is not filling the whole screen. Consequently you are only viewing part of the clipboard image.

The dClip window (when showing a bitmap image) contains vertical and horizontal scroll bars to enable the image within the window to be moved.

Click on the lower portion of the vertical scroll (but above the downward pointing arrow). The screen image will scroll upwards by about a quarter of the size of the non-visible portion.

Position the mouse pointer over the scroll box (the white box in the scroll bar) and, while holding down the left mouse button, drag the scroll box lower down the scroll bar. The scroll box represent your window view of the dClip image, so as the box is moved downwards the image in the dClip window will be moved upwards and will be redrawn when you release the mouse button.

To make fine adjustments to the portion of the image visible within the dClip window, click on the scroll arrows at the top or bottom of the scroll bars.

In the same way adjustments to the horizontal position of the viewed image may be made, using the horizontal scroll bar at the bottom of the dClip window.

## 3.3 Screen capture

So far we have only attempted to capture the screen image when the dClip Window is shown on screen. Let's capture an image from another application.

Minimise dClip to an icon, either by selecting MINIMIZE from the System Menu, or by clicking on the downwards pointing arrow at the top right of the dClip window.

Start another Windows application from the MSDOS executive window , dFile or Program Manager. You could use any Windows application for this purpose, e.g. Write, Clock, Calendar, Notepad, Program Manager or Paintbrush, etc.

Use the application to create an image in the applications windows, either by opening a suitable file or by creating a new image.

Ensure that the dClip icon is visible in the icon area (at the bottom of the screen). If the dClip icon is completely obscured by the applications window it may be because the application is maximised or because it has been dragged or sized to cover the bottom portion of the screen. If so, move the application's window so that at least a portion of the dClip icon is visible.

Click once on the dClip icon. dClip's System Menu will appear. Click on the CAPTURE item in this menu. dClip's System Menu will then disappear and the dClip window will be restored. dClip's clipboard information line will display the word Bitmap. If dClip's window title is not now dClip - viewing Bitmap you will need to select BITMAP from the DISPLAY menu in order to change dClip's display mode.

The dClip window will now show the screen image captured and stored on the

clipboard. This image may be saved in a disk file as described earlier.

3.4 Hot-key screen capture

dClip also provides an alternative and more versatile route for capturing images. A "hot-key" may be "armed" so that capture takes place as soon as the key combination is pressed - even when dClip is totally obscured by other applications...

By default dClip uses the <Alt><F1> combination for the hot-key (i.e. pressing the <F1> key while the <Alt> key is held down). [The hot key combination may be defined by the user, by selecting DEFINE HOT KEY from the CAPTURE menu.] The hot-key must be armed by selecting ARM from dClip's System Menu before dClip will respond to hot-key commands.

To try this out, first Arm the hot-key by selecting ARM from dClip's System Menu. {The ARM item is ticked when dClip is armed.]

Now restore another application's window to the screen. In this case it make no difference whether dClip is left as a window or reduced to an icon, or whether the dClip window/icon is visible or covered by an application's window.

Now hold down the <Alt> key and press the <F1> key.

The dClip window will be restored and the captured screen image may be viewed. 3.5 Window capture

It is more likely that you would wish to capture an application's window or contents rather than an entire screen image.

Select the CAPTURE menu on dClip's menu bar. The menu allows you to select the capture mode, i.e. the region you wish to capture by hot-key capture. Thus you may select either Full Screen - in which case you do capture the entire screen image, or Target Window - which captures the window and borders of the current target window [for the present purposes this is the window of the application which is active (as indicated by a highlighted title bar) during a hot-key capture, or that which was active before the capture command was given from the system menu], or Client Area - which captures the target window contents, not including the window borders and menu bar.

The capture mode currently selected is indicated by a tick mark appearing on the left-hand side of the mode name.

Similarly the CAPTURE menu offers the choice of converting a capture image to monochrome if you are using a colour monitor. Capturing colour images may be fun, but unless you have a colour printer the colour images may have relatively little practical value. [However, colour images may be converted into device independent bitmaps (DIBs) which can be printed on single colour printers - see below.]

Experiment by capturing images from an application using each of the three capture modes. In each case the captured image may be saved to a disk file if required, or pasted into another Windows application.

dClip is able to capture any material displayed in a window, including dialog boxes, message boxes, icons and menus. Note that in some of these cases selecting Client Area capture will result is the capture of the box or icon on a background which does not contain the parent window's menu bar or caption. If you wish to capture the item on a background of its parent window, the Target Window capture should be used. Note also that Target Window and Client Area hot-key captures will capture an image from the Window which is currently active. Consequently you may need to click the mouse pointer within the item you are attempting to capture (to make it active) before pressing the hot-key. Some of the dialog boxes used in some Windows applications do not permit the focus to be removed while the dialog box is visible. Such dialog boxes may only be captured without any background or as part of a full screen image.

If you require to capture an image which has a menu showing (perhaps for creating pictures for a training manual, such as this one), then note that you must pull down the menu using the <Alt><letter> key technique for selecting menus, and then press <F1> before releasing the <Alt> key. This is because visible menus will disappear if the Alt key is pressed down a second time, and so will not be captured.

If you need to capture a display from a program which changes its display when a key is pressed (some versions of CorelDraw do this when in preview mode), then use the Trigger Delayed Capture facility (see section 4.1).

### 3.6 Clipboard viewing

So far the images we have seen in the dClip window have all been clipboard images created by dClip itself. dClip will allow you to view, and save to disk, images copied to the clipboard by most other Windows applications.

With dClip already started, start a text application, such as Windows Notepad. Open a TXT file from within Notepad or type in some text. Select some of the text with the cursor or arrow keys (see your Windows documentation for details of selection within applications) and copy the selected material to the clipboard using the COPY item on the application's EDIT menu. If you can see both the Notepad and dClip windows at the same time you will observe that as soon as the Notepad COPY command is executed, dClip's clipboard information line changes to indicate that text is now contained on the clipboard. If you can't see both windows at the same time you will have to bring dClip's window to the front to observe this.

If the dClip title bar already indicates that dClip is viewing in text mode then you will be able to see the information you copied to the clipboard on dClip's window. If the dClip title bar indicates that dClip is viewing in some other mode, then you will need to choose TEXT from dClip's DISPLAY menu before you can read the textual content of the clipboard.

It so happens that Notepad copies only text to the clipboard, and then only in one of the many possible formats - Text format. Let's try the same exercise with Windows Write.

Start Windows Write, get some text in its window, select some of it and copy it to the clipboard. Now dClip's information line will tell you that the clipboard contains the text you copied in both WRITE formatted text format and in ordinary Text format. If you try the same experiment with Microsoft Word for Windows, you will find that text is copied to the clipboard in Rich Text Format, Word formatted text, Text, OemText and Link formats.

You can examine the clipboard content in OemText format by selecting OEMTEXT from the dClip's display menu. The text will appear in a different font - rather like a typewriter image. Some characters will appear as different symbols in OemText and

Text formats (see your Windows documentation for details).

Unlike the Windows clipboard viewer CLIPBRD.EXE, dClip will not show you the clipboard contents using the other, special formats. This is because (a) if you want to see these formats you can do so with CLIPBRD, (b) such formats are only available while the program which creates them is still running on your PC, and (c) such formats are normally suitable only for pasting back into the application which created them. dClip is not primarily a clipboard viewer. It is intended to provide a facility for loading the clipboard with data which can be pasted into a wide variety of applications or used as a videoshow presentation. So let's try an exercise to illustrate an example of one of dClip's uses.

### 3.7 A common image - exercise

First let's create a simple image file to use in our exercise. Load any Windows application and open a suitable data file (or create an image in the application's window). Now resize the application's window so that it occupies, say, a quarter of the screen.

Start dClip and from the CAPTURE menu select TARGET WINDOW. Now from the System menu select ARM and ensure that a tick appears on the left of the word ARM in the menu. Minimise dClip to an icon or resize the dClip window so that it does not overlap the other application's window.

Now click anywhere within the window of the other application. Its title bar should become highlighted to indicate that the application is active.

Hold down the <Alt> key and press <F1>.

Set dClip into Bitmap viewing mode if necessary. You should see an image of the application's window within dClip's window.

Save this image as a file by selecting SAVE from the FILE menu.

Now we have saved an image which we can use in the rest of the exercise. Bear in mind that we could have equally easily produced our image using any Windows application, including any of the painting or drawing applications. So we could carry out the rest of the exercise with an image of the our favourite picture, or the company logo.

Now close the application you were running and start the Window's WRITE word processor (or indeed any other Window's word processor, such as Word for Windows or Ami. The instructions provided here assume that you are starting WRITE, but you should not have much difficulty in adapting these instructions for any other Windows word processor.) Open a document and immediately re-save it with the another filename, such as JUNK; just in case something goes wrong and you would rather not loose the document.

At the moment the image we created is still on the clipboard, but normally you would not wish to recreate an image every time you wanted to use it. So lets reload the image from disk by selecting LOAD from dClip's FILE and then double clicking on the name of the file we created. Now minimise dClip to an icon.

Now click somewhere within the WRITE document displayed in the WRITE window. The caret will be flashing at the point you have selected. This is the insertion point, and it is where any material pasted from the clipboard will be inserted. Select EDIT from WRITE's menu bar. You will see the menuitem PASTE. It will be in clear text (i.e. not "greyed") and this indicates that there is data on the clipboard which WRITE can paste into a document. Like most Windows word processors, WRITE can paste text or pictures into its documents. In this case we are going to paste a bitmap picture.

Click on paste and the image loaded by dClip will be pasted into the WRITE document.

The image will appear as a block picture within the WRITE document. The picture can now be moved or resized by selecting MOVE PICTURE or RESIZE PICTURE from WRITE's EDIT menu, and the document can be printed for you to see the result.

The image we have just pasted into the WRITE document is still on the clipboard, so in fact we could also paste the same image in at another point within the WRITE document. Alternatively we could restore dClip, load another Bitmap image (try TESTB.CLP) onto the clipboard, and the paste this image into the WRITE document.

Exactly the same procedure can be used to paste a Metafile Picture into the WRITE document. A metafile file picture called TESTM.CLP is provided for you to experiment with, although you will be able to create you own Metafile Picture if you have a suitable drawing package, such as Windows Draw, Designer or CorelDraw. The principal attraction of Metafile pictures compared with bitmap pictures, is that the final printed version will probably be of a higher quality than that from a bitmap image.

3.8 Converting Coloured images to Monochrome

If you would like to capture a coloured image and convert it to monochrome then click on the ticked item CONVERT TO MONOCHROME in the CAPTURE menu and repeat the capture process described in section 3.4. The image will be captured and converted into a monochrome bitmap, which may then be saved or pasted into other applications for printing on a monochrome printer.

Note that ARMing dClip's hot key system arms it with the capture options which were in effect at the time. If you wish to change those options you must re-arm the hot key system.

Monochrome bitmaps can be a bit disappointing, because - very roughly - anything which is not white is black, so that some images may lose most of the detailed shading. On the other hand virtually all Windows word processing packages can accept a monochrome bitmap and successfully print it out on a conventional monochrome printer. Some word processors are not able to interpret colour bitmaps correctly.

At the time of writing relatively few Windows applications are able to accept the Device Independent Bitmap (DIB) format, although some use this format internally. However, the advantage of the DIB format is that coloured images may be transferred to monochrome devices much more successfully than conventional bitmaps. So if you do have an application which accepts DIBs, or if you are creating images which will be used on another computer (e.g. in a videoshow) then the best way of transferring images is in DIB form.

To convert a normal bitmap image into DIB format simply select CONVERT TO DIB from the EDIT menu. Similarly if you are displaying a DIB on the clipboard you can convert the image into a conventional bitmap by selecting CONVERT TO BITMAP from

the EDIT menu. [Bitmaps display more rapidly than DIBs.]

## 3.9 Selecting part of an image

If you are displaying a picture image (bitmap, DIB or metafile), perhaps a captured image, and you require only a part of the image, then choose SELECT REGION from the EDIT menu. Now position the mouse pointer at the top left-hand corner of the part of the image you require, and, while holding down the left mouse button, drag the pointer downwards and to the right.

A rectangle will be drawn on screen as you move the pointer. The rectangle indicates the portion of the image which will be selected when you release the mouse button.

Once you have released the mouse button select CONVERT TO BITMAP from the EDIT menu. The selected portion will be redrawn as a new image without the material lying outside your selection region.

In the same manner a selected region may be converted into a Device Independent Bitmap - by selecting CONVERT TO DIB from the EDIT menu. Selected regions of bitmap, DIBs or metafile picture may be converted into bitmaps or DIBs. However, the whole window image of text format displays must be converted into bitmaps or DIBs before a region of the image may be selected for a second conversion.

## 3.10 Creating a videoshow

Create several files of clipboard material; these can be any combination of text, bitmap, DIB, metafile, etc., although for best effects text and metafile images should be converted to bitmaps for showing as this avoids background problems. Choose filenames which begin with the same characters so that they will be easy to find as a group in a directory listing display.

Now select PRESENTER from the File menu. This causes dClip to enter its Presentation mode.

Select EDIT SHOW from the EDIT menu. The Show Editor appears, displaying a list of the available clipboard files and a list of files in the current show - although this will be empty at the moment.

Select the filename of the first image you would like to appear in your show (by clicking on the filename ONCE) and push the ADD ITEM button. [Alternatively you can add an item by double clicking on its filename.]

The selected filename appears in the Current Show list.

Select the available file which you would like to appear as the second image of your show using the same procedure. This name will be added to the current show list.

Continue adding filenames until your show is complete.

Now save the list of filenames which make up the current show as a show file, by pushing the SAVE button. You will be prompted for a name for the show file. Enter a suitable name with no extension (dClip will provide the extension .DCS).

Now click on OK and the Show editor disappears.

The show is ready. While you will find in section 4 details of how to set the background colour and how to hide the Windows menu and title bars etc., you can start the show immediately by choosing START SHOW from the PRESENT menu.

The first image appears, along with a modified menu bar.

The next image may be brought into view by selecting NEXT from the menu bar, or by clicking with the left mouse button while the mouse pointer is not located over any of the menu items, or by pressing the <Page Down> key or the <space> bar.

Similarly the previous image may be selected by selecting PREV from the menu bar, or by clicking with the right mouse button, or by pressing the <Page Up> key. The first image in a show may be displayed by selecting FIRST from the menu, or by pressing the <Home> key, and the last image of a show may be selected by choosing LAST or pressing the <End> key.

The videoshow may be ended by clicking on END or pressing the <Esc> key.

Automatic videoshows (i.e. sequences in which the image is changed after a specified time interval) may started by choosing Auto Show from the PRESENT menu. The time interval between images defaults to 5 seconds, although it may be set to any number of seconds by selecting TIME INTERVAL from the OPTIONS menu.

During an automatic videoshow all the image selection techniques outlined above may be used to override the automatically timed interval. The show may be terminated by selecting END from the menu bar, or pressing the <Esc> key.