K-INSTALL CD

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DEVELOPER'S MANUAL

INTRODUCTION

K-INSTALL CD is a powerful and flexible catalogue and installation package, which allows hundreds, even thousands of software titles to be displayed, copied, installed and run from a single program. It comes in both DOS and Windows versions. Both versions feature a wide set of almost identical capabilities such as:

- * multi-level search and selection capabilities,
- * displaying any number of text and graphic files,
- * copying software as-is,
- * installing software to any directory,
- * running pre-installed software from CD,
- * full customisation of screen layout,

plus all the functions of K-Install Professional, giving a complete software installation system.

This manual describes the unique features of both the DOS and Windows version of K- INSTALL CD. It is to be used in conjunction with the Developer's Guide for K-INSTALL Professional.

System Requirements

K-INSTALL CD for DOS runs on any IBM-PC or compatible with 512KB memory. DOS 3.0 or higher is recommended.

K-INSTALL for Windows runs on any IBM-PC or compatible running Windows 3.1 (preferably in Enhanced Mode if unpacking archives). 4MB memory or more is recommended.

Installation Instructions

Run INSTALL.EXE or SETUP.EXE to unpack and copy the whole package. You get the catalogue programs, the installation programs, documentation, and samples to show the full power of this versatile piece of software.

Support and Licence Information

Registration entitles the registered organisation to free support for at least 12 months, and a licence to use and distribute DOSCAT.EXE, WINCAT.EXE, INSTALL.EXE and/or SETUP.EXE royalty free with any software developed or published by any number of employees in one development group at one site.

Customised versions of K-INSTALL CD are also available such that options can be hard coded into the program rather than specified in the separate settings file. This not only makes the program even more secure, but also smaller.

Warranty

ARK ANGLES warrants the physical disks and related printed matter to be free of significant defects in materials

and workmanship, and that the program works largely in accordance with its documentation. This warranty is effective for three months from date of registration, and is not transferable.

No liability is accepted for any loss, damage or inconvenience caused by the use of this product. No warranty is made that it is suitable for any particular person or purpose.

In any event, the liability of ARK ANGLES is restricted to either a refund of the registration paid, a replacement of the physical disks and/or printed matter, or the provision of an upgrade to the latest version.

Further Information

For more information see the following files on the Installation Disk:

KINSTALL.WRI K-INSTALL Developers Manual.

README.TXT Support and licence information, program history.

REGISTER.TXT Registration, pricing and upgrade information

PROGRAM DESCRIPTION

K-INSTALL CD is a flexible and powerful program. There are many options to tailor it to run just as you need it. However you can also get the basics up and running very quickly. The DOSCAT and WINCAT executable files can be renamed if required.

K-INSTALL CD uses settings files to control it's many functions. Program titles, file names and many other options are defined by special keywords. Suitable default values are used for any options not explicitly defined, ensuring that the settings file can be extremely simple.

Creation and Use of Directories

K-INSTALL CD can be run from any drive or directory. When running on DOS 3.0 or later it will automatically identify it's own location and look for all other files in the same place or any subdirectory of it. On DOS versions earlier than 3.0 it will assume it is running from A:\.

K-INSTALL CD automatically asks for and creates directories in which to copy or install any program. If this directory already exists (unless it is a root directory) confirmation is obtained from the user before continuing the installation.

The Main Screen

The main K-INSTALL CD screen displays a list of software products, plus text and/or bitmaps associated with the currently selected product. There are also a number of buttons displayed, depending on the keywords and options specified.

- 1. The Help button is displayed if defined by a HELP keyword and if the help program can be found.
- 2. The List button is always displayed.
- 3. The View button is displayed if any of the items in the software list have text files or bitmaps to display.
- 4. The Run button is displayed if any of the items in the software list include a program name to be executed.
- 5. The Copy button is displayed if any of the items in the software list include one or more file names for copying.
- 6. The Install button is displayed if any of the items in the software list include an instalation program name to be executed or one or more file names for copying and unpacking.
- 7. The Catalogue button is displayed if defined by a CATALOG keyword and if the catalogue program can be found.
- 8. The Exit button is always displayed.

The button names and associated descriptive text can be altered through BUTTON keywords. The BUTTONS keyword can be used to change the size and location of the buttons.

In addition to the above, in the Windows version a set of six List Buttons are also displayed. These allow scrolling through the product list. The buttons are Top ($|<-\rangle$, PgUp ($<<\rangle$, Up ($<\rangle$, Down ($>\rangle$), PgDn ($>>\rangle$) and Bottom (->) on these buttons performs the same function as pressing the Home, Page Up, Up Arrow, Down Arrow, Page Down and End keys respectively. The LISTBTNS keyword can be used to change the size and location of these buttons.

The Settings File

The settings file is a plain ASCII file that can be created and updated with any editor in DOS or Windows. There

are two types of settings file.

The default settings file has the same name as the catalogue/install program itself with an extension of ".SEL". Therefore if the catalogue/install program is SETITUP.EXE then the settings file must be called SETITUP.SEL.

A different settings file can be used by entering its name as a parameter when running K- INSTALL CD. For example,

DOSCAT MAIN.SEL

will read the settings from "MAIN.SEL". If no file extension is entered then ".SEL" is presumed. Do not enter a directory name, as the settings file must always be in the same directory as the catalogue/install program.

Each option is defined in the settings file by a single keyword, often followed by one or more additional parameters.

Keywords may be in upper or lower case. Keywords that require additional parameters must be followed by a space before any parameters.

Parameters may be in upper or lower case. Parameters are separated from each other by commas, or by some other delimiter if defined by the DELIMIT keyword. Any number of spaces may also be added between parameters for readability. Parameters which themselves contain commas or another delimiter must be enclosed in double quotes.

Numeric parameters may be entered in either decimal or hexadecimal format. A hexadecimal number is identified by a trailing "h" or "H", as in "c000h" or "FFh" or "10h". All numeric parameters must be integers.

In most cases, keywords may be entered in any order in the settings file. Keywords that allow multiple entries, such as CATEGORY, PLATFORM, LISTING and PRODUCT etc will be processed in the order in which they appear in the file.

Blank lines and REMarks lines may be inserted anywhere into the settings file for readability.

Differences between DOS and Windows versions

The substantial functions of both the DOS and Windows version of K-INSTALL CD are exactly the same. The only differences are those that relate specifically to the operating environment in which K-INSTALL CD is running, and relate to the appearance of K-INSTALL CD.

Regarding K-INSTALL CD's appearance, the syntax of the WINDOW, COLS and PICTURE keywords are different, and the Windows version also has additional keywords ICON and PATTERN to take advantage of the extra capabilities of that environment.

Apart from these differences, any settings file can be used interchangeably in both the DOS and Windows version.

Use of Variables

K-INSTALL CD has all the same program-defined variables as K-INSTALL Standard and Professional editions. See the K-INSTALL Developer's Manual for more infomation.

Scrambling Files

In the registered version, the settings file and any text file to be displayed by K-INSTALL CD can be scrambled to safeguard any control measures and protect other installation secrets. The file scrambler uses a proprietory encryption method unique to K-INSTALL, and makes the file impossible to read or alter.

The SCRAMBLE.EXE utility encrypts any text file. Run it from the DOS command prompt or from Windows using the name of the text file as a parameter, as in:

SCRAMBLE WINCAT.SEL

If the settings file extension is omitted then the default ".SET" is used. If no settings file name at all is specified then the default "SETUP.SET" is used.

The scrambler takes a backup of the file before encrypting it. The backup is given an extension of ".BKS".

A settings file may be re-scrambled multiple times, it will still be quite usable to K-INSTALL. Note however that there is no facility to return a scrambled file back to it's original state, so ensure that a copy is kept of the original settings file.

DICTIONARY OF SETTINGS

The following list describes all available settings.

Parameters in square brackets [] are optional.

Screen Layout settings

TITLE

Defines a descriptive name for the catalogue, which displayed at the top of the K-INSTALL CD screen.

Usage: TITLE text

text is any text including spaces.

Example: TITLE Ark Angles Aussie Software

Default: The general term "Software Catalogue" is used.

MSG

Specifies a fixed message to be displayed on the K-INSTALL CD screen.

Usage: MSG [text]

text is the message to be displayed.

DOS version only: text may contain colour codes to change foreground and background colours anywhere in the message. See the PICTURE keyword for an explanation of colour control characters.

Example: MSG Another quality product from Blasterware

Default: No message is displayed.

HELP

Specifies the file name and extension of a help utility that can be run from K-INSTALL CD.

Usage: HELP [fileext[,parms]]

fileext is the name of the help utility, or blank to turn the option off. No directory need be specified as K-INSTALL CD will search the installation disk, the main program directory, and the user's Path to find the file.

parms is any additional parameters for the program.

Any tilde variables may be used in any of the above parameters - see the section "Use of Variables" above for more information.

Examples: HELP README.EXE

HELP BROWSE.COM, README.TXT

Default: No help utility defined, option not enabled.

CATALOG

Specifies the file name and extension of a separate product catalogue program that can be run from K-INSTALL CD.

Usage: CATALOG [fileext[,parms]]

fileext is the name of the catalogue program, or blank to turn the option off. No directory need be specified as K-INSTALL CD will search the installation disk, the main program directory, and the user's Path to find the file.

parms is any additional parameters for the program.

Any tilde variables may be used in any of the above parameters - see the section "Use of Variables" above for more information.

Examples: CATALOG CATALOG.EXE

CATALOG BROWSE.COM, PROGRAMS.TXT

Default: No separate catalogue program defined, option not enabled.

BUTTON

Allows all button text and associated descriptions in K-INSTALL CD to be customised, even into other languages.

Usage: BUTTON num[,code[,name[,desc]]]

num is the button number, from 1 to 15

code is the shortcut code which controls auto-starting

name is the name that actually goes onto the button, and must be consistent with code

DOS version only: The button name should usually just be the same as code, and generally the code cannot be changed or some functions will not work.

Windows version only: One character in name can be a shortcut so that the user can activate it from the keyboard with the Alt key. This character should have an ampersand "&" in front of it and it should be the same as code.

desc is the longer description printed beside the button

Examples: (DOS version only)

BUTTON 1, H, [H], Aide

BUTTON 10, X, [X], Quit install program

(Windows version only)

BUTTON 1, A, & Aide, Aide

BUTTON 10, Q, & Quit, Quit setup program

Defaults: Num Code Dos Name Win Name Description

1 H [H] &Help Help

11 L [Enter] &List Search program list

12	V	[V]	&View	View program information
13	R	[R]	&Run	Run program
14	Y	[Y]	&Copy	Copy program
15	I	[I]	&Install Insta	ll program
9	C	[C]	&Catalog Prod	uct Catalogue
10	X	[Esc]	E&xit	Exit Setup program

BUTTONS (DOS version only)

Defines the position of the buttons in the main K-INSTALL CD screen.

Usage: BUTTONS [x,y,w,h,h,hs,vs,ht,vt]]

x is the horizontal location of the first button in characters from the left of the window.

y is the vertical location of the first button in lines from the top of the window.

w is the width of each button in characters.

h is the height of each button in lines.

hs is the horizontal space between each button in chaarcters.

vs is the vertical space between each button in lines.

ht is the horizontal space between each button and its associated text in characters.

vt is the vertical space between each button and its associated text in lines.

Note: If ht and vt are both zero then the associated text is not displayed.

Example: BUTTONS 1, 1, 9, 2, 15, 0

Default: All values default to zero if not entered. If there is no BUTTONS record then x defaults to 2, y to 1, w to 7, h to 2, hs to 0, vs to 2, ht to 9 and vt to 0.

BUTTONS (Windows version only)

Defines the position of the buttons in the main K-INSTALL CD screen.

Usage: BUTTONS [,x[,y[,w[,h[,hs[,vs[,ht[,vt]]]]]]]]

x is the horizontal location of the first button in pixels from the left of the window.

y is the vertical location of the first button in pixels from the top of the window.

w is the width of each button in pixels.

h is the height of each button in pixels.

hs is the horizontal space between each button in pixels.

vs is the vertical space between each button in pixels.

ht is the horizontal space between each button and its associated text in pixels.

vt is the vertical space between each button and its associated text in pixels.

Note: If ht and vt are both zero then the associated text is not displayed.

Example: BUTTONS 0, 60, 100, 40, 0, 40

Default: All values default to zero if not entered. If there is no BUTTONS record then x defaults to 26, y to 70, w to 105, h to 35, hs to 0, vs to 45, ht to 135 and vt to 11.

COLS (DOS version only)

Specifies the colours used throughout K-INSTALL CD.

Usage: COLS [titl[,msg[,pic[,btn[,menu[,stat[,ask[,norm]]]]]]]]

titl is the absolute colour for the title line.

msg is the absolute colour for the message line.

pic is the absolute colour for the picture to start with.

btn is the absolute colour for the push buttons.

menu is the absolute colour for the main menu.

stat is the absolute colour for the status bar.

ask is the absolute colour for the questions.

norm is the absolute colour for other program responses.

Notes: Absolute colour codes specify a complete foreground and background colour combination, and are defined in a single byte, giving a decimal number from 0 to 255, or a hexadecimal number from 00h to FFh. The foreground colour is defined in the lowest 3 bits, the intensity in the next bit, the background colour in the next 3 bits, and blinking in the highest bit. There are eight basic colours for both background and foreground, but the foreground colours can also be selected in high or low intensity, effectively giving 16 foreground colours.

Val Low Intensity		High Intensity	
0	Black	Dark Grey	
1	Blue	Light Blue	
2	Green	Light Green	
3	Cyan	Light Cyan	
4	Red	Light Red	
5	Magenta	Light Magenta	
6	Brown	Yellow	
7	Light Grey	White	

To derive the colour code for a specific absolute colour: take the basic colour number for the foreground, add 8 if you want high intensity, add the basic number for the background colour multiplied by 16, and add a further 128 if you want blinking.

Examples: COLS 7, 7, 7, 7, 7, 7, 7

COLS 79

Default: all colours default to reasonable values if not entered, and remain unchanged if the colour is set to zero. Defaults are:

title line White on Blue

message line Light Green on Green

picture White on Black

push buttons Dark Grey on Light Grey

main menu Yellow on Green

status bar Yellow on Blue

questions Red on Black

COLS (Windows version only)

Specifies the colours used throughout K-INSTALL CD.

Usage: COLS [top[,bot[,titl[,shad[,depth[,msg[,menu]]]]]]]

top is the background colour at the top of the window.

bot is the background colour at the bottom of the window.

titl is the text colour for the title line.

shad is the text colour for the title shadow.

depth is the amount of offset of the shadow from the title line, where positive numbers are below and to the right, and negative numbers are above and to the left, and zero means no shadow.

msg is the text colour for the message line.

menu is the text colour for the main menu items.

Notes: Colours are made up three components, Red, Green and Blue. Each component has an intensity from 0 to 255, specified in one byte. A complete colour code therefore has three bytes, giving decimal numbers from 0 to 16777215, or hexadecimal from 000000h to FFFFFFh. The lowest order byte is the Red value, the next byte is the Green value, and the highest byte is the Blue value. Any number of intermediate colours can be made by mixing different intensities of these three colours.

To derive the colour code for a specific colour: take the value for Red, add the value for Green multiplied by 256, and add the value for Blue multiplied by 65538. In hexadecimal, write the Blue byte followed by the Green byte followed by the Red byte. Using codes where each of the three colours are divisible by 64 (40h) minimises dithering. The most common and attractive colour codes are:

Decimal	Hex	Colour
0	000000h	Black
128	000080h	Dark Red
255	0000FFh	Light Red

32896	008080h	Brown
65280	00FF00h	Light Green
65535	00FFFFh	Yellow
8288608	800000h	Dark Blue
8388736	800080h	Dark Magenta
8421376	808000h	Dark Cyan
8421504	808080h	Dark Grey
12632256	C0C0C0h	Light Grey
16711680	FF0000h	Light Blue
16711935	FF00FFh	Light Magenta
16776960	FFFF00h	Light Cyan
16777215	FFFFFFh	White

008000h

Dark Green

32768

The depth quality normally works best with just small values up to about 3 and down to about -3.

Examples: COLS 255, 0, 0, 16777215, 0, 2, 16777215, 12632256

COLS ff0000h ff00ffh, 2, 0, ffffffh, 1

Default: all colours and options default to reasonable values if there is no COLS keyword:

top background Light Cyan

bottom background Light Green

title White

shadow Black

shadow depth

message Black

main menu Black

Individual colours default to black and depth defaults to zero if they are missing from the COLS record.

WINDOW (DOS version only)

Defines the position and size of the main K-INSTALL CD window.

1

Usage: WINDOW [x1[,y1[,x2[,y2[,w1,[h1,[w2,[h2]]]]]]]]

- x1 is the horizontal location of the window as an absolute number of characters from the left of the screen. This is added to the value derived from x2 if defined.
 - yl is the vertical location of the window as an absolute number of lines from the top of the screen. This is

added to the value derived from y2 if defined.

- x2 is the horizontal location of the window as a percentage of the way across the screen, 50 being the middle and 100 the right edge. This is added to the value derived from x1 if defined.
- y2 is the vertical location of the window as a percentage of the way down the screen, 50 being the middle and 100 the bottom edge. This is added to the value derived from y1 if defined.
- w1 is the width of the window as an absolute number of characters. This is added to the value derived from w2 if defined.
- h1 is the height of the window as an absolute number of lines. This is added to the value derived from h2 if defined.
- w2 is the width of the window as a percentage of the width of the screen, 50 being half the width and 100 the whole width. This is added to the value derived from w1 if defined.
- h2 is the height of the window as a percentage of the height of the screen, 50 being half the height and 100 the full height. This is added to the value derived from h1 if defined.

Example: WINDOW 0, 0, 50, 50, 76, 20, 0, 0

Default: x1, y1, w2 and h2 default to zero, x2 and y2 default to 50, w1 defaults to 80 and h1 defaults to 25 if there is no WINDOW record.

WINDOW (Windows version only)

Defines the position and size of the main K-INSTALL CD window.

Usage: WINDOW [max[,chg[,x1[,y1[,x2[,y2[,w1,[h1,[w2,[h2]]]]]]]]]

max is the initial state of the window:

- 0 restored
- 1 maximised

chg is whether the window is resizable and in what way:

- 0 the window is fully resizable, it has a thick border for resizing, and maximise and minimise buttons
- 1 the window can be maximised, restored and minimised only, it has maximise/restore and minimise buttons
 - 2 the window can be minimised only, it has a minimise button
 - 3 the window is not resizable at all.
- x1 is the horizontal location of the window as an absolute number of pixels from the left of the screen. This is added to the value derived from x2 if defined.
- y1 is the vertical location of the window as an absolute number of pixels from the top of the screen. This is added to the value derived from y2 if defined.
- x2 is the horizontal location of the window as a percentage of the way across the screen, 50 being the middle and 100 the right edge. This is added to the value derived from x1 if defined.
- y2 is the vertical location of the window as a percentage of the way down the screen, 50 being the middle and 100 the bottom edge. This is added to the value derived from y1 if defined.
 - w1 is the width of the window as an absolute number of pixels. This is added to the value derived from w2

if defined.

- h1 is the height of the window as an absolute number of pixels. This is added to the value derived from h2 if defined.
- w2 is the width of the window as a percentage of the width of the screen, 50 being half the width and 100 the whole width. This is added to the value derived from w1 if defined.
- h2 is the height of the window as a percentage of the height of the screen, 50 being half the height and 100 the full height. This is added to the value derived from h1 if defined.

Examples: WINDOW 1, 2

WINDOW 0, 0, 20, 20, 650, 450

Default: max, chg, x1, y1, w2 and h2 default to zero, x2 and y2 default to 50, w1 defaults to 600 and h1 defaults to 400 if there is no WINDOW record.

PATTERN (Windows version only)

Defines the makeup of the background of the main K-INSTALL CD screen. The background can be either a small bitmap repeated over the whole screen, or a hatched pattern, or two plain colours that merge into each other in the middle of the screen. Only one of these three methods is used to generate the background, and K-INSTALL will attempt each in turn until valid parameters are found. If a bitmap is used then it must be added to the EXE file using a resource editor, or exist as a separate BMP file.

Usage: PATTERN [name[,style[,skew]]]

name is the name of a bitmap resource or file name. The bitmap may be up to 8 bits square, and is painted repeatedly all over the background of the window. If the bitmap is larger than 8 bits square then only the first 8 bits in each direction are used. If name is valid then the style and skew parameters are ignored.

style is the type of hatch that used to form a background pattern:

- 0 no hatch
- 1 horizontal lines
- 2 vertical lines
- 3 forwards diagonal lines
- 4 backwards diagonal lines
- 5 vertical and horizontal crossed lines
- 6 forwards and backwards diagonal crossed lines

This parameter is only used if the name parameter is blank or invalid. If style is greater than 0 then the skew parameter is ignored. The foreground colour of the hatch pattern is the top colour as defined by the COLS keyword. The background colour of the hatch pattern is the bottom colour as defined by the COLS keyword.

skew is the relative weight given to the top and bottom background colours in the way in which they graduate from one to the other. Positive numbers give more emphasis to the top colour, and negative numbers give more emphasis to the bottom colour, and zero means both colours are weighted evenly. The top and bottom colours are defined by the COLS keyword. This parameter is only used if the name parameter is blank or invalid and the style parameter is blank or less than or equal to 0.

Notes: Normally only one of the above three parameters need be entered, as the first valid non blank/non zero parameter will define how the background is generated.

Examples: PATTERN MINILOGO.BMP

PATTERN BITMAP 1

PATTERN, 6

PATTERN,,1

Default: name defaults to blank and style and skew default to 0. If a valid name is entered then the background is generated from the bitmap and the style and skew parameters are ignored. If name is blank or invalid and style is greater than 0 then the background is generated from the hatch pattern and the skew parameter is ignored. If name is blank or invalid and style is less than 1 then the background is a graduated colour change from the top to the bottom of the screen using the skew parameter if entered. If there is no PATTERN record then the background is a simple graduated colour change using a skew of 0.

ICON (Windows version only)

Defines an icon that is displayed in the main K-INSTALL CD screen. The icon must be added to the EXE file using a resource editor. The EXE file already contains two icons, the first being the Install icon and the second being the Uninstall icon.

Usage: ICON [index[,x1[,y1[,x2[,y2]]]]]

index is the number of the icon resource.

- x1 is the horizontal location of the icon as an absolute number of pixels from the left of the window. This is added to the value derived from x2 if defined.
- y1 is the vertical location of the icon as an absolute number of pixels from the top of the window. This is added to the value derived from y2 if defined.
- x2 is the horizontal location of the icon as a percentage of the way across the window, 50 being the middle and 100 the right edge. This is added to the value derived from x1 if defined.
- y2 is the vertical location of the icon as a percentage of the way down the window, 50 being the middle and 100 the bottom edge. This is added to the value derived from y1 if defined.

Example: ICON 1, 0, 20, 50, 0

Default: x1, y1, x2 and y2 default to zero if not entered. If index is blank or invalid or there is no ICON record then no icon is defined or displayed.

PICTURE (DOS version only)

Defines a graphic that is displayed in the main K-INSTALL CD screen. The graphic is made up of characters from the full IBM character set, or a bitmap in a separate BMP file.

```
Usage: PICTURE [name[,x1[,y1[,x2[,y2[,w1[,h1[,w2[,h2[,mode[,ovly]]]]]]]]]]

[string

[string

[string...]]]
```

name is the bitmap file name, or blank for a character graphic.

x1 is the horizontal location of the graphic as an absolute number of characters from the left of the window. This is added to the value derived from x2 if defined.

- y1 is the vertical location of the graphic as an absolute number of lines from the top of the window. This is added to the value derived from y2 if defined.
- x2 is the horizontal location of the graphic as a percentage of the way across the window, 50 being the middle and 100 the right edge. This is added to the value derived from x1 if defined.
- y2 is the vertical location of the graphic as a percentage of the way down the window, 50 being the middle and 100 the bottom edge. This is added to the value derived from y1 if defined.
- w1 is the width of the graphic as an absolute number of characters. This is added to the value derived from w2 if defined.
- h1 is the height of the graphic as an absolute number of lines. This is added to the value derived from h2 if defined. For a character graphic, that number of lines immediately following in the settings file will define the graphic.
- w2 is the width of the graphic as a percentage of the width of the window, 50 being half the width and 100 the whole width. This is added to the value derived from w1 if defined.
- h2 is the height of the graphic as a percentage of the height of the window, 50 being half the height and 100 the full height. This is added to the value derived from h1 if defined.

string is ASCII characters and colour control codes which make up each line of the character graphic. Any ASCII characters greater than or equal to 8 may be used to create the picture. ASCII characters from 1 to 7 are used to alter the colours in the graphic, as follows:

- #1 set colour to the code of the following character
- #2 toggle between high and low intensity (xor 8)
- #3 shift the foreground down one colour (subtract 1)
- #4 shift the foreground up one colour (add 1)
- #5 shift the background down one colour (subtract 16)
- #6 shift the background up one colour (add 16)
- #7 toggle between blinking and non blinking (xor 128)

The #1 character must be followed by another character which specifies the colour to switch to, the ASCII value of which is the absolute colour code.

See the COLS keyword (DOS version) above for an explanation of how to calculate absolute colour codes.

Examples: PICTURE ,50,2,28,1

This Is A One Line Picture!

PICTURE MAINLOGO.BMP, 0, 0, 100, 50

Notes: For bitmap graphics the w1, h1, w2 and h2 parameters are ignored as the graphic is displayed actual size.

For character graphics the name parameter must be blank. Ensure that each string parameter in subsequent lines fills up the full width of the graphic, putting blanks at the end of lines as necessary.

Remember that you can set an absolute colour with an ASCII character #1 followed by an ASCII character specifying the complete colour combination required, or you can set the colours relative to the last colour with the ASCII characters #2 to #7.

The pic parameter of the COLS keyword sets the starting colour of the picture. Alternatively you can simply start the picture with an ASCII #1 character and then an absolute colour character.

A very few colour combinations give absolute colour characters that may be interpreted as something else. For example to set colours to Light Magenta on a Black background you may want to use character codes #1 then #13. However the #13 will be read as a carriage return. In this case it is necessary to give a slightly different control code sequence to achieve the same result, such as #1 then #14 to get Yellow on Black, and then #3 to shift the foreground colour down one to Light Magenta.

Do not use absolute colour character #0 (Black on Black).

Default: name, x1, y1, x2, y2, w1, h1, w2 and h2 all default to zero if not entered. If there is no PICTURE record then no graphic is defined or displayed.

PICTURE (Windows version only)

Defines a graphic that is displayed in the main K-INSTALL CD screen. The graphic is a bitmap that must be added to the EXE file using a resource editor, or exist as a separate BMP file.

```
Usage: PICTURE [name[,x1[,y1[,x2[,y2[,style[,w1[,h1[,w2[,h2[,mode[,ovly]]]]]]]]]]]
```

name is the name of the bitmap resource or file name.

- x1 is the horizontal location of the graphic as an absolute number of pixels from the left of the window. This is added to the value derived from x2 if defined.
- y1 is the vertical location of the graphic as an absolute number of pixels from the top of the window. This is added to the value derived from y2 if defined.
- x2 is the horizontal location of the graphic as a percentage of the way across the window, 50 being the middle and 100 the right edge. This is added to the value derived from x1 if defined.
- y2 is the vertical location of the graphic as a percentage of the way down the window, 50 being the middle and 100 the bottom edge. This is added to the value derived from y1 if defined.

style is the method by which the bitmap is superimposed over the existing background of the window:

- 0 OVER: the bitmap is shown with the background showing through the white parts
- 1 COPY: the bitmap is copied over the top of the background, completely replacing it.
- 2 AND: the bitmap and background are combined bit by bit with the AND function.
- OR: the bitmap and background are combined bit by bit with the OR function.
- 4 XOR: the bitmap and background are combined bit by bit with the XOR function.
- 5-9 other effects.

The first two styles are generally the most useful, but it is worth experimenting to see the different effects they all have.

- w1 is the width of the graphic as an absolute number of pixels. This is added to the value derived from w2 if defined. If the total value is not zero then the graphic is stretched or compressed to this width.
- h1 is the height of the graphic as an absolute number of pixels. This is added to the value derived from h2 if defined. If the total value is not zero then the graphic is stretched or compressed to this height.
- w2 is the width of the graphic as a percentage of the width of the window, 50 being half the width and 100 the whole width. This is added to the value derived from w1 if defined. If the total value is not zero then the graphic is stretched or compressed to this width.

h2 is the height of the graphic as a percentage of the height of the window, 50 being half the height and 100 the full height. This is added to the value derived from h1 if defined. If the total value is not zero then the graphic is stretched or compressed to this height.

mode is the method by which the bitmap is stretched:

- 1 preserves black pixels at the expense of white ones
- 2 preserves white pixels at the expense of black ones
- 3 treats all colours in the same way

ovly is the way in which the bitmap is overlaid on the background or any existing bitmaps. This parameter is mainly used in the Professional edition on the INSTPIC keyword to increase speed and/or allow special effects with overlaid bitmaps or multiple bitmaps on the screen at once.

- 0 not overlaid, background completely redrawn before drawing bitmap
- 1 overlaid, background not redrawn before drawing bitmap, very fast

Note: Transparent bitmaps (that is, those copied with style 0) cannot be stretched.

Example: PICTURE MAINLOGO.BMP, 0, 0, 100, 50, 1

Default: name, x1, y1, x2, y2, style, w1, h1, w2, h2 and mode all default to zero if not entered. If name is blank or invalid or there is no PICTURE record then no graphic is defined or displayed.

Catalogue Viewing settings

LISTBTNS (Windows version only)

Defines the position of the list box scrolling buttons in the main K-INSTALL CD screen.

Usage: LISTBTNS [,x[,y[,w[,h[,hs[,vs]]]]]

- x is the horizontal location of the first button in pixels from the left of the window.
- y is the vertical location of the first button in pixels from the top of the window.
- w is the width of each button in pixels.
- h is the height of each button in pixels.
- hs is the horizontal space between each button in pixels.
- vs is the vertical space between each button in pixels.

Example: LISTBTNS 0, 60, 100, 40, 0, 40

Default: All values default to zero if not entered. If there is no LISTBTNS record then x defaults to 134, y to 55, w to 75, h to 25, hs to 75 and vs to 0.

LISTBOX (DOS version only)

Defines the size and position of the main list box which displays the software product list as defined by the PRODUCT keyword.

Usage: LISTBOX [,x[,y[,w[,h]]]]

- x is the horizontal location of the list box in characters from the left of the window.
- y is the vertical location of the list box in lines from the top of the window.
- w is the width of the list box in characters.
- h is the height of the list box in lines.

Example: LISTBOX 14, 1, 65, 8

Default: All values default to zero if not entered. If there is no LISTBOX record then x defaults to 32, y to 1, w to 46, h to 6.

LISTBOX (Windows version only)

Defines the size and position of the main list box which displays the software product list as defined by the PRODUCT keyword.

```
Usage: LISTBOX [,x1[,y1[,x2[,y2[,w1[,h1[,w2[,h2]]]]]]]
```

- x1 is the horizontal location of the list box as an absolute number of pixels from the left of the window. This is added to the value derived from x2 if defined.
- y1 is the vertical location of the list box as an absolute number of pixels from the top of the window. This is added to the value derived from y2 if defined.
- x2 is the horizontal location of the list box as a percentage of the way across the window, 50 being the middle and 100 the right edge. This is added to the value derived from x1 if defined.
- y2 is the vertical location of the list box as a percentage of the way down the window, 50 being the middle and 100 the bottom edge. This is added to the value derived from y1 if defined.
- w1 is the width of the list box as an absolute number of pixels. This is added to the value derived from w2 if defined.
- h1 is the height of the list box as an absolute number of pixels. This is added to the value derived from h2 if defined.
- w2 is the width of the list box as a percentage of the width of the window, 50 being half the width and 100 the whole width. This is added to the value derived from w1 if defined.
- h2 is the height of the list box as a percentage of the height of the window, 50 being half the height and 100 the full height. This is added to the value derived from h1 if defined.

Example: LISTBOX 0, 0, 10, 10, 0, 0, 100, 100

Default: All values default to zero if not entered. If there is no LISTBOX record then x1 defaults to 134, y1 to 80, w1 to -145, h1 to 82 and w2 to 100.

TEXTBOX (DOS version only)

Defines the size and position of the text box which displays any text files listed in the view parameter of the PRODUCT keyword.

Usage: TEXTBOX [,x[,y[,w[,h]]]]

- x is the horizontal location of the text box in characters from the left of the window.
- y is the vertical location of the text box in lines from the top of the window.

- w is the width of the text box in characters.
- h is the height of the text box in lines.

Example: TEXTBOX 14, 9, 65, 6

Default: All values default to zero if not entered. If there is no TEXTBOX record then x1 defaults to 2, y1 to 8, w1 to 76, h1 to -10 and h2 to 100.

TEXTBOX (Windows version only)

Defines the size and position of the text box which displays any text files listed in the view parameter of the PRODUCT keyword.

Usage: TEXTBOX [,x1[,y1[,x2[,y2[,w1[,h1[,w2[,h2]]]]]]]

- x1 is the horizontal location of the text box as an absolute number of pixels from the left of the window. This is added to the value derived from x2 if defined.
- y1 is the vertical location of the text box as an absolute number of pixels from the top of the window. This is added to the value derived from y2 if defined.
- x2 is the horizontal location of the text box as a percentage of the way across the window, 50 being the middle and 100 the right edge. This is added to the value derived from x1 if defined.
- y2 is the vertical location of the text box as a percentage of the way down the window, 50 being the middle and 100 the bottom edge. This is added to the value derived from y1 if defined.
- w1 is the width of the text box as an absolute number of pixels. This is added to the value derived from w2 if defined.
- h1 is the height of the text box as an absolute number of pixels. This is added to the value derived from h2 if defined.
- w2 is the width of the text box as a percentage of the width of the window, 50 being half the width and 100 the whole width. This is added to the value derived from w1 if defined.
- h2 is the height of the text box as a percentage of the height of the window, 50 being half the height and 100 the full height. This is added to the value derived from h1 if defined.

Example: TEXTBOX 0, 0, 10, 10, 0, 0, 100, 100

Default: All values default to zero if not entered. If there is no TEXTBOX record then x1 defaults to 134, y1 to 162, w1 to -145, h1 to -199, w2 to 100 and h2 to 100.

AUTOWRAP

Defines whether the text in the text box is left as-is or wrapped to the text box width.

Usage: AUTOWRAP opt

opt is the wrapping option

0 text is not wrapped

1 text is wrapped

Example: AUTOWRAP 1

Default: Text is not wrapped.

PICBOX (DOS version only)

Defines the size and position and format of the picture box which displays any graphics files listed in the view parameter of the PRODUCT keyword.

Usage: PICBOX [,x1[,y1[,x2[,y2[,x3[,y3[,x4[,y4[,ovly]]]]]]]]]

- x1 is the horizontal location of the picture box as an absolute number of pixels from the left of the window. This is added to the value derived from x2 if defined.
- y1 is the vertical location of the picture box as an absolute number of pixels from the top of the window. This is added to the value derived from y2 if defined.
- x2 is the horizontal location of the picture box as a percentage of the way across the window, 50 being the middle and 100 the right edge. This is added to the value derived from x1 if defined.
- y2 is the vertical location of the picture box as a percentage of the way down the window, 50 being the middle and 100 the bottom edge. This is added to the value derived from y1 if defined.
- w1 is the width of the picture box as an absolute number of pixels. This is added to the value derived from w2 if defined. If the total value is not zero then the graphic is stretched or compressed to this width.
- h1 is the height of the picture box as an absolute number of pixels. This is added to the value derived from h2 if defined. If the total value is not zero then the graphic is stretched or compressed to this height.
- w2 is the width of the picture box as a percentage of the width of the window, 50 being half the width and 100 the whole width. This is added to the value derived from w1 if defined. If the total value is not zero then the graphic is stretched or compressed to this width.
- h2 is the height of the picture box as a percentage of the height of the window, 50 being half the height and 100 the full height. This is added to the value derived from h1 if defined. If the total value is not zero then the graphic is stretched or compressed to this height.

ovly is the way in which the bitmap is overlaid on the background or any existing bitmaps.

- 0 not overlaid, background completely redrawn before drawing bitmap
- 1 overlaid, background not redrawn before drawing bitmap, very fast

Note: Transparent bitmaps (that is, those copied with style 0) cannot be stretched.

Example: PICBOX 0, 0, 10, 10, 0, 0, 100, 100

Default: All values default to zero if not entered. If there is no PICBOX record then x1 defaults to 2, y1 to 8, w1 to 76, h1 to -10 and h2 to 100.

PICBOX (Windows version only)

Defines the size and position and format of the picture box which displays any graphics files listed in the view parameter of the PRODUCT keyword.

Usage: PICBOX [,x1[,y1[,x2[,y2[,style[,x3[,y3[,x4[,y4[,mode[,ovly]]]]]]]]]]]

- x1 is the horizontal location of the picture box as an absolute number of pixels from the left of the window. This is added to the value derived from x2 if defined.
- y1 is the vertical location of the picture box as an absolute number of pixels from the top of the window. This is added to the value derived from y2 if defined.

- x2 is the horizontal location of the picture box as a percentage of the way across the window, 50 being the middle and 100 the right edge. This is added to the value derived from x1 if defined.
- y2 is the vertical location of the picture box as a percentage of the way down the window, 50 being the middle and 100 the bottom edge. This is added to the value derived from v1 if defined.

style is the method by which the bitmap is superimposed over the existing background of the window:

- 0 OVER: the bitmap is shown with the background showing through the white parts
- 1 COPY: the bitmap is copied over the top of the background, completely replacing it.
- 2 AND: the bitmap and background are combined bit by bit with the AND function.
- 3 OR: the bitmap and background are combined bit by bit with the OR function.
- 4 XOR: the bitmap and background are combined bit by bit with the XOR function.
- 5-9 other effects.

The first two styles are generally the most useful, but it is worth experimenting to see the different effects they all have.

- w1 is the width of the picture box as an absolute number of pixels. This is added to the value derived from w2 if defined. If the total value is not zero then the graphic is stretched or compressed to this width.
- h1 is the height of the picture box as an absolute number of pixels. This is added to the value derived from h2 if defined. If the total value is not zero then the graphic is stretched or compressed to this height.
- w2 is the width of the picture box as a percentage of the width of the window, 50 being half the width and 100 the whole width. This is added to the value derived from w1 if defined. If the total value is not zero then the graphic is stretched or compressed to this width.
- h2 is the height of the picture box as a percentage of the height of the window, 50 being half the height and 100 the full height. This is added to the value derived from h1 if defined. If the total value is not zero then the graphic is stretched or compressed to this height.

mode is the method by which the bitmap is stretched:

- 1 preserves black pixels at the expense of white ones
- 2 preserves white pixels at the expense of black ones
- 3 treats all colours in the same way

ovly is the way in which the bitmap is overlaid on the background or any existing bitmaps.

- 0 not overlaid, background completely redrawn before drawing bitmap
- 1 overlaid, background not redrawn before drawing bitmap, very fast

Note: Transparent bitmaps (that is, those copied with style 0) cannot be stretched.

Example: PICBOX 0, 0, 10, 10, 0, 0, 0, 100, 100

Default: All values default to zero if not entered. If there is no PICBOX record then x1 defaults to 62, y1 to 63, x2 to 50, y2 to 50, w1 to -147, h1 to -201, w2 to 100 and h2 to 100.

Catalogue Definition settings

PRODUCT

Defines a software title to be included in the product list.

Usage: PRODUCT title[,cat[,plat[,list[,keyw[,view[,run[,copy[,inst]]]]]]]]

titleis the name of the product, such as "K-Chess for Windows v2.1"

cat is one or more categories to which the product is suited, such as "Strategy Games Board games".

plat is one or more operating systems on which the product will run, such as "Windows 3.x Windows 95".

list is the type of listing, such as "New Product" or "Update".

keyw is any number of keywords for additional searching capability, such as "game board chess strategy pieces".

view is any number of bitmap and/or text file names containing information about the product, such as "file id.diz kchess1.bmp kchess2.bmp readme.txt".

run is the name of the executable file which will run the product from the CD if possible, such as "progs\kchess\kchessw.exe".

copy is any number of file names (including wildcards) to enable the program to be copied exactly is it is on the CD, such as "files\kchess*.zip". This is particularly useful to allow shareware disk vendors to copy archives from CD to individual distribution diskettes.

inst is the name of the executable file which can be run to install the product to the user's hard disk, such as "files\kchess\setup.exe". If this parameter is blank then K-INSTALL CD may still allow the program to be installed by copying the files listed in the copy parameter but also unpacking any archives which have the Unpack Id (as defined by the UNPAK keyword) included in their names.

Examples: PRODUCT Space Blaster, Games, DOS, New, game arcade, blast.bmp,, blast1.zip

PRODUCT K-Chess, Board Games, Windows, Update, game board, kchess.txt

PRODUCT Oz-Pack, Utilities, DOS, Update, file directory utilities, "ozpack*.*

PRODUCT Genius, Genealogy, Windows, New, genealogy, genius.txt genius.bmp

PRODPARMS

Defines the names of the five selection criteria as they will appear on the selection dialog box. These relate to the first five parameters on the PRODUCT keyword.

Usage: PRODPARMS title[,cat[,plat[,list[,keyw]]]]

titleis the name of the title parameter

cat is the name of the category parameter

platis the name of the platform parameter

list is the name of the listing parameter

keyw is the name of the key words parameter

Example: PRODPARMS Title, Product Cat, Op System, Status, Key Words

CATEGORY

Defines valid categories as used in the cat parameter of the PRODUCT keyword.

Usage: CATEGORY cat

cat is the category name

Example: CATEGORY Strategy Games

CATEGORY Board games

CATEGORY Word Procesing

CATEGORY Utilities

PLATFORM

Defines valid operating system platforms as used in the plat parameter of the PRODUCT keyword.

Usage: PLATFORM plat

platis the platform name

Example: PLATFORM DOS

PLATFORM Windows 3.x

PLATFORM Windows 95

PLATFORM OS/2

LISTING

Defines valid listing types as used in the list parameter of the PRODUCT keyword.

Usage: LISTING list

list is the type of listing

Example: LISTING New Program

LISTING Update

LISTING Minor Fix

AUTOSHOW

Defines whether certain functions are performed immediately whenever a new product in the list box is focussed. If this is set on, the View, Run, Copy and Install buttons are enabled or disabled according to whether the focussed product can be viewed, run, copied or installed, and the first text file or bitmap associated with the product is displayed immediately if there is one.

Usage: AUTOSHOW var

var is the state of the autoshow function:

0 off

1 on

Example: AUTOSHOW 0

Default: Default is 1 (on).

Installation Settings

DIR

Defines the default directory in which programs are to be copied or installed.

Usage: DIR [dest[,opt[,ask[,ask2]]]]

dest is the full drive and directory name, or blank to install to the current directory.

opt is whether the user has the option of changing the directory:

0 the user is asked for a directory and can change from the default

1 the user is not asked, the dest is used without alteration

ask is the question to ask the user to enter the name of the directory where the program should be installed.

ask2 is the question to ask the user to enter the name of the directory where the program should be copied.

Examples: DIR C:\TEMP

DIR D:\CATALOG, , Enter the directory to install to, Enter directory to copy to

DIR C:\SETDIR, 1

Default: ask and ask2 default to standard questions, opt defaults to 0, dest defaults to blank (the current directory).

UNPAK

Defines the identifier indicating an archive is to be automatically unpacked by K-INSTALL during installation.

Usage: UNPAK string

string is between 1 and 8 valid filename characters.

Example: UNPAK &&

Default: A single underline indicates an archive to be unpacked, so files such as _ABC.ZIP or MY_FILE.LZH ARCHIVE_.EXE will be unpacked automatically by K- INSTALL into the directory defined.

LHA

Sets the options used by LHA.EXE when automatically unpacking .LZH files.

Usage: LHA [parms]

parms is all the options required by the unarchiving program.

Any tilde variables may be used in the above parameter - see the section "Use of Variables" above for more information.

Example: LHA e /m1

Default: The options "e/ma1" are used.

ZIP

Sets the options used by PKUNZIP.EXE when automatically unpacking .ZIP files.

Usage: ZIP [parms]

parms is all the options required by the unarchiving program.

Any tilde variables may be used in the above parameter - see the section "Use of Variables" above for more information.

Example: ZIP -o

Default: The options "-o -Jhrs" are used.

ARJ

Sets the options used by ARJ.EXE when automatically unpacking .ARJ files.

Usage: ARJ [parms]

parms is all the options required by the unarchiving program.

Any tilde variables may be used in the above parameter - see the section "Use of Variables" above for more information.

Example: ARJ e

Default: The options "e -y -a" are used.

EXE

Sets the options used by self unpacking archives when they are run automatically.

Usage: EXE [parms]

parms is all the options required by the unarchiving program.

Any tilde variables may be used in the above parameter - see the section "Use of Variables" above for more information.

Example: EXE /s

Default: No options are used.

ARCHIVE

Defines an additional unarchiving program and associated file extension and optional parameters.

Usage: ARCHIVE ext[,prog[,parms]

ext is the file extension of files to be unarchived.

prog is the program name and extension of the unarchiving program.

parms is all the options required by the unarchiving program.

Any tilde variables may be used in any of the above parameters - see the section "Use of Variables" above for more information.

Example: ARCHIVE .ZIP, UNZIP.EXE, -o

Default: No unarchiving program defined, function not enabled.

Other Settings

REM

Allows additional remarks to be inserted into the settings file without altering the operation of the INSTALL program.

Usage: REM [text]

text is any explanatory notes or additional information for anyone editing the settings file.

Example: REM This file last modified by Rob McDonell 1.9.95

DELIMIT

Defines the delimiter used to separate parameters in the settings file.

Usage: DELIMIT string

string is one or more characters

Example: DELIMIT;

Default: A single comma is used to separate parameters in the settings file.

IF/ELSE/ENDIF

Allows conditional processing of most functions.

Usage: IF cond

[line 1

[line 2

[line 3...]]]

[ELSE

[line 4

[line 5...]]]

ENDIF

cond any condition that can be evaluated to a positive or negative (True/False) answer. It may contain any combination of literal characters and wildcards, and relative and Boolean operators.

Wildcards are similar to those in DOS, but with additional capabilities. There are four wildcard characters:

- @ is for any one alphabetic character
- # is for any one numeric character
- ? is for any one character
- * is for any number of characters

Relative operators allow ranges to be specified. There are seven:

- = is equal to (optional, this is the default)
- is not equal to
- == is exactly equal to, wildcards treated as literal characters
- > is greater than
- < is less than
- >= is greater than or equal to
- <= is less than or equal to

Boolean operators allow negative matches or combinations. There are three:

NOT true if the criteria is not satisfied

AND true if both criteria are satisfied

OR true if either criteria are satisfied

Example: IF \sim \$WINVER >=3.1

PRODUCT Windows Utilities ...

PRODUCT Windows Game Pack ...

ENDIF

STRING

Allows all error and other information text in K-INSTALL to be customised, even into other languages.

Usage: STRING num[,text]

num is the number of the string, from 100 to 150

text is the new text to be displayed in place of the old. It may contain any normal tilde variables as well as literal text. Many messages are also used in conjunction with special variable data such as a file or directory name, in which case one of two special tilde variables may be used:

- ~@ display the data as text
- display the data as a number

Examples: STRING 109, Directory ~@ is already there. Install anyway?

STRING 131, Installation of ~MAIN is now completed.

STRING 143, Do you really want to uninstall this wonderful program?

Defaults: Num Text

- 100 General error code ~#.
- 101 Unable to open settings file ~@.
- 102 Invalid settings line "~@"
- 103 ~TITLE requires a ~CPU or higher processor (you have a ~\$CPU).
- 104 ~TITLE requires a maths coprocessor.
- 105 ~TITLE requires DOS version ~DOSVER (you have version ~\$DOSVER).
- 106 ~TITLE requires Windows version ~WINVER (you have version ~\$WINVER).
- 107 Invalid copy of installation disk.
- 108 Previous version of ~TITLE could not be found.
- 109 ~@ already exists. Continue with install?
- 110 ~@ does not exist. Continue with install?
- 111 ~@ already exists.
- 112 ~@ does not exist.
- Not enough space to install the whole program. Do not select all the optional components.
- 114 ~TITLE requires at least ~#KB disk space. Continue with install?
- 115 ~TITLE requires at least ~#KB disk space. Free up space or choose another drive.
- 116 Unable to find or create directory ~@.
- 117 Enter ~(*a*)
- 118 Insert ~@ and press <Enter>
- 119 Insert next disk with file \sim @ and press <Enter>
- 120 Copying ~@
- 121 Expanding ~@
- 122 Unpacking ~@
- 123 Updating ~(a)
- 124 ~@ already exists. Replace it?

- 125 ~@ invalid.
- 126 ~@ not found.
- 127 Unable to move ~@ to destination directory.
- 128 Unable to append ~@ to target file.
- 129 Unable to install ~@.
- 130 Unable to update ~@. Please check and adjust manually.
- 131 Installation completed.
- 132 Installation not completed.
- 133 ~TITLE installed.
- 134 ~TITLE uninstalled.
- 135 ~TITLE not installed.
- For more information or last minute instructions please read ~DOC.
- 137 To run this program open the ~GROUP group in Windows Program Manager.
- 138~ To run this program change to directory $\sim\!\!$ MAIN and enter " $\sim\!\!$ CMD", or double click on $\sim\!\!$ PROG in Windows File Manager.
 - 139 ∼TITLE runs best if you ensure ~@ includes:
 - 140 Would you like this to be done for you?
 - 141 Is this correct?
 - 142 I/O error ~#. Unable to create log file. Program cannot be uninstalled.
 - 143 Uninstall the program now?
 - 144 Unable to open log file for uninstallation.
- 145 $\sim @$ may be a shared file that is required by other Windows software you have installed after this program. Do you want to delete it?
 - No products found.
 - 151 Graphics error code ~#.
 - 152 Bitmap load error: ~@.