

- \* {FILECHECK} [file1 [file2]]  
{FC }
- \* DIR directory\filespec [file1]
- \* PCD file1
- \* {LAUNCH} {NORmal} progname file1  
{LN } {+NO}  
{MINimise}  
{+MI}  
{MAXimise}  
{+MA}  
{-NO}  
{-MI}
- \* {LAUNCHDEL} {NORmal} progname file1  
{LD } {+NO}  
{MINimise}  
{+MI}  
{MAXimise}  
{+MA}  
{-NO}  
{-MI}
- \* INFO
- \* {MD } directory  
{MKDIR}
- \* {RD } directory  
{RMDIR}
- \* FDX file1 [file2]
- \* {SD } {file1 "dd mmm yy" "hh:mm:ss" }  
{SETDATE} {file2 }
- \* SDL file1 "dd mmm yy" "hh:mm:ss" progname
- \* {SDD} host,app,file,viewnumber "dd mmm yy hh:mm:ss" other  
parameters  
{SDE}
- \* {LDD} host,app,file,viewnumber "dd mmm yy hh:mm:ss" other  
parameters  
{LDE}
- \* DDE application,topic,item "[commands]"
- \* HTM *starts browser in C:\BROWSER\BROWSER.EXE*

The FDX command enables MAPPER to request the user to choose a filename. The

EICUTIL.EXE FDX file1 [file2]

file1 this is the parameter file

file2 return data file containing the user's choice. Default file is CHOICE.TXT in the same directory as file1.

The format of file1 is:-

Only lines starting with a tab character are looked at.

The second character is used to determine which command.

T		set dialog box title.
	4-49	Title text
D		Set drive and directory
	4-49	drive and directory
F		Set filename
	4-12	filename
E		Extensions to offer user
	4-12	file filter
	17-49	filter description
I		Set file filter index
	4-2	Index value

Example: ( "]" character is used to represent a tab character in this example.)

.RID.TXT

```
*
* File type      Description
*=====
]T]Importing a PC file
]D]C:\DW\DB\
]F]-0.DAT
]E]*.TXT        ]Text file
]E]*.DAT        ]Data file
]E]*.BAT        ]MS-DOS Batch file
]E]*.SYS        ]MS-DOS System file
]I]2
```

DIR command produces a file (file1 - default name is c:\dw\ldb\dir.txt) of the following format:-

```
* Filename      DATE2$    TIME$
*=====,=====,=====,=====
Ddirectory
Filename.ext   dd mmm yy  hh:mm:ss
Filename.ext   dd mmm yy  hh:mm:ss
...
```

This file format is then the correct input for file2 in the SETDATE command.

SDD Set date and launch DRILLER

SDE Set date and DDE "[LOAD filename]" to DRILLER.  
If DRILLER not loaded then execute SDD.

LDD Check date and if valid launch DRILLER, else return remote view request to host.

LDE Check date and if valid DDE "[LOAD filename]" to DRILLER, else return remote view  
request to host.  
If DRILLER not loaded then execute LDD.

DDE sends DDE Link Execute command to application.

E.G. DDE Driller "[LOAD c:\eic\sm\agview\keystat1]"  
sends a request to Driller to load the Keystat1 file.

DDE is used by SDE and LDE.

## DRILLER parameter definitions

## =====

## DRILLER.exe Data-file Command-file Form caption

Data-file contains the MAPPER rid data, it may also contain commands.

Command-file may contain text to go in a text box above the spreadsheet grid, it may also contain commands.

Form caption is the spreadsheet form caption

## =====

## Command definitions:

/Erow1.col1,row2.col2,r1.g1,b1,r2.g2,b2

Emphasis r1,g1,b1=foreground r2,g2,b2=background

/EI.row1.inc,r1.g1,b1,r2.g2,b2,r3.g3,b3,r4.g4,b4

Emphasis r1,g1,b1,r2,g2,b2 to be applied for all columns starting at row1 for inc rows then emphasis r3,g3,b3,r4,g4,b4 to be applied for all columns starting at next row for inc rows then repeat.

/ES.row1.col1,r1.g1,b1,r2.g2,b2,r3.g3,b3,r4.g4,b4

Emphasis r1,g1,b1,r2,g2,b2 to be applied for all columns starting at row1 until the value in col1 changes then emphasis r3,g3,b3,r4,g4,b4 to be applied for all columns starting at next row until the value in col1 changed then repeat.

/Cr1.c1,r2.c2,<combo-list>

List of items separated by tabs to be displayed as a combo box

/Hr1.c1,r2.c2,<Row-Height>

Row height in Twips

/Lr1.c1,r2.c2

Lock cells from update

/Pr1.c1,r2.c2,<Picture-file-name>

Load picture .ICO,.BMP,.PCX,.WMF

/Tr1.c1,r2.c2,<cell-type>,<options>

Define cell type

0 Date

1 Edit

<options> are <alignment>

<alignment>

L Left

R Right

default Left

2 Floating point

<options> are <min>,<max>,<decimalplaces>

default is -9999999.99,+9999999.99,2

3 Integer

<options> are <min>,<max>

default is -9999999,+9999999

#### 4 PIC

<options>	picture format
X	any ASCII character
9	any numeric '0' - '9', decimal point
A	alphabetic characters 'a'-'z', 'A'-'Z'
N	alphanumeric characters
U	upper case alphabetic characters 'A'-'Z'
L	lower case alphabetic characters 'a'-'z'
H	hexadecimal digit '0'-'9','a'-'f','A'-'F'

#### 5 Static Text

<options>	Alignment
L	Left
C	Centred
R	Right

#### 6 Time

#### 7 Button

8 Combo box (drop down list box) (set automatically by ":C")

9 Picture (set automatically by ":P")

#### /Wr1.c1.r2.c2.<Column-Width>.<Edit Width>

Column width in Twips

Edit width in characters

*hiding columns*

*W-1, col#, ,, ,*

#### /=r1.c1.r2.c2.<formula>

set formula for cell

e.g C1:C4 summation of cells C1,C2,C3,C4

#1,#4 summation of current column rows 1,2,3,4

#### /Dv1

Display view number v1.

If v1 is 0 (zero) then the grid is displayed.

If /D parameter is not supplied then the first defined view is displayed.

If v1 is invalid then an error message box is displayed, OK to this message will display the grid.

v1 may also define a multi-view display. Each view to be displayed is separated by a "/".

So /D22/11/3 will create a display of views 22, 11 and 3. A maximum of 6 views may be displayed.

#### /Fform caption

Form caption to be used for grid form display. This over-rides the form caption specified on the Driller.exe call.

If neither are specified then the Data-file name is used.

#### /Rreport-text

Report-text is used to append to the form-caption and each defined graph-title.

/Q.name.value

Defines a name to used in macro expansion in any "/" command other then "/Q"

The expansion is triggered by the sequence ;/name/;

"/;" is the start sentinel, "/" is the end sentinel. The string in between the sentinel is looked for from the "/Q" parameters and if found the name is replaced with the appropriate value.

The value includes all characters to end of line.

E.G.

/Q,month,July

/Q,year,1993

/VT,Figures for month ;/month/; ;/year/;

would result in

/VT,Figures for month July 1993.

/QC.name.value

This is an extension of /Q written specially for Combo boxes. The /Q list is searched for "name" and when found a TAB + "value" is appended to the previous value. Multiple /QC commands builds up a TAB separated string that can then be used with a /C command. This provides an alternative to using /JQ.

/B.name.column

Similar to /Q but takes data from the first row in the spreadsheet at the column specified as the value.

/M.filename

Set output file name. This is intended for use from a command file.

E.G. DRILLER.EXE COMMAND.TXT

Where COMMAND.TXT is > /I,DATA.RID

> /M,DATA.RID

> other ? commands

and DATA.RID is > .

> \*Col1 Col2 Col3 etc

> \*=====,=====,=====.

> data lines

/I.filename

Include another file at this point. Current maximum nesting level is 10.

/S.column1,order1,column2,order2,column2,order3

Sort spreadsheet as specified

Columns may be specified by column name or number (no partial columns allowed)

Order may be

A - ascending

D - descending

default is ascending

/JA.flags

Force program mode. Flags consist of 7 Y or Ns, the default is NNNNNNY. Each individual letter turns on or off the entries in the File pulldown of Driller.

1	Open
2	Graph
3	Merge
4	Save
5	Save As
6	Print
7	Exit

/JB,button-text,command#,command-string

Creates a button below the spreadsheet. A maximum of 10 buttons may be specified

Button-text appears on the face of the button. Command-string contains command parameters.

Command# can be:

#	Action	Command Params
1	Exit	none
2	Save and exit	none
3	Cancel	none

/JD

DDE mode

/JE,error-text

Place error-text in error message text box.

/JF,r1,c1,r2,c2

Set focus. Marks a block of cells in the spreadsheet. This is purely a cosmetic function that allows the error message to refer to particular cells.

/JL,cols

Freeze columns

/JQ,name,file,columns

Make tab delimited string for combo

/JT,text

Add text to text box.

/JU

Allow user formulas

/JVS,view#,filename

Save view number view# to specified file. View# can be multiple views e.g. 4/7.  
Driller will exit after all /JVS are completed.

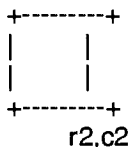


=====

When a line of data is added to the spreadsheet then r1 is set to the current row and c1 is set to 1. Each "/" command can alter the r1,c1 and this remains in effect for the next "/" command line unless a dat line is encountered.

The top headers are in row zero and the left headers are in column zero. The first data cell is row 1 column 1. In order to specify a block of cells then the coordinates of the upper left corner and the bottom right corner must be provided.

E.G. r1,c1



If the whole column is to be specified then the rows are given as -1.

E.G. if the spreadsheet has a total of 7 data rows the -1,c1,,, is equivalent to 1,c1,7,c1.

If the whole row is to be specified then the columns are given as -1.

E.G. if the spreadsheet has a total of 10 data columns then r1,-1,,, is equivalent to r1,1,r1,10.

If the value for r2 or c2 are omitted then the r1 or c1 values are used.

If the value for r1 or c1 are omitted then the values from the previous "/" command are used or the row number of the previous data line and column 1.

Colour is defined by Red,Green,Blue combination. A number between 0 (none) and 255 (full) defines the mix of colour. 255,0,0 is Red, 255,255,0 is Yellow.

Twips are defined as :

Twip (1440 twips per logical inch; 567 twips per logical centimeter).

## Graph commands

VN.report-id.graph#.YN.graph description

report-id and graph# are the name and number to be user when setting up chained views report-id is optional.

YN specifies whether a view is to be included in the pulldown viewlist

Y = yes

N = No

Default is Yes

graph description which is to appear in the pulldown viewlist

VG.g1.g2.g3.g4

g1 is graph type, g2 is graph style

GraphStyle Property Value

0 <= GraphStyle <= 7, depending on GraphType (see below)

## Description

GraphType	GraphStyle	Notes
None=0		
Pie (2D=1) (3D=2)	0 - Default 1 - No Label Lines 2 - Colored Labels 3 - Colored Labels without Lines 4 - % Labels 5 - % Labels without Lines 6 - % Colored Labels 7 - % Colored Labels without Lines	Default: lines joining labels to pie. If LabelText values are set, then those labels are used, otherwise the data values are used as labels.
Bar (2d=3) (3d=4)	0 - Default 1 - Horizontal 2 - Stacked 3 - Horizontal Stacked 4 - Stacked % 5 - Horizontal Stacked % 6 - Z-Clustered 7 - Horizontal Z Clustered	Default: vertical bars, clustered if NumSets > 1. If NumSets = 1, then the bars will be differently colored. If NumSets > 1, then the sets will be differently colored. (3D only) (3D only)
Gannt=5	0 - Default 1 - Spaced Bars	Default: non-spaced bars. Spaced bars have a small gap between each other.

Line & Polar (Line=6) (LogLine=7) (Polar=10)	0 - Default 1 - Symbols 2 - Sticks 3 - Sticks and Symbols 4 - Lines 5 - Lines and Symbols 6 - Lines and Sticks 7 - Lines and Sticks and Symbols	Default: lines. Thick or patterned lines are created by setting the ThickLines or PatternedLines properties to 1 (on).
Area(2D=8) (3d=14)	0 - Default 1 - Absolute 2 - Percentage	Default: stacked data sets. Absolute means relative to the X axis. Percentage shows data sets as percentage of total.
Scatter=9	0 - Default 1 - Curve 2 - Symbols 3 - Curve & Symbols	Scatter graph needs XPosData. Only graph to have curve fitting.
HLC=11	0 - Default 1 - No Close Bar 2 - No High-Low Bars 3 - No Bars	Default: all bars shown.
Tape=13	0 - Default	
Bubble=12	0 - Default	Bubble chart needs 2-D XPosData.

g3 is flag to indicate whether the graph is to have its normal row/column orientation reversed.  
0=Normal, 1=Reverse

g4, Y axis - 0=default, 1= autoscaling, i.e. graph will zoom-in on data, useful when data has large values compared with variance.

g5, LineStats 0 - No Stats 1 - MEAN 2 - MIN/MAX 3 - MEAN/MIN/MAX  
 4 - Standard deviation 5 - Standard deviation / MEAN  
 8 - Standard Best fit line  
 c1 = Column to be used for row labels

#### VA,r1,c1,r2,c2

r1,c1 and r2,c2 define a block of data to be added to the graph. If r1 and r2 are 0 (zero) then only the columns are selected. the rows can then be defined using VS.

#### VH,c1,Column title

Add column c1 to graph. Column title, if specified, over-rides the column heading of the rid.

VD column title

Column title to be used in Graph

/VD.c1.c2.op.val1.val2.Column title/VD.c1.c2(start).op.val1.val2.Column title/VD.c1.c2(start-len).op.val1.val2.Column title

Add column c1 to graph and select rows

c2 is the column number to operate on

start is the start character to compare from (default is 1)

len is the length to compare (default is the length of val1 or val2)

op is the operator to use when comparing column c2

val1 and val2 are value to use for the compare

Column title can be used to override the column header provided with the data

op operation

BK break on change of value of c2

Adds column c1 to the graph, once for each value in column c2.

assumes that rows are sorted on c2.

The value in column c2 is used as a prefix to the column header/column title.

This command works on the currently selected rows for the graph, if no selection has been done then all the rows are considered.

EQ (value(c2) = val1) OR (value(c2) = val2)

NE (value(c2) != val1) AND (value(c2) != val2)

IN (val1 <= value(c2) <= val2)

EX (value(c2) < val1) OR (val2 < value(c2))

TP gets top val1 rows in column c2

BT gets bottom val1 rows in column c2

GE (val1 <= value(c2))

GT (val1 < value(c2))

LE (value(c2) <= val1)

LT (value(c2) < val1)

/VS.c1.op.val1.val2/VS.c1(start).op.val1.val2/VS.c1(start-len).op.val1.val2

select rows to graph

c1 is the column number to operate on

start is the start character to compare from (default is 1)

len is the length to compare (default is the length of val1 or val2)

op is the operator to use when comparing column c1

val1 and val2 are value to use for the compare

op operation

EQ (value(c1) = val1) OR (value(c1) = val2)

NE (value(c1) != val1) AND (value(c1) != val2)

IN (val1 <= value(c1) <= val2)

EX (value(c1) <= val1) OR (val2 <= value(c1))

TP gets top val1 rows in column c1

BT gets bottom val1 rows in column c1

GE (val1 <= value(c1))

GT (val1 < value(c1))

LE (value(c1) <= val1)

LT (value(c1) < val1)

/VT.Title

Title is the Graph Title to appear in the graph. This overrides the Title on the /G command.

/VK,Row Title

Title for the rows of the graph. If no title is specified then the column header of the column indicated by g3 of the /G command is used.

/VJ,Column title

Title for the columns of the graph.

/VY,Y-axis title

Title for the Y-axis of the graph.

/VF,Form caption.

Caption for the form which encloses the graph. If not specified then the caption from the spreadsheet form is used.

/VC.c1.report-id.graph#.application.parameters.remote view description

If column c1 is selected on the graph then the chained view is as defined by report-id, graph#, application.

The parameters passed to the report are:

parameter-count,parameter-1,parameter-2,....

/VR.0.r1.report-id.graph#.application.remote view description

If row r1 is selected on the graph then the chained view is as defined by report-id, graph#, application.

The parameters passed to the report are:

parameter-count,parameter-1,parameter-2,....

/VR.c1.cvalue.report-id.graph.application.remote view description/VR.c1(start).cvalue.report-id.graph#.application.remote view description/VR.c1(start-len).cvalue.report-id.graph#.application.remote view description

Row r1 is determined by comparing column c1 value with cvalue.

start is the start character to compare from (default is 1)

len is the length to compare (default is the length of cvalue)

If row r1 is selected on the graph then the chained view is as defined by report-id, graph#, application.

The parameters passed to the report are:

parameter-count,parameter-1,parameter-2,....

/VU.x1,x2,...,x32

Specify colours to be used for graph sets. A maximum of 32 colours may be specified. If less colours are specified than required for the graph then the colours are repeated.

Default values are 9,10,11,12,13,14,1,2,3,4,5,6,8

Setting	Colour
0	Black
1	Blue
2	Green
3	Cyan
4	Red
5	Magenta
6	Brown
7	Light gray
8	Dark gray
9	Light blue
10	Light green
11	Light cyan
12	Light red

- 13 Light magenta
- 14 Yellow
- 15 White

/VP.report-id.graph#.application.level.parameters.remote view description  
/VP.graph#..level..remote view description

Defines which graphs appear in the Views pulldown and what order  
 If no report-id is specified then the graph # is local. If level is specified then it is the indent level.  
 Currently only indent value of 1 is supported.  
 The parameters passed to the report are:  
 parameter-count,parameter-1,parameter-2,....

/VX.report-id.graph#.date-time.remote view description  
/VX.report-id.graph#.application.remote view description

report-id is the remote report identifier.

graph# is the number of the graph to display within that report.

date-time is not used when EICdater mechanism is used to verify chain view links.

date-time is the date and time of the current version of the report.  
 This is used by Driller to determine whether a local copy of the report is up to date and can be used.

date-time can be specified as "dd mmm yy hh:mm:ss", "yymmdd hh:mm:ss".

E.G. /VX,remote,4,18 AUG 93 16:15:00, test remote link

/VQ.name.value

Defines a name to be used in macro expansion in any "/V" command for this view other than "/VQ".  
 The expansion is triggered by the sequence ;/name/;  
 ";" is the start sentinel, "/" is the end sentinel. The string in between the sentinel is looked for from  
 the "/VQ" parameters and if found the name is replaced with the appropriate value.

The value includes all characters to end of line.

Note: /Q commands are applied to all / commands first, then /VQ is applied as each view is  
 accessed.

/VB.name.column  
/VBL.name.column

Similar to /VQ in that it defines a name to be used in macro expansion. VB and VBL extract row data  
 from "column". "column" may include partial column reference. VB extracts data from the first row  
 selected, VBL extracts from the Last row.

E.G. /VB,test,Org Code(4-3)

Extracts 3 characters from character position 4 of the column with heading "Org Code" for the first  
 row of the rows selected for the view.

/VE.view#

The commands that define view# are included into this view definition with the exception of /VG, /VQ and /VE.

This enables a view to be set up as a format and then used in other views. The /VE command cannot be nested. If nesting is attempted it will be ignored.

A view may contain several /VE commands, but care is advised in doing so.

/VM.multfactor

All the data included in the view are multiplied by this value before being displayed.

E.G. /VM,0.000001 will divide all values in this view by 1 million.

/VZ.c1.op/VZ.c1(start).op/VZ.c1(start-len).op

Sort graph rows as specified

Columns may be specified by column name or number (partial columns ARE allowed)

Order may be

A sort value(c1) ASCII ascending

D sort value(c1) ASCII descending

AN sort value(c1) NUMERIC ascending

DN sort value(c1) NUMERIC ascending

/VW, window state, top, left, height, width

0 - Normal

1 - Minimize

2 - Maximize

Twips

1 inch = 1440 twips

1 cm = 567 twips



Driller communicates back to the host via the file DRILLER.TXT which is written to the temporary directory that was configured at EIC util installation time.

The format is as follows:

```
*Id          .Date          .
*=====,=====
]ChainView
*Report-id   YYMMDD HH:MM:SS
*Graph-#
*Application
```

The above format request that the host load down a specific report and display at a particular graph.

```
*Id          .Date          .
*=====,=====
]ChainView
*KEYSTAT3   930820 18:02:28
*1
*AGVIEW
```

The example requests report "KEYSTAT3" from application "AGVIEW" to be displayed at graph number 1. The current version on the PC is dated "930820 18:02:28".

If the EICdater mechanism is out of date for a particular application then there is additional data added to the DRILLER.TXT file

```
*Id          .Date          .
*=====,=====
]ChainView
*Report-id   YYMMDD HH:MM:SS
*Graph-#
*Application
]Lappl
*Application  YYMMDD HH:MM:SS
```

The above requests that the dates and times for the application be refreshed and then a specific report displayed.

```
*Id          .Date          .
*=====,=====
]ChainView
*KEYSTAT3   930820 18:02:28
*1
*AGVIEW
]Lappl
*AGVIEW     930915 12:04:30
```

The above requests that the dates and times for the application AGVIEW be refreshed and then the report KEYSTAT3 displayed. The last application refresh occurred at "930915 12:04:30" and the host will transfer all updates since then.

If the date and time "930820 18:02:28" is current for the KEYSTAT3 report then it need not be reloaded to the PC. However when the chain view was requested the application data was incorrect so the date and time could not be verified on the PC.

In the /VC, /VR and /VP the graph# may also define a multi-view display. Each view to be displayed is separated by a "/". So

/VP,,22/11/3,,Multi view display

will create a pulldown which when selected will create a display of views 22, 11 and 3. A maximum of 6 views may be displayed.

Driller commands

```

/=r1,c1,r2,c2,<formula>
/B,name,column
/Cr1,c1,r2,c2,<combo-list>
/Dv1
/Er1,c1,r2,c2,r1,g1,b1,r2,g2,b2
/El,row1,inc,r1,g1,b1,r2,g2,b2,r3,g3,b3,r4,g4,b4
/ES,row1,col1,r1,g1,b1,r2,g2,b2,r3,g3,b3,r4,g4,b4
/Fform caption
/Hr1,c1,r2,c2,<Row-Height>
/I,filename
/JA,flags
/JB,button-text,command#,command-string
/JD
/JE,error-text
/JF,r1,c1,r2,c2
/JL,cols
/JQ,name,file,columns
/JT,text
/JU
/Lr1,c1,r2,c2
/M,filename
/Pr1,c1,r2,c2,<Picture-file-name>
/Q,name,value
/QC,name,value
/Rreport-text
/S,column1,order1,column2,order2,column2,order3
/Tr1,c1,r2,c2,<cell-type>,<options>
/VA,r1,c1,r2,c2
/VB,name,column
/VBL,name,column
/VC,c1,report-id,graph#,application,remote view description
/VD,c1,c2,op,val1,val2,Column title
/VD,c1,c2(start),op,val1,val2,Column title
/VD,c1,c2(start-len),op,val1,val2,Column title
/VE,view#
/VF,Form caption.
/VG,g1,g2,g3
/VH,c1,Column title
/VJ,Column title
/VK,Row Title
/VL,c1
/VN,report-id,graph#,YN,graph description
/VP,,graph#,,level
/VP,report-id,graph#,application,level
/VQ,name,value
/VR,0,r1,report-id,graph#,application,remote view description
/VR,c1(start),cvalue,report-id,graph#,application,remote view description
/VR,c1(start-len),cvalue,report-id,graph#,application,remote view description
/VR,c1,cvalue,report-id,graph#,application,remote view description
/VS,c1(start),op,val1,val2
/VS,c1(start-len),op,val1,val2
/VS,c1,op,val1,val2
/VT,Title•
/VU,x1,x2, ... ,x32

```

/VX,report-id,graph#,date-time,description  
/VX,report-id,graph#,application,description  
/VY,Y-axis title  
/VZ,c1,op  
/VZ,c1(start),op  
/VZ,c1(start-len),op  
/Wr1,c1,r2,c2,<Column-Width>,<Edit Width>

# Graph Window Size and Location

/VW, Window state, top, Left, Height,  
width

Window state    0 - Normal display  
                    1 - Minimize  
                    2 - Maximize

top, Left, Height, width in twips

1 inch = 1440 twips

1 cm = 567 twips