

·SCREEN·UTILITIES·

"Screen Utilities" is made up of two programs, "SCRDUMP.XR" & "SCR_SLC.XR". The following documentation covers the features offered by each program and details instructions for their use.

PROGRAM FEATURES

SCRDUMP.XR (Dump video screen to printer)

- * Relocatable system extension.
- * Compatible with most printers.
- * Dumps any size graphic screen from 2 by 1 to 42 by 28
- * Colour based shading. (In 256 colour mode)
- * Works in all colour modes etc.
- * Option to invert the print-out.
- * Option to use own video/printer channels or defaults.
- * Full error messages.
- * Built in :HELP facility.

SCR_SLC.XR (Screen saving/loading and copying).

- * Relocatable system extension
- * Fast and flexible.
- * Save/load screens and colour information.
- * Works with all colour modes etc.
- * Automatically opens channels when necessary.
- * Option to display screens after loading.
- * Copy screen from one channel to another.
- * Option to use own channels ie NET:, SERIAL: or use defaults.
- * Full error messages.
- * Built in :HELP facility.

OPERATION MANUAL

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SYSTEM EXTENSIONS.

Both programs have been written as system extensions. A system extension is a program that once loaded into the ENTERPRISE becomes part of the operating system. This enables it to be called by all programs that leave EXOS intact.

COMMAND SYNTAXES.

NOTE. When using these system extensions all references to channels should be written as decimals.

"SCRDUMP.XR" has within it two commands "SETP" and "SCRDUMP"

"SETP" gives you the option to make "SCRDUMP" compatible with a required printer and to select various densities of print-out..

As there are so many printers currently on the market it is impossible to list them all in this manual. To aid the selection of suitable control codes a list of all the control codes supported and their corresponding identifiers is listed at the end of this manual. Check with your printer manual for correct codes.

EXAMPLE: SETP A.

"SCRDUMP" is the command that dumps a video channel to a printer. The syntax of this command may take these forms:

```
"SCRDUMP"  
"SCRDUMP V"  
"SCRDUMP V P"
```

In the first variation it uses the default video and printer channels 101 and 104.

In the second variation video channel "V" is dumped via default printer channel 104.

In the last variation video channel "V" is dumped via printer "P"

NOTE. The printer channel must already be open.

Finally you can invert the print out by adding the letter "I" to the end of the command.

Example:

```
"SCRDUMP I"  
"SCRDUMP 200 I"  
"SCRDUMP 200 10 I"
```

SCR_SLC.XR

"SCR.SLC.XR" has within it three commands "SCRSAVE", "SCRLOAD" and "SCRCOPY".

"SCRSAVE" is the command to save a video channel. The syntax of this command may take these forms:

```
"SCRSAVE 'file_name'"  
"SCRSAVE V 'filename'"  
"SCRSAVE V S"
```

In the first variation default video channel 101 is saved with the file name held within the single quotes, via default channel 106.

In the second variation video channel "V" is saved with the file name held within the single quotes via the default channel 106.

In the third variation it saves video channel "V" via channel "S".

NOTE. Channel "S" must already be open.

"SCRLOAD" is the command to load in a video page and has the following syntax.

```
"SCRLOAD 'file_name'"  
"SCRLOAD V 'file_name'"  
"SCRLOAD V L"
```

In the first variation it loads a screen with a file name held within the single quotes into default video channel 101 via default channel 106.

In the second variation it loads a screen with a filename held within the single quotes into the video channel "V" via default channel 106. If channel "V" is not already open it will be opened with the appropriate parimeters ie. Size, colour & mode.

In the third variation it loads in a screen with a file name held with in the single quotes into video channel "V" via channel "L". If channel "V" is not open it will be opened with the appropriate parimeters ie. Size, colour & mode. NOTE. Channel "L" must already be open.

Finally "D" may be added to the end of any "SCRLOAD" commmand to display the channel once it has been loaded in but only if the channel is not larger than 27 characters high.

Example:

```
"SCRLOAD 'file_name'D"  
"SCRLOAD V 'file_name'D"  
"SCRLOAD V L D"
```

"SCRCOPY" is the command that will copy one video channel to another video channel.

```
"SCRCOPY F T"
```

There is only the one version of this command and it has to have two parimeters "F" and "T". When used video channel "F" is copied into video channel "T". If "T" is not already open then it will be opened with the appropriate parimeters. ie: Size, mode & colour.

In all the "SCR_SLC" commands the colour information of the screens is saved/loaded with the screens and the palette colours of the receiving

channel set accordingly.

NOTE. All the above commands may be entered in upper or lower case.

ERROR MESSAGES.

Both system extensions provide error messages to inform the user of an error when it occurs. They are listed below.

COMMAND.	ERROR MESSAGE.	ERROR NUMBER.
"SCRDUMP"	Cannot SCR DUMP a non-video channel	01
	Cannot SCR DUMP a text channel	02
	Vertical size too large	03
	Bad decimal in command	04
"SETP"	Printer code identifier not recognised	05
"SCRSAVE"		
"SCRLOAD"		
"SCRCOPY"	Must be a video channel	10
	Bad decimal in command	11
	Number too large	12
	Page wrong size or mode	13

NOTE. The error number has been included to enable the user to capture the error with a exception handler.

USING SYSTEM EXTENSIONS WITHIN A BASIC PROGRAM.

There are two ways of calling a system extension

from within BASIC. One is to call it from direct mode placing an ":" before the command and pressing ENTER. The other is to incorporate it within basic line. This is done by using the basic command "EXT" followed by a string containing the command required.

Printed below is a short basic program showing the use of the "EXT" command. This program may be used to load in and print the demo screen following "SCRDUMP.XR" on side two of "SCREEN UTILITIES". Remember to load both "SCRDUMP.XR" and "SCR_SLC.XR" into the Enterprise before running.

```
100 PROGRAM "SCR_DEMO"
110 !
120 OPEN #10:"TAPE:DEMO.PIC"
130 !
140 EXT "SCRLOAD 200 10 D"
150 !
160 CLOSE #10
170 !
180 WAIT 5
190 !
200 TEXT
210 !
220 PRINT
230 PRINT
240 !
250 INPUT PROMPT "ENTER SETP IDENTIFIER : ":A$
260 !
270 EXT "SETP "&A$
280 !
290 !
300 EXT "SCRDUMP 200 1"
310 !
320 STOP
```

HELP MESSAGES.

Full help messages of a command can be obtained by typing ":HELP" followed by the command you want help on.

EXAMPLE:

:HELP SCRCOPY

PRINTER CONTROL CODES.

IDENTIFER	LINE FEED CODE:	BIT IMAGE CODE:
A	27."A",8	27."K"
B	27."A",8	27."L"
C	27."A",8	27."Y"
D	27."A",8	27."Z"
E	27."A",8	27."*" .1
F	27."A",8	27."*" .2
G	27."A",8	27."*" .3
H	27."A",8	27."*" .4
I	27."A",8	27."*" .5
J	27."A",8	27."*" .6
K	27."1"	27."K"
L	27."1"	27."L"
M	27."1"	27."Y"
N	27."1"	27."Z"
O	27."1"	27."*" .1
P	27."1"	27."*" .2
Q	27."1"	27."*" .3
R	27."1"	27."*" .4
S	27."1"	27."*" .5
T	27."1"	27."*" .6

Line feed, carriage return,
control codes used in all

and reset line feed
"SETP" modes are:-

Line feed
10

Carriage return
13

Reset line feed
27."2"