Laser-Scan Ltd.

LITES2

HRD Workstation Guide

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#### 1 Introduction

This document describes the workstation dependent facilities available in the version of LITES2 for HRD type displays (image LITES2HRD.EXE). It is to be read as a supplement to the LITES2 Reference Manual and the LITES2 User's Guide. The user should also refer to the "VAX LDLIB and HR Driver Reference" manual for more information about the HRD-1 and its interface to VAX computers.

# 2 Display

This version of LITES2 requires a Laser-Scan HRD-1, HRD-1S, FASTRAK, or LASERTRAK display (generically referred to as HRD displays). A single graphics display is supported (both GRAPHICS and PRIMARY must be ENABLEd). The HRD to be used is addressed via the logical name SYS\$HRD (which is normally set up system wide).

ENABLE SEGMENTS is not supported, so all redrawing is performed from the source IFF file. Plotting to Diazo film is not supported, use LAMPS software package PLOTTING option HRD instead.

The LITES2 program may be run from any VDU terminal, but on a LASERTRAK, it will normally be run from the Tek 4205 closeup screen terminal.

The refresh mode of the HRD is used for display of the interactive cursor and highlighting of found items etc.

The HRD display does not support display overlays (DISPLAY and OVERLAY commands), raster backdrop (IMAGE command), perspective viewing (VIEW command) or stream digitising (FOLLOW command).

# 3 Interactive devices

In addition to the keyboard, this version of LITES2 is capable of interpreting commands from the HRD button box and tracker ball, and optionally a digitising table on a separate terminal line.

The digitising table is activated by the commands ENABLE TABLE and ENABLE MONITOR (both are required). The table puck may be programmed using the PUCK command on device 3. The digitising table input is interpreted either using the Table Monitor system, or by reading the table directly. The former allows the table to be set in stream mode, giving smooth cursor tracking.

To use the Table Monitor, a table monitor process must be started, using program STARTMON. If the 'named monitor' option is used, then logical name LSL\$MONITOR\_TABLE must point to the serial line. In addition, if the table is anything other than a standard ALTEK, then logical table LSL\$TABMON\_ROUTINE (or LSL\$TABMON\_ROUTINE\_<terminal> for named monitor) must point to a suitable decoding shareable image. This logical name must be available to the table monitor process, and so should be in the group or system logical name table. If stream mode is used, to allow smooth tracking using the lowest numbered button, then the lowest acceptable stream rate above 4 points per second should be used. If set too high, then the table monitor will use large quantities of system resources, if too low, then buttons other than the 'tracking button' will repeat

if held down.

If logical name LSL\$MONITOR\_TABLE is set up, but LITES2 determines that no table monitor process exists, the table will be accessed directly. This does not allow stream mode or smooth tracking.

The tracker ball is activated automatically, and the LITES2 cursor will follow the ball movement without need for any button presses.

Before the buttons can be used, they must be defined as a PUCK on device 4. This defines the number of buttons that are to be used. The individual buttons can be programmed using MACRO commands as usual. A typical command file to do this is attached as an appendix.

# APPENDIX A

# Button Puck

The following is an example of a file that sets up the HRD buttons as a puck. It should be called LSL\$LITES2CMD:HRDBUT.LCM

```
! Definition of HRD function buttons
!
MESSAGE *** Reading HRD function button macros ***
! first define puck
PUCK 4 16 FB
! now define the contents of each FB
MACRO FB1
                FIND
                               ENDMACRO
MACRO FB2
                START
                              ENDMACRO
MACRO FB3
                END
                              ENDMACRO
MACRO FB4
                ABANDON
                              ENDMACRO
                WINDOW MAP
MACRO FB5
                              ENDMACRO
                              ENDMACRO
MACRO FB6
                START END
MACRO FB7
                CURVE
                               ENDMACRO
MACRO FB8
                REMOVE
                              ENDMACRO
MACRO FB9
                PREVIOUS
                              ENDMACRO
MACRO FB10
               NEXT
                               ENDMACRO
MACRO FB11
                INVISIBLE
                              ENDMACRO
MACRO FB12
                CONTINUE
                              ENDMACRO
                GET 1
MACRO FB13
                               ENDMACRO
                GET 2
MACRO FB14
                               ENDMACRO
MACRO FB15
                GET 3
                               ENDMACRO
MACRO FB16
                ABANDON
                               ENDMACRO
```