

*Laser-Scan Ltd.*  
*Software Product Specification*  
*LSLSYSTEM Package*  
*(Laser-Scan System Software Support Package)*

*LAMPS V4.3 - 25-Feb-1994*

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## 1 DESCRIPTION

The Laser-Scan system support software package (LSLSYSTEM) is assumed to be present by all LSL software components. It includes environment setup command files, run time library support, supplementary system utilities, and utility programs needed by more than one package. It provides the underlying environment to the applications packages that make up the Laser-Scan Automated Map Production System (LAMPS), and the XGIS layered GIS products of Horizon and Metropolis.

The programs and libraries of the LSLSYSTEM package are documented as part of the various application packages which use them. In particular, the user is referred to the MAPPING package documentation for general environment information, notably the "LAMPS Environment Guide".

## 2 FACILITIES

The following facilities are included in the LSLSYSTEM package software.

1. The main component of LSLSYSTEM is the LSL run time library LSLLIB.OLB, which is also provided as a shareable image file LSLSHR.EXE. This library is not for direct customer use, but it is referenced by other standard LSL libraries, eg LSLFRTLIB, and is accessed as a shared image by most LAMPS applications. Use of the LSLSHR shared image results in smaller image size for LAMPS programs, better sharing of memory, and ease of installing modifications and upgrades to LAMPS software.
2. Automated software installation procedure LAMPSINSTALL allows installation of LAMPS software on new customer computers, using a customer-specific issue tape generated at Laser-Scan. Note that this procedure is intended for use by a LSL software engineer. LAMPS is not customer-installable. Included in the LSLSYSTEM package are template command files for LSL environment setup, both as a layered product, and as a turnkey system.
3. Automated software upgrade procedure LSLUPDATE allows upgrade by customer of existing LAMPS and XGIS software packages on existing systems.
4. Various support utilities are included in LSLSYSTEM as they are needed by more than one LAMPS application package. These include the SD and SI set default directory utilities, and the MLOAD microprocessor loader.
5. Various unsupported utilities such as those for number conversion (CALC, CVT, ERROR) and system inquiry (QUO) are provided as they have been found to be generally useful. Note that these are not part of supported LAMPS software, but are supplied "as is".
6. Various file management utility command procedures (FREE, MV, NV, PROTECT, REPEAT, OPER) are provided as they have been found to be generally useful. These include template command files for a turnkey operator function for system backups etc. Note that these are not part of supported LAMPS software, but are supplied "as is" as examples.

7. A help library UTILITIES.HLB is provided as outline documentation for some of the above utilities.
8. A package-specific initialisation file LSLSYSTEMINI.COM is provided to set up symbols for the above utilities. See this file for an annotated list of programs and command procedures.

### 3 *PREREQUISITES*

#### 3.1 *Hardware Prerequisites*

- \* Any DEC VAX, MicroVAX, VAXstation or Alpha AXP computer supported by the current version of OpenVMS.
- \* At least 2MB available disc space for software, plus sufficient for data files,
- \* At least 4096 pages working set per process for efficient use,
- \* Any DEC-compatible alphanumeric terminal.

#### 3.2 *Software Prerequisites*

OpenVMS VAX Version 5.5-2, or OpenVMS AXP version 1.5 (or higher version, assuming continued upwards compatability by DEC), concurrently with other interactive and batch processes.

It is recommended that the reader becomes familiar with the LAMPS Environment Guide which outlines in greater detail the hardware and software environment required by the LAMPS package as a whole (of which LSLSYSTEM is the kernel).

#### 3.3 *Growth Considerations*

The minimum hardware and software requirements for any future version of this product may be different from the minimum requirements for the current version.

### 4 *SUPPORT LEVEL*

LSLSYSTEM is a fully supported Laser-Scan standard software product.