



# LAMPS –

LASER-SCAN'S AUTOMATED MAP PRODUCTION SYSTEM



LAMPS provides the technology to link a number of hardware and software products into a totally automated mapping facility.

LAMPS consists of modular software packages which can be used individually or in any combination. These modules cover data capture, verification, quality control, restructuring and presentation. LASERTRAK, VTRAK, IMP and LITES are all compatible systems which combine to produce maps and digital data handling that are tailored to user requirements. But as well as providing a complete mapping capability, they can be utilised within an existing data base management system for increased performance.

LITES (Laser-Scan Interactive Editing System) provides an editing and manipulation capability, allowing the user to produce detailed digital maps for specific applications. These functions can be carried out on newly digitised map data or with digital maps already held on computer. Its workstations are a combination of a graphics screen and digitising table. Modifying an existing computer system to use LITES is one option, whilst the alternative involves installing a customised one. Operations can be carried out either fully automatically, interactively or manually on map features, and their attributes. Operation is by command menu and cursor, as well as keyboard

instruction, which allows for a wide variety of user routines and control procedures.

IMP (IFF map processing package), provides the utilities needed to manipulate data files. This ability allows you to make full use of the data held on computer. For example, files can be merged to form new maps, or split into part maps. They can also be clipped to an exact rectangular outline in map space and sorted into a logical order of overlays and features for output to magnetic tape. Processing the information in this way simplifies surveying and statistical tasks. At no stage is there any compromise on quality, or efficiency.

Laser-Scan's PLOTTING utility can drive a wide variety of pen, electrostatic and film plotters. All the major products from CalComp, Schlumberger/Benson, HP, Kongsberg and Laser-Scan amongst many others are compatible. The CONVERT package also allows you to use a number of transfer formats including NTF, DLG, OSTF, SIF, Moss and Informap.

The ability to implement a system specifically for a user's needs makes LAMPS economic to install. Compatibility and ease of use means that LAMPS adds up to a flexible computer assisted, high quality mapping system.

## Laser-Scan

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# TECHNICAL SPECIFICATIONS

## LAMPS – LASER-SCAN'S AUTOMATED MAP PRODUCTION SOFTWARE

Laser-Scan offers a comprehensive range of automated software systems for map data capture, data verification/quality assurance, further data processing and plotting. Such systems create, update and manipulate digital map databases in vector format in a simple, flexible and cost-effective way. All Laser-Scan systems are compatible with DEC, VAX, MicroVAX or VAXstation systems.

### HIGHLIGHTS

- Optimised system for mapping – from existing maps or photogrammetry
- Suitable for data conversion or map production
- Ideal for map compilation from stereo-model digitising
- Flexible map scales, coding and display can be handled
- Impressive optional integration of raster backgrounds and vector foregrounds
- Powerful text handling capabilities
- Stand-alone or multi-user operation
- Easy-to-use with menus, cursor buttons, keyboard, on-line help and even optional voice input
- Fast-response, spatially-optimised file structures
- Full security ensured by command journalling
- Available as complete system or as a software package
- Full installation, training and support

### PACKAGING

Three software packages come as standard and there are optional extras to tailor the facilities to your exact requirements.

The three standard packages are:

LITES – Laser-Scan Interactive Editing system for digital map data capture, correction, up-date and manipulation.

Features include:

- Simple start-up procedures
- Multi-point map registration
- User-defined line styles, symbology and text fonts
- Automated edge-match options along arbitrary boundaries
- Hierarchical feature selection
- Pan and zoom display facilities
- Data search/modification by feature, arbitrary region or whole file

IMP – IFF Map Processing package – a collection of over twenty utility programs to perform useful map processing operations. This range is being increased continuously and users are always kept up-to-date.

Typical IMP utilities include:

- Merge/Split – digital maps can be merged to form new maps or split into part maps
- Editor – simple non-graphic editing (without the use of a graphics work-station) is possible using the keyboard editor
- Co-ordinate transformations – this program converts map co-ordinates between latitude and longitude representation into over twenty supported map projections. For geodetic work, facilities are available to transfer co-ordinates between different geodetic spheroids
- Clipping and sorting – maps can be clipped to an exact rectangular outline in map space and sorted into hierarchical or other logical orders of layers or groupings for output to magnetic tape
- Point filtering and smoothing – data can be generalised or enhanced to suit different display requirements and scales of manipulation
- Report generation – facilities are available to generate statistical reports on the contents of digital maps
- File comparisons – differences between files can be used as a confidence check, for an edit log or for updating

PLOTTING – to drive many industry standard plotters such as pen and colour electrostatic devices from suppliers such as CalComp, Hewlett Packard, Schlumberger/Benson and others. Facilities include:

- User-defined scale, position, rotation
- User-defined use of symbols, text fonts, line styles and colours held in associated symbol libraries and feature representation tables
- Feature selection on the basis of its serial number or any of its multiple attribute codes
- Automatic feature labelling with its serial number or any of its multiple attribute codes
- On-line help commands for operator assistance

Optional additional packages offer facilities for data structuring, polygon handling, transfers to most AM/FM and GIS systems and full Flowline Management.

## Laser-Scan

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