

ROAD MEASUREMENT DATA ACQUISITION SYSTEM

ROMDAS

Volume 3 No. 2

November 2001

WELCOME

2001 has been another year of growth for ROMDAS. We are pleased to have supplied over 130 ROMDAS systems to over 40 developed and developing countries.

The continued growth of ROMDAS reflects its unique position as the most cost effective way of collecting data for road management. With our commitment to research and development we are able to offer the most complete solution for road data collection and data management.

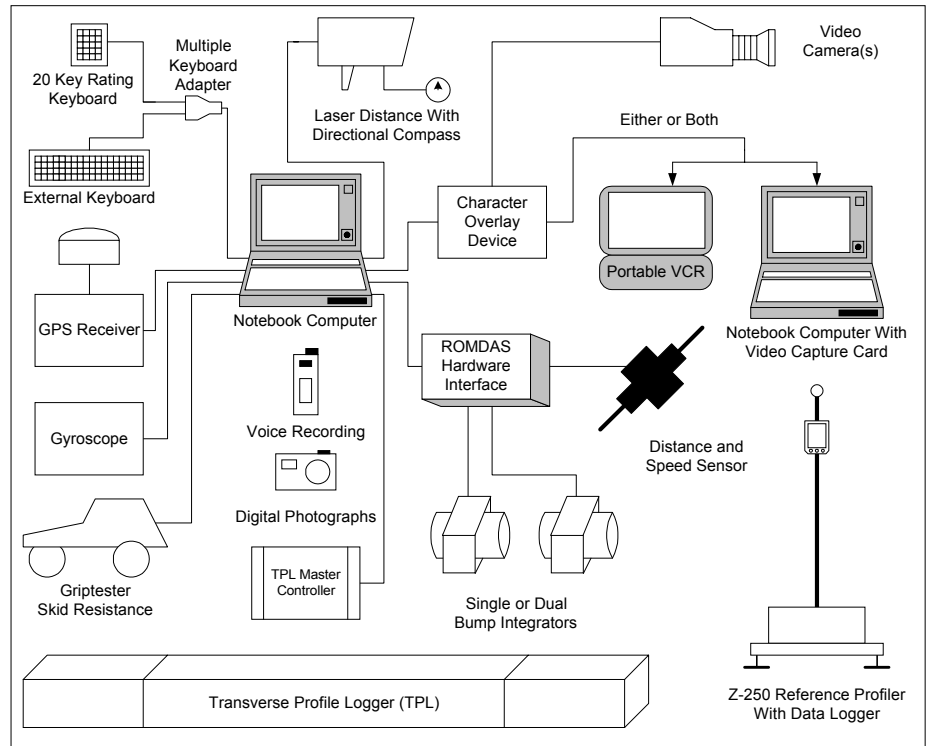
The range of ROMDAS instruments are shown to the right. A basic system for collecting roughness data starts at just over \$USD 5500, while a complete system for roughness, video, rating and rut depth is approximately \$USD 30,000. The modular design of ROMDAS allows users to upgrade over time

MAILING LIST UPDATE

We are updating our mailing list. To continue receiving our newsletter please contact info@romdas.com, fax 64-3-528-8213, or PO Box 348, Motueka 7161, New Zealand.

Z-250 REFERENCE PROFILER

We are pleased to announce the release of our Z-250 Reference Profiler. The Z-250 is used to accurately measure the road profile and calculate the IRI.



The Z-250 consists of a measurement unit and a hand-held data logger. The measurement unit contains a precision inclinometer which measures the elevation change between the two 'feet' on the measurement unit. These feet are spaced at 250 mm intervals.



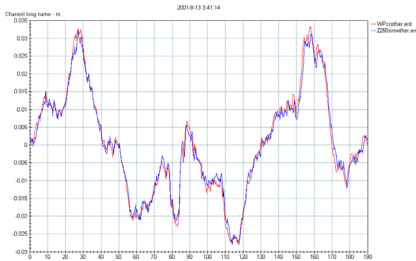
Measurements are made by 'walking' the unit down the road.



The data logger is a standard Pocket PC (eg Compaq IPaq or Casio Cassiopeia) which is connected to the measurement unit via a serial cable. Custom software records the elevation profile as well as the IRI. The data are stored for downloading to a computer where it can be further

analysed using the industry standard RoadRuf software.

The Z-250 was tested against an ARRB TR Walking Profiler, a recognised Class I calibration instrument. As shown in the figure below (from RoadRuf), the Z-250 gave almost identical results to the ARRB Walking Profiler, although it is much slower to operate.



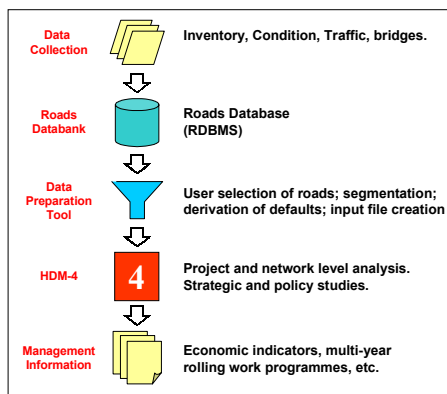
The Z-250 is available for \$USD 3200, including all hardware, the data logger, and software.

NOTE: The Z-250 is not available for sale to the USA

HDM-4 INFORMATION MANAGEMENT SYSTEM

DCL has been closely involved in the development of the HDM-4 software. Dr. C.R. Bennett, owner of DCL, was the Team Leader of the HDM-4 Technical Relationships Study.

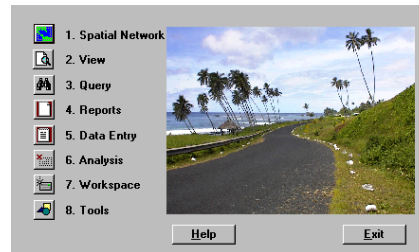
The figure below, presented by Dr. H. Kerali at the 2001 Seattle PMS Conference, shows where HDM-4 fits into the framework of road management.



ROMDAS is the ideal tool for data collection, and this is the purpose for which many of our systems have

been supplied. In response to requests from our users we have developed software to store and manage data and for preparing HDM-4 run files: the HDM-4 Information Management System (HIMS).

The HIMS is fully integrated with ROMDAS but goes beyond ROMDAS: It is designed to allow the user to store any type of data required for road management, from traffic to pavements to inventory to bridges.



Among its features are:

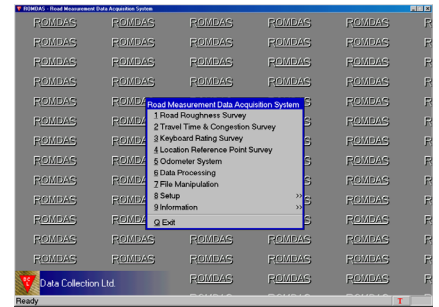
- **Embedded GIS.** No need for an external programs such as MapInfo. This allows the user to link and access data via a map.
- **User Definable Tables.** The user can define the data to store, field names, etc. The HIMS can store any type of data.
- **Sectioning.** Multiple options for creating homogenous sections.
- **Transformations.** Data are transformed to the homogeneous sections.
- **Reports.** Totally user customisable reports and charts
- **Data Manipulation Tools.** Powerful tools for manipulating data including lookup tables, formulas and filters.
- **Data Display.** Integrates video and other data allowing user to 'drive' down the road and visualise the condition.
- **Shortest Path.** Ability to analyse network for shortest path

The HIMS is available for evaluation by contacting DCL. The full release will be in the first quarter of 2002.

ROMDAS for WINDOWS

The ROMDAS for Windows (ROM-WIN) software is in the final stages of

Beta testing. It is scheduled for release in the first quarter of 2002.



The software follows the general design of the existing MS-DOS application, although we have used the opportunity to refine some aspects of the interface, data storage and manipulation.

The survey output is stored as Access .mdb files and is compatible with both the ROMDAS Road Management System (RMS) and the HIMS.

A beta version of the ROM-WIN software is available for download from www.ROMDAS.com.

VIDEO ANALYSIS

Version 3 of the ROMDAS Road Management System (RMS) will be released this month. This new version includes the ability to estimate pavement widths from videos and enter visual distresses during video playback.

FURTHER INFORMATION

A free comprehensive CD is available with software, catalogue, manuals, working papers, etc. To receive a copy please contact us at:

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