



# YELLOW ACTIVITY MONITORING SYSTEM



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# OVERVIEW

The Yellow Activity Recording System is a low-cost, low-maintenance system that aids with vehicle fleet management. This rugged, fully electronic system provides a means of easily and accurately monitoring the working patterns of plant, heavy or light vehicles, cars, delivery vehicles or any other mobile equipment.

Activity data is recorded, stored, transferred and processed with little or no human intervention. This means that there is very little chance of data loss, corruption or tampering. Accurate reports of fleet or individual vehicle activity may be easily produced using the Windows PC-based software.

The system has been developed to replace the ageing, maintenance-intensive, clockwork and electro-mechanical vibration recorders and to greatly enhance the processing of vehicle operation information.

## WHAT CAN IT DO FOR YOU?



**Monitor the operation** of your fleet **24 hours a day, 365 days a year**. By using the YAMS you can keep a check on daily work starting and ending, lunch and tea breaks, unscheduled or unauthorised stoppages, excessive idling, out-of-hours operation and other operational activities.



**Identify effective working patterns**. The accurate system timing coupled with extensive graphic and text reports will allow you to observe standby time relative to work time, identify vehicle activity cycles, encourage effective operation, determine route efficiency, improve shift usage and efficient use of available hours, compare operator performances and make many more judgements on vehicle usage. Work categories may also be recorded.



**Implement preventative maintenance** using the reports that predict service dates for the monitored vehicles. The YAMS handles multiple grades of services as well as fully flexible service cycles. It will be a **guide to your decision-making** regarding what spares to order when, and when to bring a vehicle in for servicing.



**Maintain a log book of ALL vehicle activities**. The YAMS allows you to keep a unified record for each vehicle, not only of work activity but also of fuel fillings, services, operator changes, location changes, project activity, hiring contracts and more.



Ensure that the **financial aspect** of each vehicle makes sense. If you're hiring, you will have a guide for hire rate calculations, you'll be able to charge accurately for hours used and your customers will be able to see how the vehicle was used. As an owner, you will be able to keep track of each vehicle's **financial viability and performance**.



Access **reports and graphs** that quickly highlight **exactly the information** that you require. Get the overall picture with averages, totals and percentages for single or multiple vehicles on a day by day basis, or over a specified period. Or, with a few mouse-clicks, you can produce event reports or graphs of the minute-by-minute activities of a single vehicle. Facilities to export data to third-party spreadsheets and databases are also provided.



**Monitor your outlying depots and fleets** from a central location. No longer will this be an administrative nightmare. Activity information, vehicle details and log books may be easily transported by disc, e-mail, WAN or LAN, enabling a head office to easily **see the "whole picture"**.



**Integrate** the management and monitoring of your entire fleet with **one, easy-to-use system**. Whether you operate heavy plant, light plant, delivery vehicles, motors, conveyors, stationary plant, or a mixture of these, all units can be monitored by the Yellow system.

Finally, operation of the entire system will **save you time and money**. It has been designed to ensure low maintenance, rugged resistance to wear and tear, ease of installation and operation and overall user satisfaction.

## THE COMPONENT PARTS



### Activity Recorder



This is a small, rugged unit that is mounted on any surface that experiences vibrations while working. It is dust- and water-resistant, tamper proof and UV protected.



The unit is self-contained. It operates for up to a year using a pair of PM3 9volt batteries.



In a simple, once-off operation activity recorders are user-programmed with a unique registration number. This number is stored in the recorders indefinitely and is used to identify data belonging to each vehicle.



The unit contains a clock/calendar and stores the time and date and activity information when any of the following events occur:

- Presence of work vibrations - stored as the average intensity during each minute
- Changes in state of an external voltage - used to monitor ignition or engine running time
- Changes in the position of a 12-position dial - used by the operator to identify the type of work (or work code) currently being carried out (model VR081R only)



The resolution of recording is 1 minute, for up to 114 working hours (ten 10-hour working days). Memory overflows by over-writing the oldest events first. Thus the unit always contains a record of the most recent activity.



Status indicators show whether the unit is idle (standby) or has experienced work vibrations during the past minute.



Data is downloaded from the Activity Recorder using a Data Gatherer. This unit is inserted into the socket at the bottom of the Activity Recorder and held in place for a few seconds while the data transfer takes place.



The Activity Recorder is available in two models:

- VR081 - The standard unit
- VR081R - The standard unit with a dial switch for recording work codes.



### Data Gatherer



The Data Gatherer is a pocket-sized unit used to collect activity data from one or more Activity Recorders. The unit is dust- and water-resistant and is tamper proof.



The Data Gatherer is quick and easy to use. All activity data is extracted from an Activity Recorder by simply pressing the Data Gatherer into the Activity Recorder adapter socket for a few seconds. A similar operation transfers all the collected activity data to a PC via a Desk Reader.



Built in self-tests, three status indicators and a beeper ensure that the user is always informed of the state of the unit and its current operation.



The Data Gatherer may collect data from at least 16 Activity Recorders. Each download of data is marked by the Activity Recorder's registration number. Thus the correct identity of the data is ensured. Multiple downloads from a single Activity Recorder may also be made.



## Desk Reader



The Desk Reader is a small unit that connects to a PC's COM port and provides a communication channel to the Data Gatherer.



## PC-based Software



System software runs under Windows (95, 98, 2000 or NT) and is used to collate and report on the activity of all vehicles being monitored.



Intuitive operation flow, simple set-up procedures and context-sensitive help ensure that the software is easy to operate and may be used with confidence.



A database of all the vehicles to be monitored, including their details (e.g. fleet allocation, depot location etc), is set up. Multiple databases may be configured.



A wide range of reports is available. These include single and multiple day, single and multiple vehicle, comparative and predictive maintenance reports.



Graphs of daily activity (including the traditional tachograph-style chart) and period activity may be quickly produced and printed.



Facilities are offered for the transfer of vehicle data between PCs, thereby permitting centralised fleet activity monitoring and reliable data backups.



Data may be exported for inclusion in third-party spreadsheets and databases.



Continued development ensures that customer software requirements are met, wherever possible.

## FEATURES OF THE SYSTEM



Very low operating cost (battery replacement only). No paper, no charts.



Rugged design means high system reliability. Maintenance costs are almost non-existent.



Easy to install and operate. No specialised installation equipment or training is required.



Fully electronic data transfer. There is little chance of human error, no tampering, data loss or sacrifice of accuracy.



Data is easy to manage. There are no papers, no loose charts, no filing requirements, and there is no misplaced information.



Detailed reports, history and graphs for fleets or individual vehicles, single days or periods are instantly available.



Data exporting to third-party programs.