



# 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 offers unified, cross-vehicle/plant activity monitoring with the benefits of low purchase price, easy user installation, low maintenance and running costs and overall ease of operation.

## 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, utilisation, efficiency and other operational activities.

Ensure that the **financial aspects** of vehicle operation makes sense. As a contractor, you will have a detailed overview of plant operations, enabling you to calculate costs and enhance utilisation. As an owner, you will be able to keep track of each vehicle's **financial viability and performance**. YAMS will give all parties the ability to monitor and optimise operation patterns and thereby save money through improved planning, fuel usage and operator instruction.

**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 (including out-of-service and breakdowns) may also be easily 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 just-in-time ordering of spares, workshop utilisation and when to pull vehicles 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.

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

**Monitor your outlying depots and fleets** from a central location. Activity information, vehicle details and log books may be automatically or manually distributed (by flash drive, email, WAN or LAN), enabling a head office or consultant 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/earthworks 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



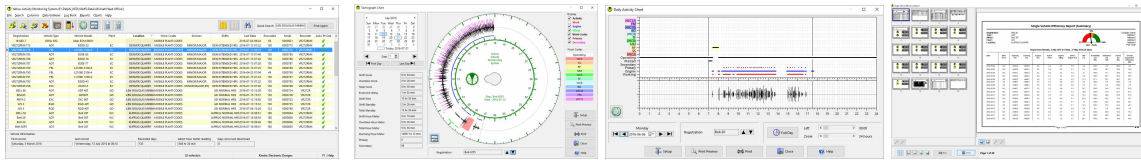
## Activity Recorder

- ⚠ A small, rugged unit that is user-installed on any surface that experiences vibrations while working. Dust- and weather-proof, tamper proof and UV protected.
- ⚠ The unit is self-contained, operating for up to two years using a pair of readily-available, PM3 9volt batteries.
- ⚠ In a simple, once-off operation activity recorders are user-programmed with a unique registration number. This number uniquely identifies the data belonging to each vehicle being monitored.
- ⚠ The unit contains a clock/calendar and stores the time and date and activity information of the following inputs:
  - Work-induced vibrations – stored as the average intensity during each minute
  - Engine operation – records engine running time, creating a minute-by-minute hour meter function
  - Position of a 12-way dial switch - set by the operator to identify the user-defined current work category (e.g. operator, type of work, breakdowns etc) (R-suffix models)
  - Up to two integrated pushbutton cycle/tip marker inputs (M-suffix models). The pushbuttons are also available on external, remote units (MX-suffix models)
- ⚠ The resolution of recording is 1 minute with a memory span of up to 160 10-hour working days .
- ⚠ 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.



## 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. Connection to the PC is via a USB lead.
- ⚠ 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 multiple 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.



## PC-based Software

- 🔧 System software runs under all current Windows operating systems and is used to collate and report on the activity of all vehicles being monitored.
- 🔧 Intuitive operation flow, simple set-up procedures and extensive 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 reports, single- and multiple-vehicle reports, detailed KPI information, running hour meter and predictive maintenance reports.
- 🔧 Charts of daily activity (including the traditional tachograph-style chart), period activity and annual levels may be quickly produced and printed.
- 🔧 A logbook is kept for each vehicle. Automatically generated entries are made for downloads, fleet and location re-allocations and battery status warnings. User entries can record fuel fillings, service details, operators, hiring, project allocations and general notes.
- 🔧 Facilities are offered for the manual or automatic transfer of vehicle data between PCs, thereby permitting centralised fleet activity monitoring and reliable data backups.
- 🔧 Data may be exported for inclusion and user-processing/manipulation in third-party spreadsheets, databases and ERP systems.
- 🔧 Clear information is given on data collection operations including the vehicles updated, activity recorder battery status and memory usage.
- 🔧 Continued development ensures that customer software requirements are met, wherever possible.

## FEATURES OF THE SYSTEM

- 🔧 **Very low operating cost.** Battery replacement every 24 months is all that is required.
- 🔧 **High reliability.** The system has been designed to operate under harsh conditions. Maintenance requirements are almost non-existent.
- 🔧 **Easy to install and operate.** No specialised installation equipment or training is required.
- 🔧 **Accurate, tamper-proof data.** All data transfers between the components require very little human intervention, resulting in highly accurate system monitoring.
- 🔧 **Backups and Transfers.** Collected data may be easily backed-up and restored, or transferred to another computer for parallel or centralised monitoring.
- 🔧 **Reports and charts.** Detailed and summary reports, histories and graphs for individual or multiple vehicles, for single days or date ranges, may be easily created.
- 🔧 **Data is easy to manage.** There are no papers, no loose charts, no filing requirements, and no forms to be filled in. You can have confidence in the reliability of the monitoring of your fleet.
- 🔧 **Data exporting.** Automatic or manual data exporting facilities mean that the collected data can be utilised by company ERP, database and spreadsheet systems.
- 🔧 **Good Service.** Dedication to quality design, manufacture and support ensure that you receive personal, prompt and efficient attention.