

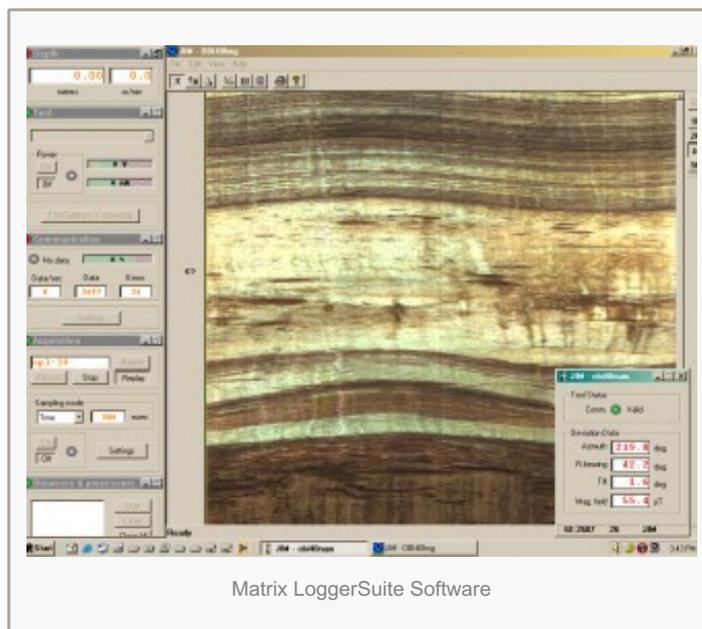
Matrix Data Acquisition System

mountsopris.com/items/matrix-data-acquisition-system/

Mount Sopris offers the most versatile data acquisition system available – the Matrix™ data logger. Able to accommodate multiple telemetry systems, the Matrix logger can be used with all Mount Sopris probes, past and present, as well as many 3rd party tools. This versatility, combined with its compact size and dependable performance, has made Matrix the most popular logger in the industry.

Matrix Logging Console

The Matrix Logger acquisition system is based on modern electronics design in which software control techniques have been used to the best advantage. The hardware incorporates the latest electronic components with embedded systems controlled via the specially developed LoggerSuite Windows interface program.



Matrix LoggerSuite Software

The software takes advantage of the latest Microsoft Windows operating systems, including Windows 8, (64-bit systems). These multi-tasking software platforms can accommodate all the tasks necessary for maximum data security and ease of operation.

Many new features have been added to the LoggerSuite software and hardware, including:

- New binary data format with .TFD extension
- Dual DSP (Digital Signal Processors) to handle data communications, pulse tool signal detection and analog signal measurement and generation
- Programmable Tool Power Supply
- Tool Voltage and Current monitoring
- USB interface to the PC for higher digital tool data rates allowing faster logging
- The system design philosophy is unique in two respects. First, it has been built to accommodate several generations of single conductor, Mount Sopris tool types, as well as single and multi-conductor ALT tools. And second, it is totally software controlled.



Matrix Logger in use on [MX Series Winch](#)

The basic system design criteria are as follows:

- Windows 8, Windows 7, Windows XP or Windows Vista operating systems platform running in 32-bit or 64-bit drivers.
- Rugged, fault tolerant electronics with dual DSP processors.

- Easy to use, on-screen graphical user interface -The LoggerSuite Dashboard- with self-diagnostic features, system configurable through screen dialog boxes, with minimal technical knowledge needed by the user.
- Wireline and winch flexibility – runs on most coax, single and multi-conductor wire lines with compatible tools.
- Depth encoder flexibility – compatible with most 12V or 5V AB Quadrature and pulse shaft encoders, and configurable for any combination of wheel/depth pulses per revolution.
- All Matrix Consoles come with latest LoggerSuite software. Latest version of this software package can be downloaded from our [Software Downloads Page](#).

Connections on the side of the Matrix logger, along with the versatile software allow users to connect to customer winches (made by Mount Sopris or others), data acquisition computer via USB, and AC power. Also, there is a mud plug connector. The 18-pin connector (lower-left in above picture) carries depth and signal information and can handle up to four wirelines, armor, and 2 of 4 wire depth encoders.

