

A Review of the Vetronix CDR System  
<http://www.angelfire.com/ny4/Anspage/page3.html>

## CDR System by VETRONIX



## How the System Works



The system works as a "computer separate from the automobile's computer." Its true and actual purpose is to record automotive crash data. "In order to improve automotive safety through better real world data and testing materials, GM introduced enhancements to its vehicles which will enable researchers to retrieve pre-crash data from a vehicle's air bag Sensing and Diagnostic Module (SDM)."

The following is taken directly from a website that was used to obtain information for the Crash Data Retrieval System.

USES OF EVENT DATA RECORDER INFORMATION: There are three categories of uses for the data that can be obtained from the on-board data recording capability.

One is improving air bag sensing systems such as sensor calibration adjustments to desensitize the SDM's response to relatively rare events such as those produced by small rocks or debris striking the underside of the vehicle with high impulsive energy.

Another is for the improvement of roadway design that would include side slopes, ditches, and safety fences located along the roadside (e.g. guard rails, crash cushions, light poles, breakaway signs, etc.). It can also be used to develop appropriate design tests and standards, thus making the objective data about crashes (pre-crash vehicle speed, brake use, crash severity, etc.) an invaluable tool.

The third category is meaningful motor vehicle regulations. Recorded event data can help the NHTSA meet its responsibility for researching and using appropriate motor vehicle regulations in many ways. Not only will pre-crash data be useful for the Agency's crash avoidance research work, the objective data recorded during a crash will be a major improvement for crash worthiness related activities.

We consider the benefits on-board recorders can provide using the Haddon matrix that divides the crash into three segments and looks at the human, vehicle and environmental conditions of each to be very valuable.

Technology allowing vehicle safety researchers to collect objective data on crashes would open the door to a new generation of understanding. The opportunities are immense since there are approximately 18,000 tow-away crashes per day.