

Notre Dame University Fire Department Effective Alarm Monitoring of New and Old Technologies



With three of their four signaling systems hidden in a back room, the Notre Dame University Fire Department needed an alarm monitoring system that would accept signals from vastly different technologies while providing the benefits of new technology. Keltron consolidated all four signaling technologies into a user-friendly operations display.

Overview

In this project, the Keltron DMP703 alarm monitoring system was used as a coded signal decoder. In addition, it needed to monitor RS232 serial data from the printer output of three separate fire alarm control panel (FACP) network controllers - one each from Pyrotronics, Simplex, and Notifier.

The serial data is displayed and printed by the Keltron DMP703. There is no provision for accessing the DMP703 database for serial data events. Programmed messages and output controls are not supported. The operator is required to acknowledge serial data events. Acknowledgment silences the audible signal and then clears the event from the display in the same manner as for the coded signal decoder events.

How it works

The operation of the coded signal decoder mirrors Keltron's DMP703 standard operation. The serial data connections are unidirectional, from the fire alarm network computers to the Keltron DMP703 receiver. The DMP703 does not transmit any ACK or NAK characters to the fire alarm network systems. The DMP703 does not transmit any XON or XOFF characters for flow control. Nor are there any hardware handshakes such as CTS, RTS, DTR, or DSR for flow control.

The serial data connections for the three fire alarm network systems connect to three separate DMP703 serial data ports and are not supervised.

All serial data is converted to upper case for the DMP703 display and printer. The DMP703 automatically word-wraps the data to fit the 32-column format of the display and printer. The printer output is read from bottom to top to be in chronological order.

The top ten lines of the DMP703 display (one display page) are used to display the serial data. The bottom five lines display the touch controls and the DMP703 time and date as usual.

Each display page of serial data requires an operator acknowledge and operator clear. Serial data from the three different fire alarm network systems are always displayed on separate pages. Serial data from a single fire alarm network system will display on a separate page after a two-second delay with no additional data. Otherwise, for continuous data reception, each page will display as soon as all ten lines are filled.

Keltron develops and manufactures universally-compatible, UL listed life safety event management systems for the municipal and proprietary markets. Solutions include Ethernet signaling systems, active network radio systems, distributed multiplex systems, digital communicator/receiver systems, and direct wire systems. This document is not intended for installation or maintenance purposes. All specifications are subject to changes without notice. For more information visit www.keltroncorp.com or contact us at 781-894-8710.

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