

# Fire Department Alarm Monitoring

**The speed at which an Emergency Signal is received has a direct bearing on *Response Time*.**

Today, Municipal Fire Services are seeking ways to reduce signal transmission and processing time by taking advantage of data networks that can be used to report Fire Alarm and other life safety-related signals directly to Fire Services Communication facilities. (see [Projects-Municipal on the electronicsurveillance.com web site](#))

Not every municipality can afford a computer-aided dispatch (CAD) system and until now, inexpensive alarm handling systems (with vital dispatch information) have not been readily available.

The **Fire Department Alarm Monitoring System** from Electronic Surveillance Corporation, has been successfully implemented in several Canadian municipalities as a new service, or as an upgrade to an existing but outdated alarm receiving system. Elegant in its simplicity, easy to install and service, the ESC Alarm Monitoring System consists of three components:

- The Emergency Signal Transmitter, Model 8240, which is installed at the site, (hospitals, schools, apartment buildings). ULC listed.
- The Utility Signal Transmitter, Model 8204, a basic four-zone transmitter ideal for monitoring lift stations, reservoir levels, pumps, chlorine levels, etc. ULC listed.
- The signal Receiver, Model 8100, which is installed in the Communications facility and displays all prioritized alarm activity to the call taker/dispatcher, and prints the messages simultaneously. ULC listed.
- The Integrated Monitoring System (IMS) an alarm handling software package (optional) which instantly displays maps, site information such as floor plans, layouts and contact, as well as Standard Operating Procedures (SOP's).

The System has been designed to accommodate all of the various signal channel facilities that are used for alarm signaling, including but not limited to:

- direct connection of a twisted pair (of conductors) referred to as "direct wire" or "Class A".
- a specific protocol transportation system based on teletype technology and referred to as Digital Voice Active Control System (DVACS™), available only in Canada and limited to certain areas.
- Supervised (closed) Intra-net
- Long Range Radio Frequency

## **Company Background**

Electronic Surveillance Corporation was incorporated in 1973 as a company primarily involved in the design and production of intrusion and fire alarm controls and detection devices. Within a very short period, ESC Direct Wire alarm transmission and receiving equipment, and specifically the Series 5000, found its way into hundreds of monitoring stations and fire departments across Canada.

ESC has produced a line of alarm signaling controls that ***can transmit data in any format or protocol, over any type of medium.***

## **The New Series**

This new series of alarm transmission and receiving equipment is referred to as Series 8000. It was designed to comply with federal government and military specifications. The Series 8000 High Security transmitters are found in some of Canada's harshest environments yet they continue to communicate with the ESC Integrated Monitoring System (IMS) on a 24/7 basis.

## **The Unmanned (Volunteer) Signal Receiving Centre**

A new addition to our Receiver family has found its way into the **Volunteer Fire Department**. Left by itself in a dark room day after day, the Model 8100S Receiver Unit listens intently to any number of Fire Alarm systems connected to it over supervised signal channels. A Fire Alarm message immediately summons the volunteers through their pagers, while the alarm information is displayed and recorded at the fire hall. Trouble signals etc., are routed by the receiver to a designated service company or Public Works facility for response.

## **Signal Channel Compatibility**

In some areas, availability of signal channels is limited to twisted pair, with DVAC™ facilities being non-existent. Where twisted pair *is* available, ESC offers a two-wire, 300 baud modem (ESC Model 8425), capable of operating over 30 kilometres of standard telephone wire. This small modem is a built-in option in the Model 8240 Transmitter and is extremely tolerant to hostile environments including high levels of static discharge and line noise. It connects to one of 24 ports on the ESC Model 8050-24 Bridge Multiplexer. If more than 24 clients need to be monitored, a second multiplexer is simply connected to the first unit in daisy-chain fashion. The 8050-24 is a rack mount enclosure that can be easily installed in the Communications Room. This multi-port expander is connected to the Model 8100 Receiver.

## **How to Get Started**

Initially, we will arrange a demonstration of the system, including the optional alarm handling software. At that time, we will gather important information about the Fire Service and the municipality including:

- Full time or Volunteer Service (or a combination).
- Availability and type of signal channels,
- Routing of non-emergency signals
- Training schedule
- Normal maintenance requirements
- Availability of municipal records dealing with site information such as hydrant location, shutoffs, contacts, hazardous materials etc.
- Development of Map Display and data input by ESC, the municipality or as a shared project.
- Delivery schedule.
- Payment package

## **Payment Packages**

ESC offers three options of payment::

1. Equipment is purchased outright, taking advantage of quantity pricing for the Transmitters.
2. Receiver unit is supplied at no charge initially, and is paid for over time using the formula of an additional \$5.00 per transmitter per month. A minimum of 20 transmitters as an initial order is required.
3. Initial package is paid for in annual instalments of 30% of the package cost, over four years.

In each case, an automatic software and equipment upgrade package is charged at \$3.00 per Transmitter per month.

## **More Information**

If you require more information or would like to hear about our existing sites, simply [contact us](#). It will be a pleasure to hear from you.

## **May We Offer a Demonstration?**

ESC would be pleased to arrange for a demonstration of the Fire Services Monitoring System. Simply contact Mr. Gordon Duggan at [gord.duggan@electronicsurveillance.ca](mailto:gord.duggan@electronicsurveillance.ca) to set up a date and time.