



the standard in safety

CAN/ULC-S561-03

Installation and Services for Fire Signal Receiving Centres and Systems

What an Installation Company Needs to
Know

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CAN/ULC-S561-03

- Fire/Sprinkler Alarm Monitoring
- Canada

Agenda

- CAN/ULC-S561 Compliant Installations
– Overview
- Installation Requirements
- Communication Technologies
- Improper Installations

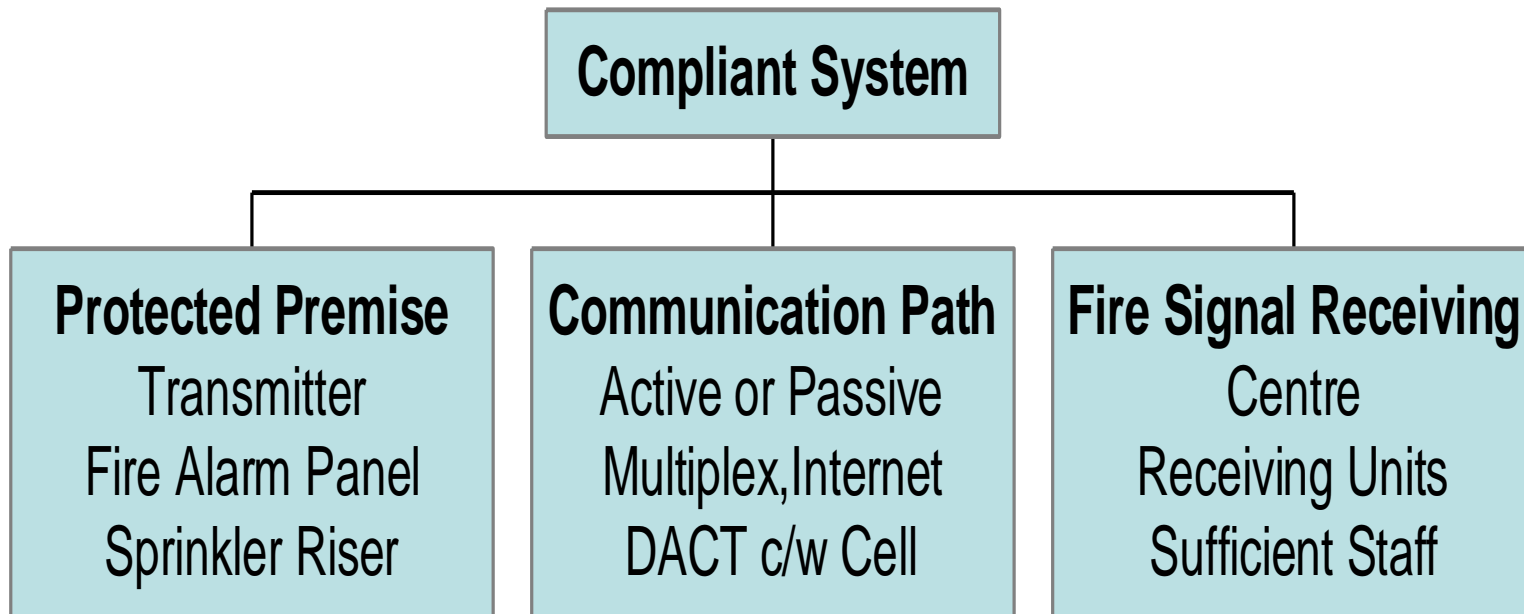


Mandated in Canada

Signals to the Fire Department

- NBC 3.2.4.7 (4)
- NFC 6.3.1.3

What makes up a compliant System?



Typical Installation



Newer Installation- Passive



Relay Boards- Fire Alarm Panel



Newer Installation - Passive



System Requirements for

- ULC Listed Transmitter (S559 Compliant)
- Electrical Permit required for 120v Supply
- Grounding of Transmitter (manufacturer's specifications)
- AC Power from a separate breaker - label
- Transformer properly installed



System Requirements for Installation

- Install CA38A Jack – No direct wiring
- Do not twist wires or EOL's under terminal screws
- Metallic conduit protection all connecting wires
- Standby Batteries (24hrs)- Dated
- Additional modules/relays properly mounted (Stand-offs, tie raps)

Qualification of Personnel

- Recognized by the AHJ
- Must have knowledge of the fire alarm panel and the interconnection with the fire alarm transmitter.
- Working on Transmitter – No Requirement

Additional requirements

- Supervised connections- (loop troubles)
 - fire alarm, fire trouble, fire supervisory
- Supervise removable terminal strips
- Monitor for AC failure
- Monitor for Communication failure
- Fire alarm signals transmitted in 60 sec.
- Dispatch on fire in 30 seconds

Communication Paths

- Active Communications-

- Internet (IP), DVACS
- No VoIP

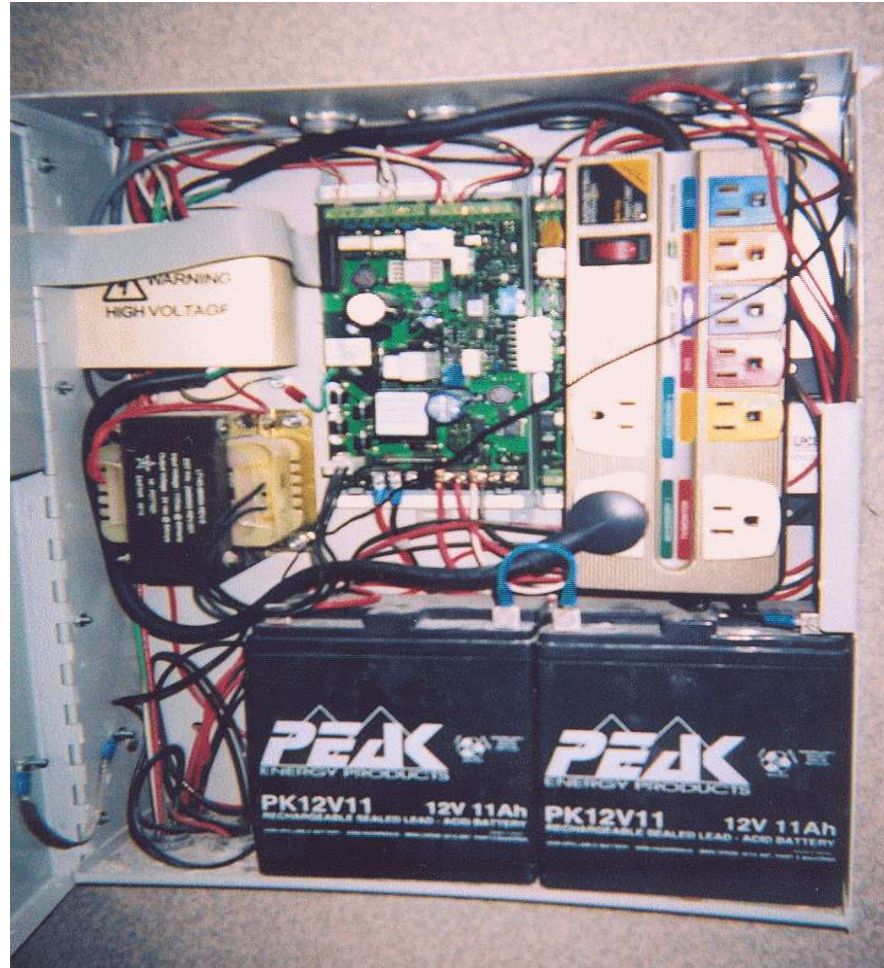
Passive Communications-

- Dual Path systems- Two technologies
- Phone Line and Cell back –up
- Phone line and internet

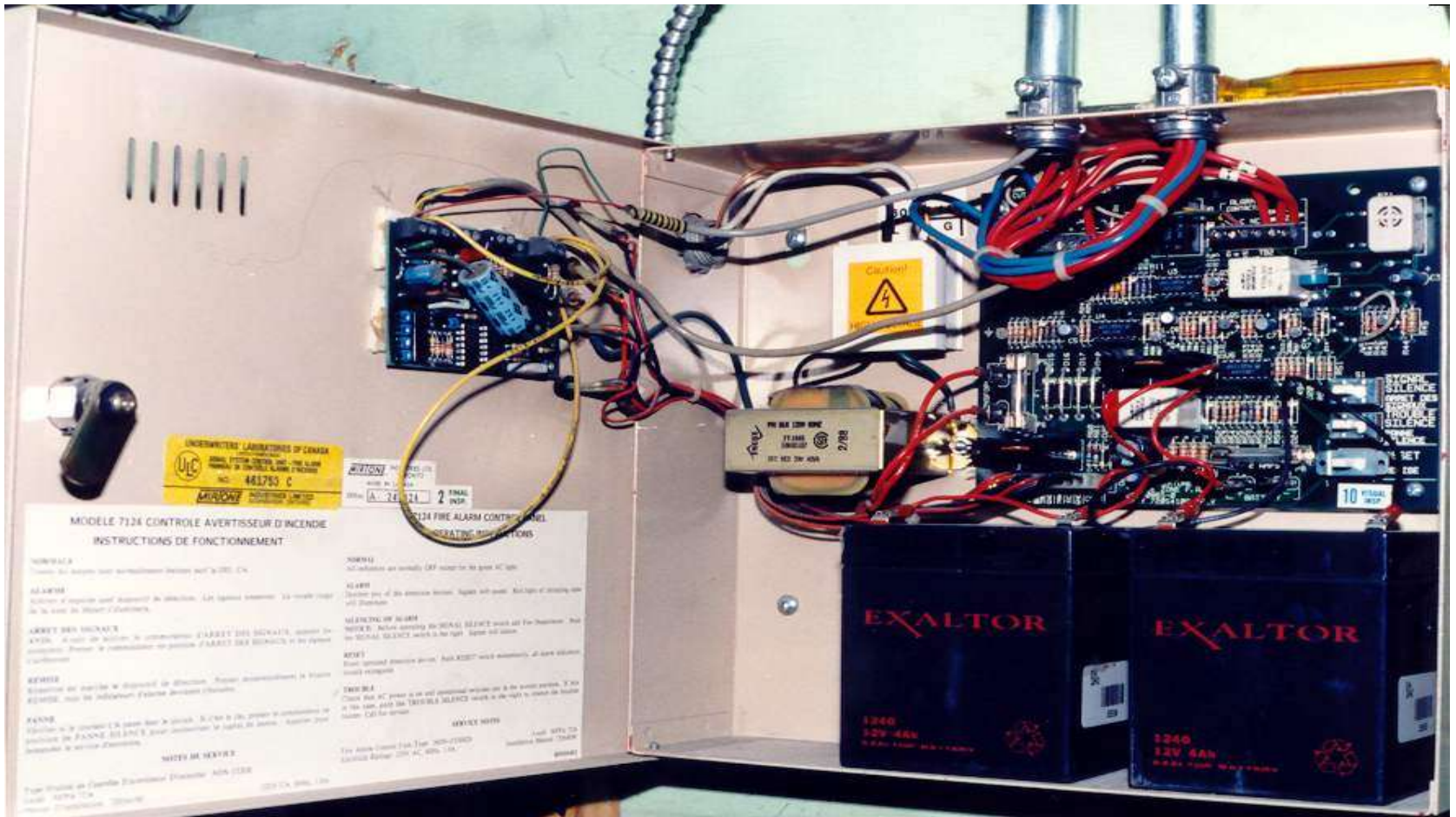
Transmitted Signals

- All signals shall be transmitted and disposition accordingly
- Fire alarm signal is always first priority
- No Verification of Fire Alarm Signals
- Ensure the signals transmitted reflect the zone tested/tripped

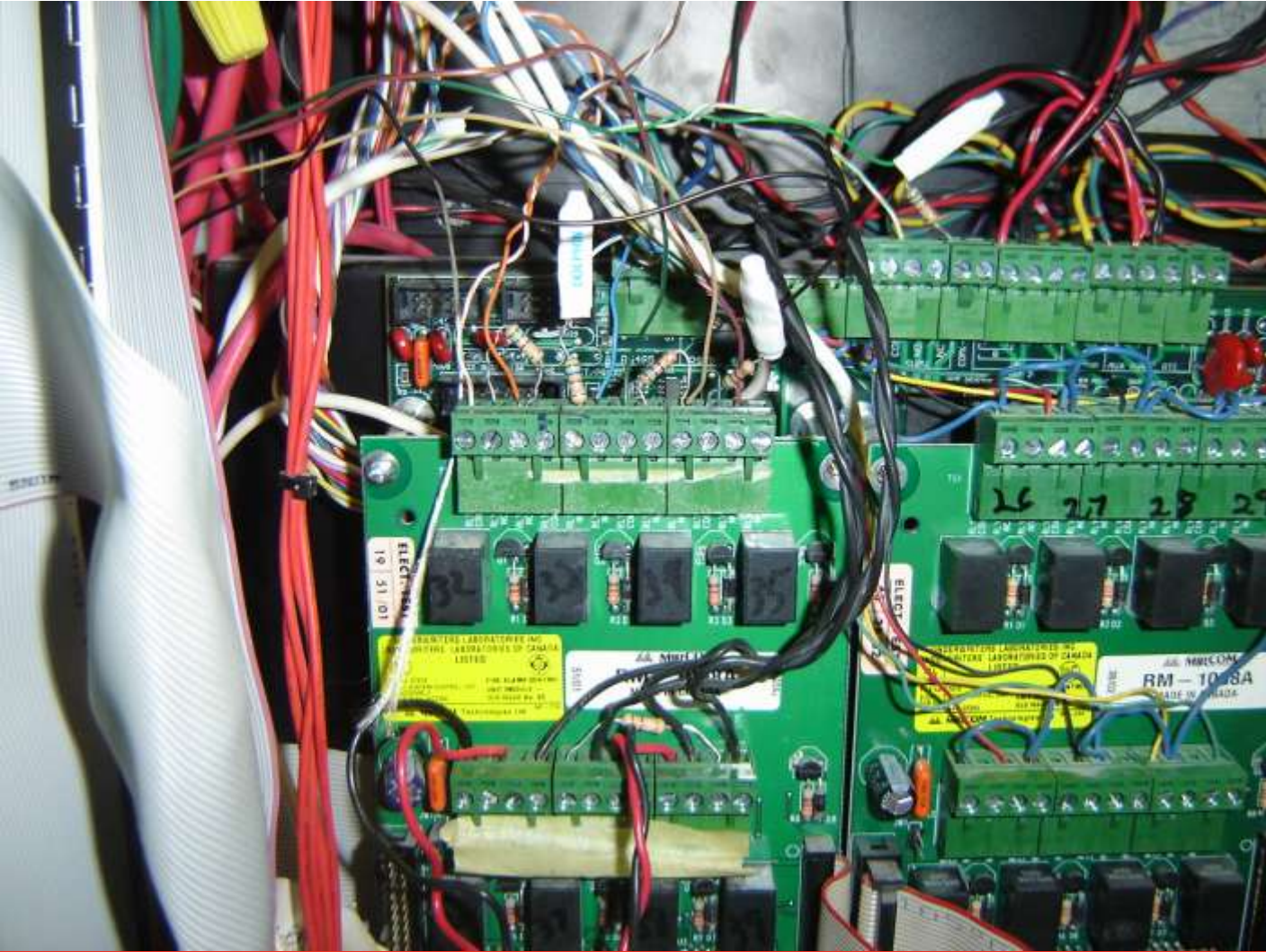
System Modifications



Adding Unlisted Relays



Removable Terminal Strip



Removable Terminal Strip



ULC Certificate for Monitoring



**Underwriters
Laboratories**

Corporate Headquarters
7 Underwriters Road
Toronto, ON M1R 3B4

Certificate Number

SHARED FIRE PROTECTIVE SIGNALLING SERVICE

This Certifies that the Alarm Companies whose names appear below are Listed by Underwriters' Laboratories of Canada (ULC) and are authorized to install, monitor, and maintain Shared Services Protective Signaling Fire Alarm Systems in compliance with the requirements in CANULC-S561 for Protective Signaling Systems.

The assignment of responsibilities as indicated in the following paragraphs shall be set out in a contract between the companies involved.

The Alarm Monitoring Company named on this certificate bears the responsibility for the monitoring of the status of signals generated by the system and for the keeping of records respecting these activities.

The Alarm Installation Company named on this certificate bears the responsibility for the correctness of the system installation, periodic testing, maintenance and repair, as well as the keeping of records respecting these activities.

It is also the responsibility of the Alarm Installation Company to confirm that the equipment used in this installation is ULC Labeled and is suitable for the application. All required service is provided for in the care contract between the Alarm Installation Company and the Occupant.

ULC makes no representations or warranties, expressed or implied, that the alarm system will prevent any loss by fire, smoke, water damage or otherwise, or that the system will in all cases provide the protection for which it is installed or intended. This certificate is evidence that the signalling devices are monitored by a ULC Listed Alarm Monitoring Company and that the installation, maintenance and service is provided by a ULC Listed Alarm Installation Company, which are subject to countercheck field inspections by ULC Representatives. This certificate is to be posted at the Subscriber's site and is valid only with a current maintenance contract.

ULC is not an insurer and does not assume or undertake to discharge any liability of the Alarm Companies or any other party for any loss, which may result from failure of the equipment, incorrect installation, non-conformity with requirements, cancellation of this certificate or withdrawal of the Alarm Company from Listing by ULC prior to the expiration date appearing on this certificate.

LISTED ALARM COMPANY					LOCATION				
TYPE OF SYSTEM	NUMBER OF SIGNAL SWITCHES								LOCAL OR RECONNECTION
	SMOKE/TEMP	SMOKE/FLOW	SMOKE/LEVEL	PRESSURE	SMOKE/TEMP	CUT OFF VALVES	PUMP/SLIP		
NUMBER OF ZONES									
TRANSMISSION MODE									MAXIMUM TERM
LISTED ALARM INSTALLING CO.					LOCATION				
SUBSCRIBER					MAINTENANCE				
					SYSTEM SHALL BE EXAMINED IN ACCORDANCE WITH NFPA-72 AND TESTED AT LEAST ONCE EACH YEAR				
					REPRESENTATIVE			DATE	

ULC Listings- Online Directories

- WWW.ULC.CA- Online Directories
 - Category Codes associated to ULC Listings
 - DAYRC- CAN/ULC-S559-04 Equipment
 - DAYYC- CAN/ULC-S561-04 – Shared Installation Co.
 - DAYIC - CAN/ULC-S561-03 – Shared and Full Service Fire Signal Receiving Centres



CFAA 2011 Manitoba

THANK YOU

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