

## Automatic Fire Suppression Systems ETI Fire Protection Solutions

### Commercial & Public Bus Fire Protection & Solutions



#### This can and has happen...







#### THE PROBLEM

Mass transit is a critical component to many communities transportation plans. Buses heavy and light rail all combine to move large numbers of people efficiently while reducing the congestion of personal vehicles on roads and highways. Meanwhile, every day school buses transport millions of children to and from school.

Unfortunately, the impact of a fire in one of these vehicles is wide ranging.

Issues include:

- Loss of passenger capacity
- Passenger safety concerns
- Injuries due to fire or during passenger exiting of vehicle
- Disruption of traffic
- Costs to City

#### **ETI FIRE SYSTEMS - ADVANTAGES:**

- Fast, reliable fire detection
- Requires no power to operate, offering 24/7 protection
- Installs quickly in new or existing vehichles
- Tolerant of the harsh working environment, including temperature extremes, vibration and dirt/dust
- Doesn't interfere with maintenance of vehicles

#### THE SOLUTION: EFFECTIVE FIRE SUPPRESSION

We offer several unique approaches to protecting many of the fire-prone areas of these vehicles. Our systems detect fire using the proprietary Detection Tubing or Firewire system.

Why our systems are ideal for transit fire protection?:

- Detection Tubing tolerates the vibration, dirt and temperature extremes environments in which the vehicles operate
- Our systems are self-operated and require little supervision
- No false activations, systems are failsafe and react only to fire or extreme heat
- Cost effective protection for engines, electrical systems or HVAC

#### **ENGINEERED FIRE SUPPRESSION SYSTEMS - TAILORED SOLUTIONS**

#### **Fire Wire Systems**

Using our proven linear electrical fire wire is an excellent method of fire event detection. In fact, all jet engines on aeroplanes have such a system to detect engine fire. Our systems have been proven on large mining machinery, as for on road vehicles we designed fire wire systems for smaller engines and fuel compartments. Our fire wire sensing cable, which uses three core cable, is routed around the areas of high fire risk. Once fire is detected, the fire wire sensing cable will send an electrical signal to the Controller (with alarm) and simultaneously discharges the extingushing agent through the cylinder valve, to the discharge nozzles.

# with Firewire and Electrical actuator Wiring for pressure switches Wiring for Wire Wiring for Wire Wiring for Solenoid Valve Wiring for Solenoid Valve Wiring for power Primary to be taken from the ignition Secondary direct from the battery of the machine The Fire wire can be run anywhere through the machine where detection is needed. It can be run through to the panel without it joining to other cabling The Manifold block should be mounted in a protected area close to the cab or inside the cab if practical. A sintered filter should be placed on the won toor of the solenoid

Typical actuation circuit for a Firewire system

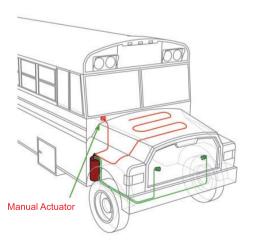


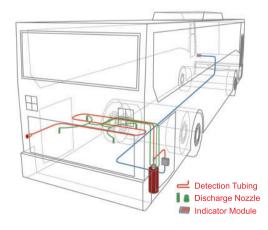
#### Loss of Pressure (LOP) Systems

Our heat sensitive sensing tube which is pre-charged with nitrogen and routed around areas of high fire risk. Once fire is detected, the sensing tube nearest the hottest point of the fire will rupture and hence the pressure within the tube immediately drops. This is sensed by the patented cylinder valve which then directs the extingushing agent to the nozzles through the stainless steel discharge pipe

#### **Advantages**

In both the above two engineered fire suppression systems, Manual Actuators located at the bus driver instructment panel and at the passenger exit doors provide additional protection for manual overide and discharge of the extinguising agent when needed. Audio alarm will also signal in the event of a fire detection.





#### **Our Clients**













































#### **Our Certifications**













Authorised International Distributor





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