

Addressable **v** Conventional

Each device connected to an addressable system has it's own unique address. When a fire is detected the devices address is identified by the panel, pinpointing the exact location of the fire.

With a conventional system there is no way of pinpointing the exact location of the device that has been activated by a fire, only the general zone.

For example if you have a three storey building each floor may be wired as a zone, so in the event of a fire you would only be alerted that the fire was on a particular floor, not the exact location or room. This could slow down the extinguishing of any fire causing a greater risk to loss of life and damage.

Addressable systems are wired in a continuous loop rather than radial circuits used for conventional systems. This means if the cable was to be severed on an addressable system, signals can still be transmitted to devices from either end of the loop.

Addressable continuous looped example



Addressable with severed cable



Although conventional fire alarm system cost less to purchase, they are generally more expensive to install. This is due to each zone for detectors and call points having to be wired, on a radial circuit back to the panel.

This benefit of an addressable system is that all devices can be connected to the same continuous loop, reducing cabling and time.

Addressable fire panels have large benefits over conventional, due to the ability to continually monitor each of the installed devices individually.

The panel can determine whether each device is functioning correctly and also ascertain the amount of heat or smoke that the device is currently sensing. This technology allows the panel to make 'intelligent' decisions as to the appropriate action to take based on the information it receives from the individual sensors. This prevent the occurrence of false alarms which can be costly to a business.

Conventional radial circuit example



Conventional with severed cable



