

Depending upon the application, the alarm output may be local, remote or a combination. Local alarms do not include monitoring, though may include indoor and/or outdoor sounders (e.g. motorized bell or electronic siren) and lights (e.g. strobe light) which may be useful for signaling an evacuation notice for people during fire alarms, or where one hopes to scare off an amateur burglar quickly.

Remote alarm systems are used to connect the control unit to a predetermined monitor of some sort, and they come in many different configurations. High-end systems connect to a central station or first responder (e.g. police/fire/medical) via a direct phone wire, a cellular network, a radio network (i.e. GPRS/GSM), or an IP path. In the case of a dual signalling system two of these options are utilized simultaneously. The alarm monitoring includes not only the sensors, but also the communication transmitter itself. While direct phone circuits are still available in some areas from phone companies, because of their high cost and the advent of dual signalling with its comparatively lower cost they are becoming uncommon. Direct connections are now most usually seen only in federal, state, and local government buildings, or on a school campus that has a dedicated security, police, fire, or emergency medical department.

More typical systems incorporate a digital cellular communication unit that will contact the central station (or some other location) via the Public Switched Telephone Network (PSTN) and raise the alarm, either with a synthesized voice or increasingly via an encoded message string that the central station decodes. These may connect to the regular phone system on the system side of the demarcation point, but typically connect on the customer side ahead of all phones within the monitored premises so that the alarm system can seize the line by cutting-off any active calls and call the monitoring company if needed. A dual signalling system would raise the alarm wirelessly via a radio path (GPRS/GSM) or cellular path using the phone line or broadband line as a back-up overcoming any compromise to the phone line. Encoders can be programmed to indicate which specific sensor was triggered, and monitors can show the physical location (or "zone") of the sensor on a list or even a map of the protected premises, which can make the resulting response more effective. For example, a heat sensor alarm, coupled with a flame detector in the same area is a more reliable indication of an actual fire than just one or the other sensor indication by itself.

Many alarm panels are equipped with a backup communication path for use when the primary PSTN circuit is not functioning. The redundant dialer may be connected to a second communication path, or a specialized encoded cellular phone, radio, or internet interface device to bypass the PSTN entirely, to thwart intentional tampering with the phone line(s). Just the fact that someone tampered with the line could trigger a supervisory alarm via the radio network, giving early warning of an imminent problem (e.g. arson). In some cases a remote building may not have PSTN phone service, and the cost of trenching and running a direct line may be prohibitive. It is possible to use a wireless cellular or radio device as the primary communication method.