

Mining Communications Solutions

Loudspeaking Telephones



The Loudspeaking Mine Telephone (LST) is a completely self-contained battery-powered communication unit that provides loudspeaker paging and a handset party line conversation over a twisted telephone line.

Installation and maintenance are simple due to the single plug-in amplifier board and the battery power supply used in the LST. The mode of operation is also simple, greatly improving ambient noise rejection. An anti-side tone circuit provides improved reception, particularly in areas with high ambient noise. Individual volume controls are also provided for the speaker and handset receiver. The audio is of high quality; voices sound clear and natural, not harsh or metallic.

The GAI-Tronics Mine Dial/Page Telephone System combines the convenience of a telephone station with paging capabilities in gaseous or dusty locations that are too hazardous for standard telephone equipment. The system is rated as "permissible".

The interface assembly is electrically connected between the station and the telephone switchboard. Each interface assembly is connected to a separate line of the telephone exchange. The mine dial/page telephone system is designed as an alternative to the mine pager system and other communication systems (such as the "Pager" or "Loud-Speaking Telephone") that lack privacy and multiple conversation capabilities.

All functions take place over a single pair of wires between the station and the interface. Using a mine dial/page telephone station, a person can access any station or any conventional telephone connected to that switchboard. If the switchboard is tied into the public telephone system, an individual can call out or receive calls from any public telephone. Personnel in hazardous areas have direct contact to all non-hazardous areas with extension telephones without the purchase of additional communications equipment for these non-hazardous areas.



Mine Dial

Rugged Industrial Telephones



GAI-Tronics industrial telephones include standard items such as a proximity detecting hookswitch with no moving parts and a sealed keypad to keep out dust, dirt and moisture. The sealed electronic ringer also prevents contaminants from entering the housing. Other standard features are noise canceling microphones and volume control handset. Theses telephones are fully line powered, and do not require an internal battery.

The 246 indoor and 256 outdoor series Industrial Telephones are constructed of a high-impact, anti corrosive enclosure with an industrial strength six- foot Hytrel® handset cord. The Hytrel® cord is unique that it can withstand 250 pounds of pull strength and remains flexible in the most extreme temperatures, unlike PVC cords that are limited to 40 pounds of pull strength and begin to deteriorate at -14°F temperature range.

Hazardous Area Telephones

GAI-Tronics Model 351-001 Division 2 Industrial Telephones are approved for selected Division 2 areas and offer a high-quality, durable telephone for safe communications in your facility. GAI-Tronics Model 351-001 Outdoor Industrial Telephones provide fully-functional communications that are approved for use in Class I, Division 2, Groups A, B, C, D; Class II, Division 2, Group G and Coal Dust; and Class III classified areas.

GAI-Tronics 260/270 Series Intrinsically-Safe Telephones include safety barriers, allowing the telephones to obtain low energy levels, eliminating the possibility of a spark or explosion occurring. The barrier is placed in an indoor or outdoor, non-hazardous location up to one mile from the telephone. In contrast to explosionproof telephones, which are designed to contain an explosion, our Intrinsically-Safe Telephones limit input power to prevent an

explosion from occurring. Intrinsically-Safe Telephones use standard telephone cable and do not require conduit.

Housed in glass-reinforced polyester, these units offer superior resistance to chemicals, solvents, salts, and extreme temperatures. The metallic keypad is fully sealed to prevent entry of dirt, contaminants and water. The handset cord is molded of thermoplastic elastomer to provide outstanding performance and long life. The non-movable handset cradle uses a proximity-detecting switch to take the phone off-hook.







SmartSeries[™] system field devices utilizes the latest technology in data communications to significantly improve system integrity and functionality. By interfacing with the SmartSeries[™] control unit, the devices exchange fault and activity messages. The SmartStatus feature provides a graphical display of the entire communication system, making the system very user-friendly.

Current faults are displayed or logged, depending on the system configuration, to provide maintenance personnel a means to diagnose equipment problems. For example, a handset left off-hook can degrade an audio channel. To alleviate this problem, the stations report this condition, and are programmed to go electronically on-hook after a pre-set time period configured at start up.

Other system functions monitored by the control unit include use of the page line, integrity of the system cable, and the functionality of the station amplifier and associated speakers. Supervision of these features significantly reduces the costs associated with maintaining your communication system.





