FEDERAL SIGNAL
Safety and Security Systems
Protecting people and our planet

Intercom

Outdoor Warning

Mass Notification

Public Address

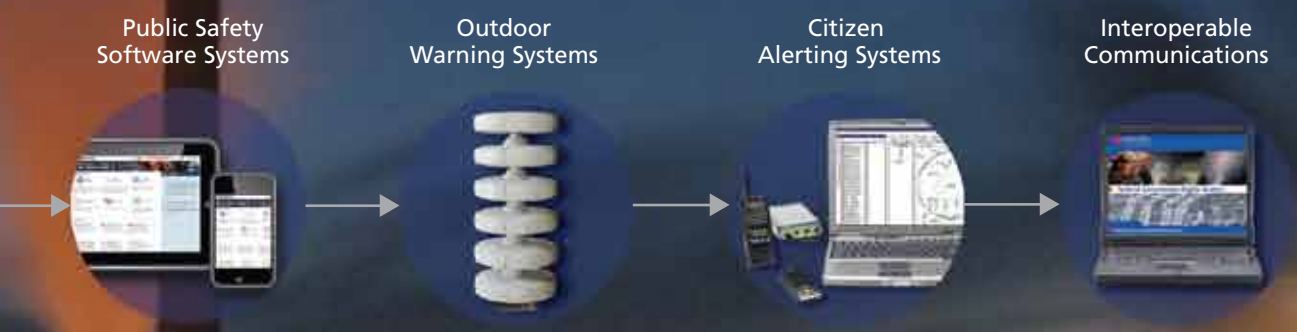
General Alarm

Alerting & Notification

One integrated system of total communications

SmartMsg
Enabled Systems
Integrated
Command Solution
Indoor
Warning Systems
Public Address/
General Alarm

Integrated Communication Systems Made Simple. Public address announcements...multi-party telecommunications... intercom and paging... tone and voice messaging... outdoor warning. Any facility probably has some or all of these systems, each fulfilling a critical communication requirement. Traditionally these systems have been viewed as individual pieces of the overall facility communications puzzle. Imagine how you could increase facility safety, minimize expense, and simplify maintenance with a single integrated system.



Facility-Wide Warning Systems for a Broad Spectrum of Signaling and Communications

SelecTone® systems cover the full range of industrial communication applications: start and dismissal, emergency evacuations, process control signaling, voice messages and public address. The SelecTone product family includes all the equipment necessary for a comprehensive industrial signaling and communication system: dependable, high quality Command Units; weatherproof, dust- and water-tight, hazardous location and explosion proof Speaker/Amplifiers; Tone Modules with pre-recorded digital voice messages, tones or melodies; and the Connector Kits that make it all work together. Every model is designed with the greatest care for long life in harsh, rugged environments.

- Virtually limitless system expansion for future growth
- Standard duty, weatherproof, dust- and water-tight, hazardous area and explosion proof models
- A range of models with outputs from 88dB to 114dB to overcome heightened noise levels
- Attractive, low profile models for office environments
- Integrated volume control adjustable from zero to maximum output
- Choice of operating voltages, including 24VDC, 24VAC, 120VAC, 240VAC and more
- Use with Federal Signal CommCenter or SelecTone Command Units for complete emergency communications systems
- Expand existing public address and communication systems
- Create fault tolerant communication systems – if one device fails, the others continue to operate

SelecTone® Speaker/Amplifiers deliver performance, dependability and extended service life.

The Selectone Speaker/Amplifier product family offers a broad range of self-amplified speakers designed to broadcast pre-recorded tones, voice messages, melodies and live public address in plant-wide communication systems. Because the communication signal is amplified by each SelecTone Speaker/Amplifier, rather than by central amplifiers, the expense of running 70 Vrms high-powered audio lines in conduit throughout the facility is eliminated.

300X, 302GC, 50GC, 300GC

Connector Cards and Tone Modules are the key to designing new communication systems or expanding existing systems.

- Connect a SelecTone Command Unit or CommCenter with SelecTone Speaker/Amplifiers.
- Add self-amplified Selectone devices to existing 25 or 70 Vrms centrally amplified communication systems.
- Add hazardous area or weatherproof SelecTone Speaker/Amplifiers to existing commercial communication or public address systems.
- Create a balanced line audio system for superior noise suppression and clear communication.

Tones and messages for every application, location and event.

The Universal Tone Module (UTM) provides a selection of 32 distinct tones for use in plant-wide communication systems with a SelecTone Command Unit or CommCenter and a limitless number of SelecTone Speaker/Amplifiers or for use in stand-alone applications with a single SelecTone Speaker/Amplifier. Tones are selected easily via DIP switches and the modules are designed for quick plug-in installation.

Federal Signal's TM33 Custom Tone Module allows users to select from a library of thousands of messages and melodies or they can provide a recording, script, or digital sound file for a custom recording in any language.

UTM, AM25CK

Microprocessors provide clear digital tones and messages. Tone Module housings are designed to shield the audio signal from RFI and EMI interference.

CommCenters® are digital playback units engineered to enable users to customize a communications system for broadcasting pre-recorded voice messages, melodies, tones and signals over Federal Signal's SelecTone®, PA and multi-party paging systems. A substitute for outdated analog "endless loop" tape devices, CommCenters ensure consistent high-quality audio playback with digital messaging capability.

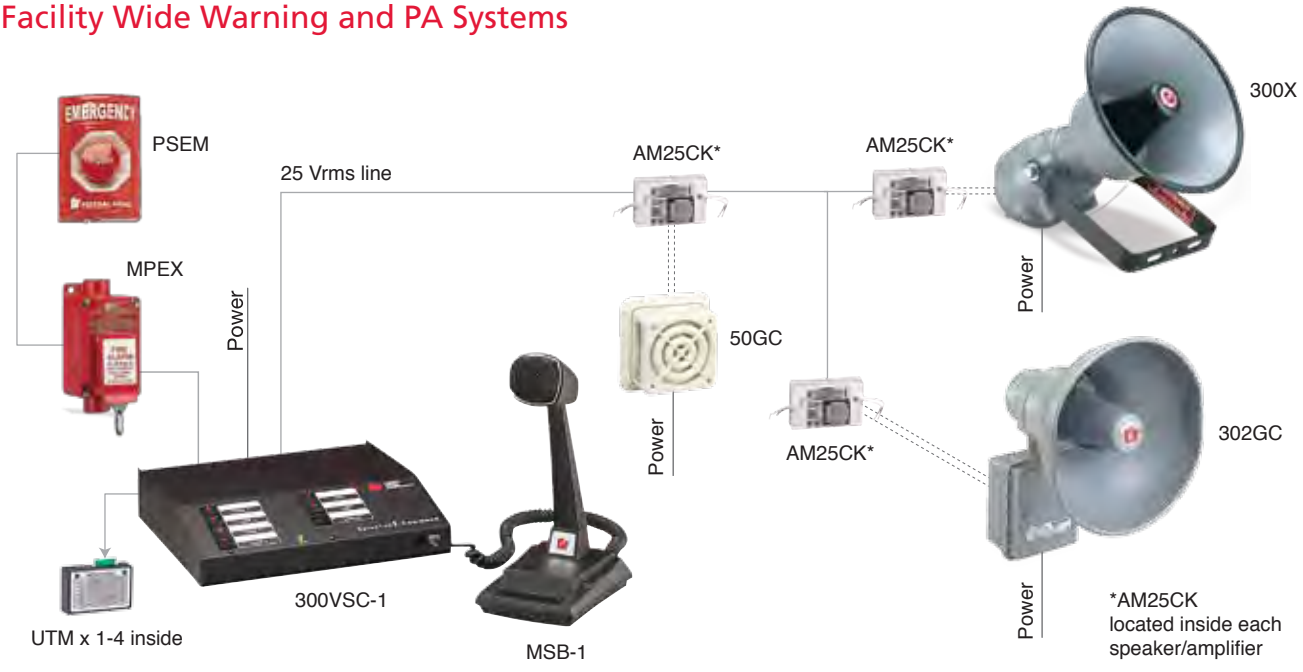
Clear, concise, pre-programmed instructions can be broadcast over a SelecTone or PA system. Additionally, audible devices can be incorporated into manufacturing areas to indicate process/machine status. Pre-recorded messages can be used to convey these situations without interrupting production flow in neighboring areas, while distinct voice messages alert people to emergency conditions.

SelecTone® Command Units are the centerpiece of a total facility communication strategy.

- Central control of tones and public address
- Local and remote microphone access and tone initiation
- Auxiliary audio input supports background music
- Prioritized communication: local microphone, tones 1 through 4, remote microphone, auxiliary audio
- On board amp supports local speaker
- Handheld or desktop noise canceling microphones
- Descrete I/O
- Rack mount, wall mount and desktop models

Command Units

Facility Wide Warning and PA Systems



Public Address & General Alarm

Systems Combine for Clear, Critical Communications and Installation Flexibility

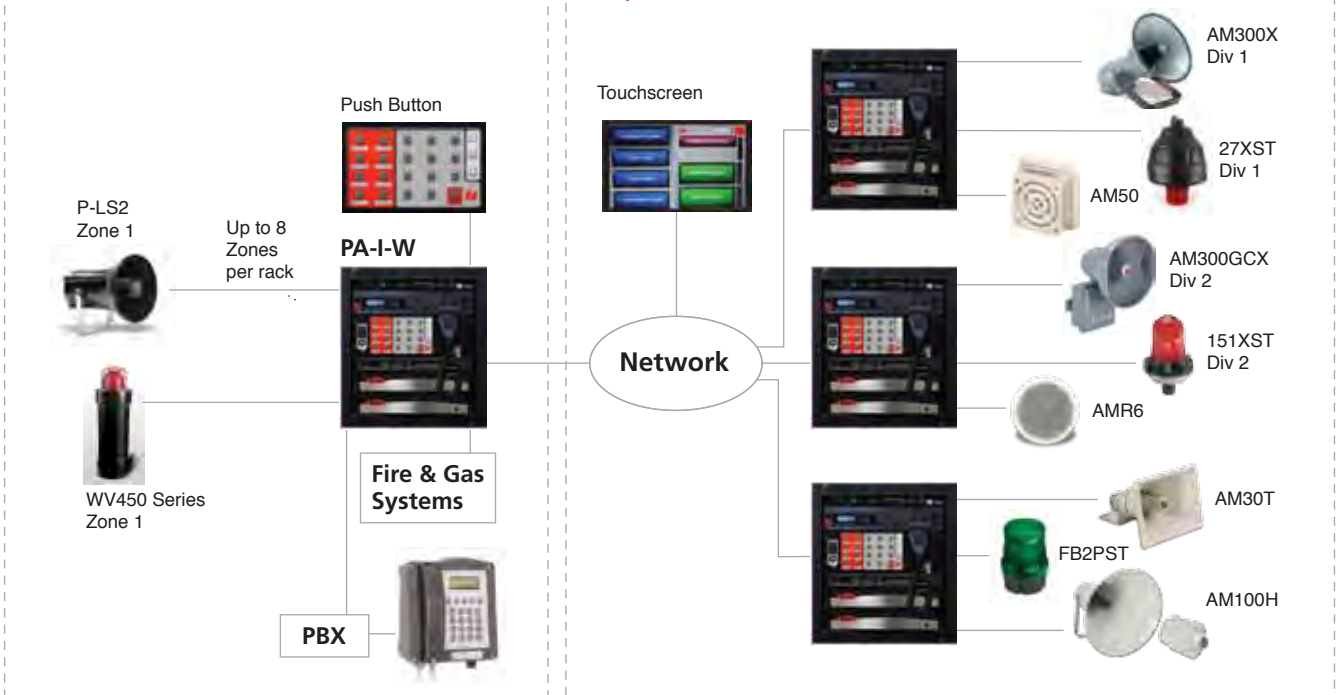
Federal Signal offers a comprehensive line of heavy-duty devices tailored to the needs of public address requirements. This product line includes high-powered audio amplifiers, industry innovative audio routers for zoning, tone generators, PBX interfaces, pre-recorded voice messaging and high-quality speakers to accommodate virtually any office or hazardous plant environment.

Federal Signal's Industrial Public Address System (I-PAS) is a reliable, cost-effective, off-the-shelf solutions providing users flexibility to specify a precise combination of features and capabilities previously available only in highly integrated custom communication systems.

The I-PAS system is engineered for tough, demanding applications that call for public address to oversee critical production processes in combination with general alarm communications for safeguarding personnel facility wide. As versatile as it is dependable, I-PAS is compatible with a full range of industrial and commercial speaker options in low to high outputs.

- Stand-alone, hot standby, or duplicated systems with network options
- Digital Signaling Processing (DSP)
- 8 Zone PBX interface option provides store and forward, and live paging
- Full feature control panels with custom touchscreen options
- High power speakers and amplifiers up to 4000 watts per cabinet
- Remote I/O for integration into fire & gas, automation or safety systems
- IP configurable nodes
- Built in tone generator and voice message storage (up to 128 messages standard)
- Mass notification options
- Background music input (auxiliary audio)
- Intercom interface

Industrial Public Address General Alarm System (I-PAS)



Add Visual Impact to your Audible Warning System

Regardless of the application – process control, facility safety or emergency evacuation – Federal Signal has a visual signaling solution. With state of the art surface mount printed circuit boards; long-life incandescent; strobe and LED lamps; superior optics that maximize light dispersion; a multitude of mounting options, a variety of operating voltages; and housings designed for indoor, outdoor, ordinary and hazardous locations – Federal Signal has visual signals for every application from food processing to steel mills.

AudioRouter™

The AudioRouter Model AR2000M is a fully integrated audio multiplexing system designed specifically for demanding industrial environments. It is employed in PA systems as a central control for routing voice pages, pre-recorded messages, PBX pages and other audio tones to specified zones within a facility. AudioRouter permits users to easily set-up sophisticated PA routing designs.

AudioMaster®

Model CTS600, CTS1200, CTS2000, CTS3000 High-Powered PA Amplifiers

The Federal Signal AudioMaster line of amplifiers provides a combination of quality and performance for heavy-duty industrial applications. Units are available in four power ratings from 600 to 3000 watts @ 70 Vrms.

The quality of AudioMaster amplifiers is apparent in the noise-free, crystal clear highs and lows they reproduce. The grounded bridge design of the CTS series provides for less distortion and thermal stress, and a simpler, more reliable power supply than found in typical stepped "liner" output systems.

Audio Router™ / Audio Master®

Echo Digital Intercom and Communication Systems

ECHO digital intercom and communication systems provide addressable intercom, public address, general alarm, paging and telecommunication capabilities. The IP version of ECHO can provide the same level of safety, coverage and reliability normally achieved with multiple disparate systems.

ECHO interfaces simply with a variety of third-party equipment, including fire and gas detection systems, auxiliary security systems and signals, PA/GA systems, two-way radios and telephone PBX. ECHO accepts multiple input sources for tones, pre-recorded voice messages, and background music. ECHO enables you to integrate all of your critical life safety, evacuation and communication systems.

Installation and commissioning is easy and cost effective. Off the shelf, two-conductor cable provides power, communication and control with a range of up to 2.4 miles (4km). Systems can be commissioned and customized quickly in the field or remotely with push button menu selections or a point-and-click software interface.

Echo System Specifications

- Private communication, conference calls and public address
- System supervision and full fault diagnostics
- DSP technology provides crisp, clear communication and noise immunity
- Standard features include one-touch emergency paging, programmable station directory, speed dialing, caller ID and auto conference
- Hazardous-area, explosion-proof, panel mount, flush-mount, desktop, vandal-resistant and weatherproof stations
- Field programmable via Windows® interface software
- Handset, gooseneck microphone, headset, hands-free and single button communication options
- Fiber optic, PBX, two-way radio, radio pocket pager, public page and background music interfaces
- ECHO cancellation, noise and feedback elimination for digital quality/high intelligibility audio
- Industry standard low-cost wiring
- 24VDC, 120-240VAC
- Ambient noise monitoring automatically adjusts speaker volume to surpass ambient sound level

Rack mounted Echo System

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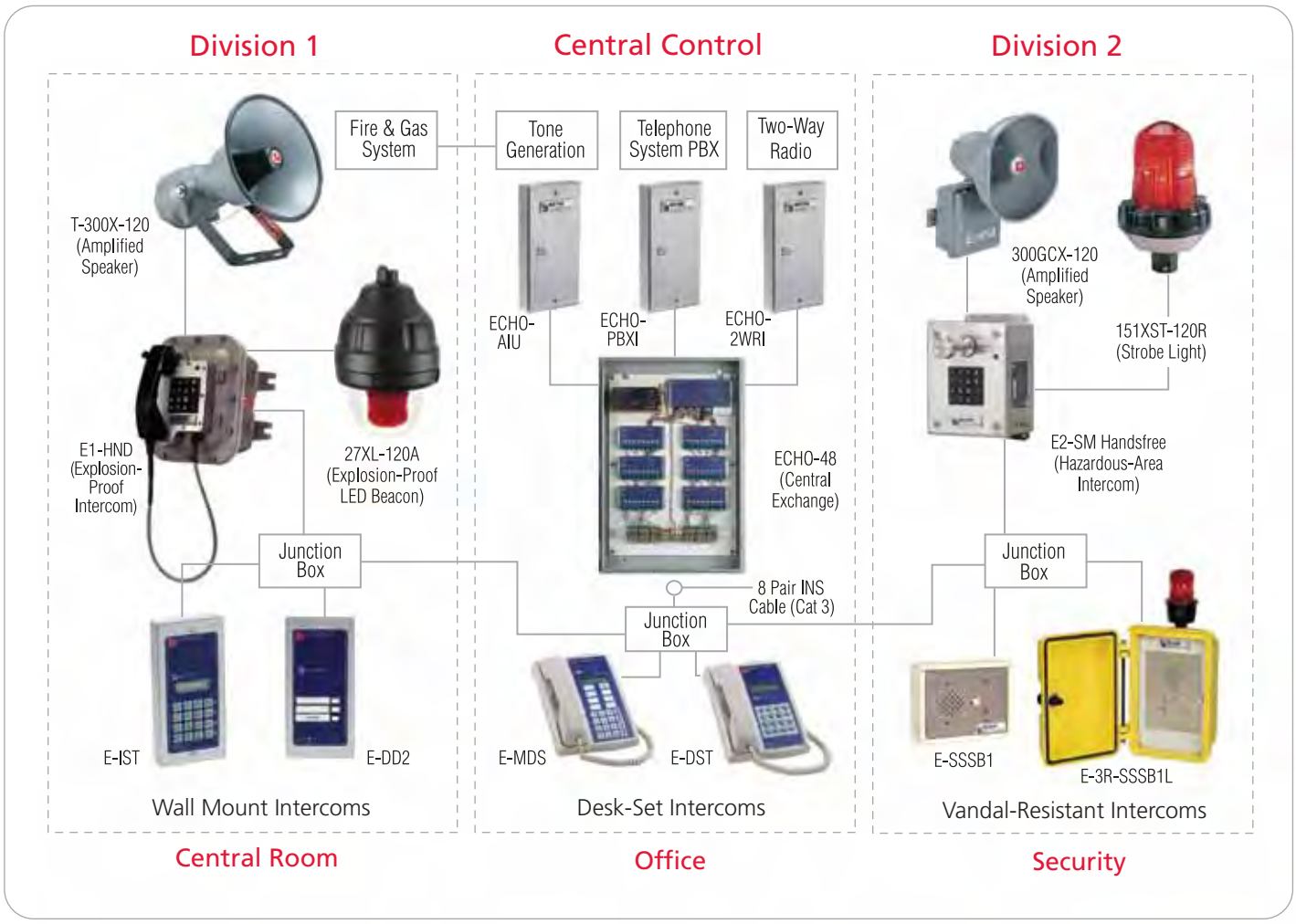


Echo Digital Intercom Stations provide safe and efficient two-way voice communications in large and small ECHO Digital Intercom Systems. They also provide instantaneous high-speed connections and clear, crisp digital voice quality. Each station offers single-button all call, priority emergency paging, group paging, speed dial, conference call, and relay output.

Any station can call any other station(s) in an ECHO Digital Intercom System. With the headset or gooseneck microphone options, each is capable of hands-free voice communication. Because the ECHO Digital Central Exchange provides 30 channels of simultaneous communication, calls are processed and connected immediately without dial tone or delay. Each station may be programmed for four levels of privacy for receiving calls; non-private, semi-private, full privacy and do-not-disturb. Volume-for-voice and signal levels are easily adjusted on the keypad.

Models EZ1 Intercom Station, E-IST, E1 Explosion Proof Intercom Station, E-MDS Management Station, and E-2 Hazardous Area Intercom Station

Outdoor Warning Systems

Reliable Performance of Large Scale Outdoor and Facility-Wide Signaling at an Economical Cost

Federal Signal produces a variety of reliable, high-powered electro-mechanical and electronic warning systems for large scale outdoor or facility-wide signaling at an economical cost. The entire product line, encompassing high-powered speaker arrays, sirens, controllers, and encoders, can be custom designed to meet your current needs.

With omni-directional sirens for 360-degree coverage and directional speaker arrays for targeted dispersion, Federal Signal backs you up with a full scope of outdoor warning solutions. Hybrid systems can be easily configured to link up with SelecTone® signaling systems that employ the same tones, central activation and control. Outdoor warning systems can also be interfaced with an existing PA, multi-party paging or signaling system. Further cost savings are achieved by eliminating the need to replace existing internal signaling systems.

Modulator® II Electronic Siren

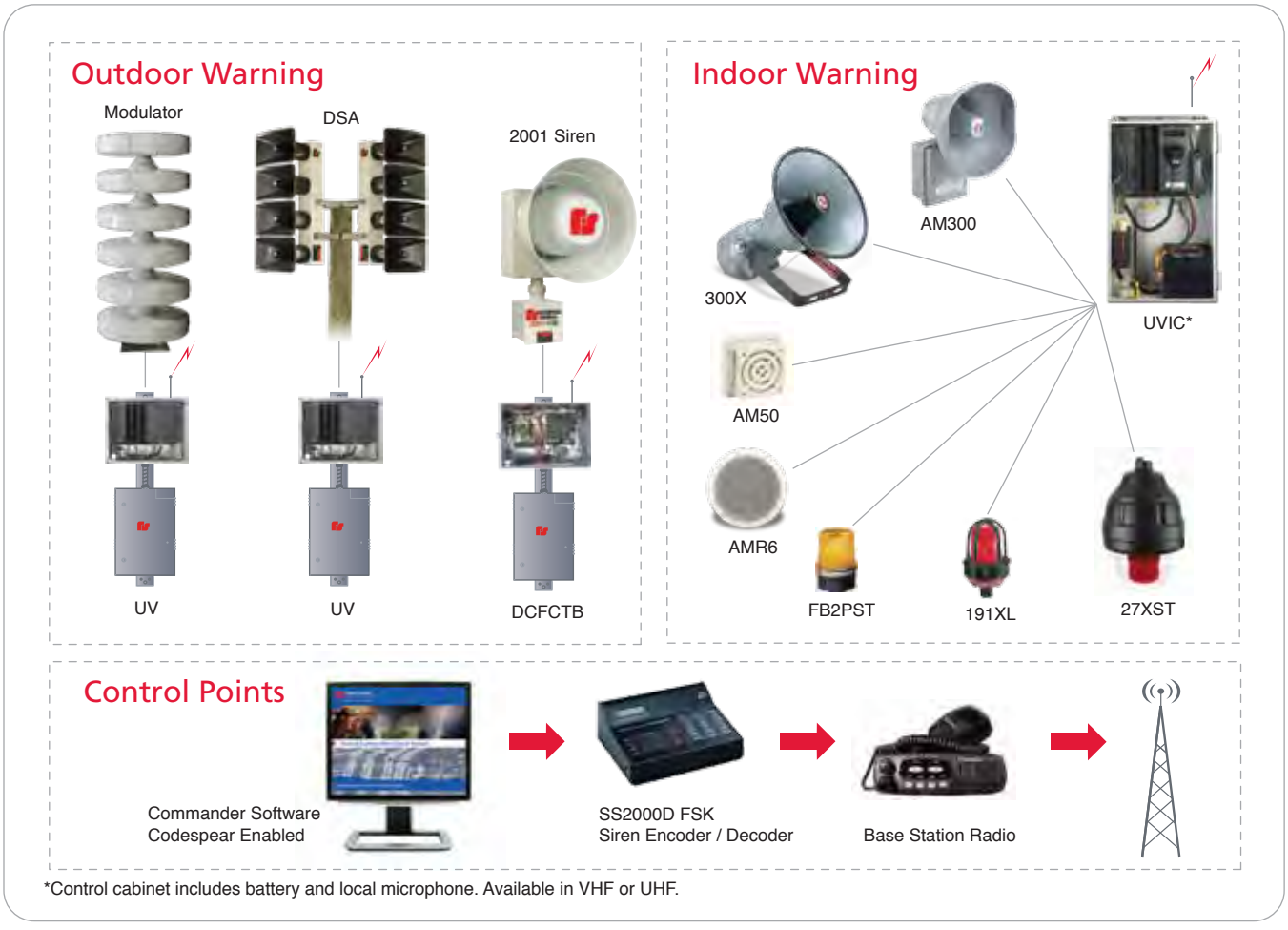
- Rated at 106dB to 123dB @ 100 feet
- Four 100 watt drivers per module
- 360° coverage without sound variation in horizontal planes
- Excellent frequency response promotes superior tone and voice production
- Readily available drivers are quickly, and easily replaced
- Roof or pole mounting

2001 Electromechanical Siren

- Rated at 130dB @ 100 feet
- Full battery operational or battery backup
- Sound output can cover four square miles
- Produces three tones: wail, fast wail, steady
- Local or remote activation

Directional Speaker Array (DSA)

- Controlled multi-directional sound output to specific areas
- Economical approach for uniquely shaped facilities
- Speech and tone reproduction
- Rated at 111 to 121dB @ 100 feet



*Control cabinet includes battery and local microphone. Available in VHF or UHF.

UltraVoice™ Controller

The high-efficiency UltraVoice controller is designed to control high-powered electronic outdoor speaker arrays as well as indoor speaker systems. The unit, which combines amplifiers, tone generator, initiating device and PA access in a single unit, produces amplified audio signals including seven built-in warning tones, high-quality live PA, and up to 250 minutes of pre-recorded voice messages.

- Delivers over 90% efficient audio output and 30-minute minimum run time
- Can reproduce standard or custom tones and voice messages
- 8-minute digital voice chips available
- Houses up to six 400 watt Class D amps
- Radio, Ethernet (IP), Landline, or local activation
- Built-in battery charger
- Optional microphone and battery heaters
- Optional solar charging system

Model FC

Siren Controller

The economical Model FC Siren Controller is a 120VAC radio receiver/encoder and timer with four programmable relay outputs, enabling you to control virtually all emergency sirens as well as other devices via relay contacts.

- Remote radio activation available
- Controls warning lights and audible devices
- Two-tone sequential, DTMF and digital FSK encoding
- Push button local control or dry-contact closure inputs for landline control
- Six built-in siren tones

SS2000+ Siren Encoder/Decoder

The SS2000+ is an advanced stand-alone unit that allows you to monitor and control the unit over your network.

The SS2000+ can be connected to a PC running Federal Signal's Commander software. Commander and the SS2000+ can work together to monitor and control your system, with the SS2000+ providing full redundancy in the event that your PC is offline.

- Streaming .wav files for voice, music and text-to-speech
- Ethernet for network-based control
- 20 remote activation inputs
- Compatible with two-tone EAS and DTMF, AFSK encoding
- 24 hot command function keys
- Communications diagnostics
- Built-in speaker and microphone jack
- Desk and 19" rack mount versions available

Model SS2000+

Federal Commander Digital System™

The Federal Commander Digital System offers safety directors and system operators comprehensive, secure activation and status monitoring of any siren system. A complete system includes the SS2000+ Encoder, Commander Software package plus digital siren controllers.

- Single-point and click-siren activation and polling
- Windows®-based operating system with facility map
- Status map monitoring and setup with correlating color-coded status of each siren
- Remote system control
- FSK digital encryption promotes optimum activation security
- Initiates sirens and SmartMsg personal mass notifications

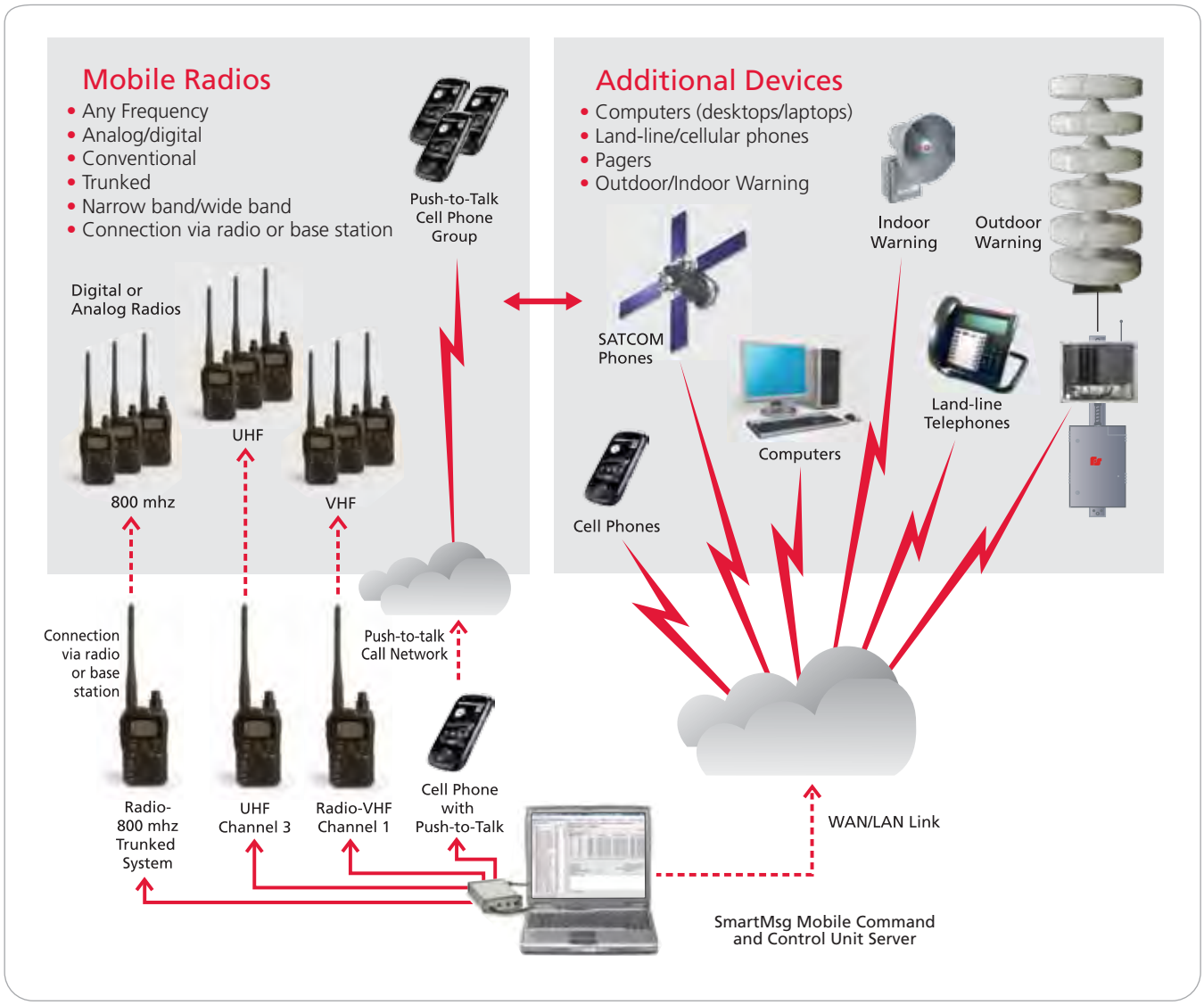
Mass Notification Systems Offer Integrated Command and Control

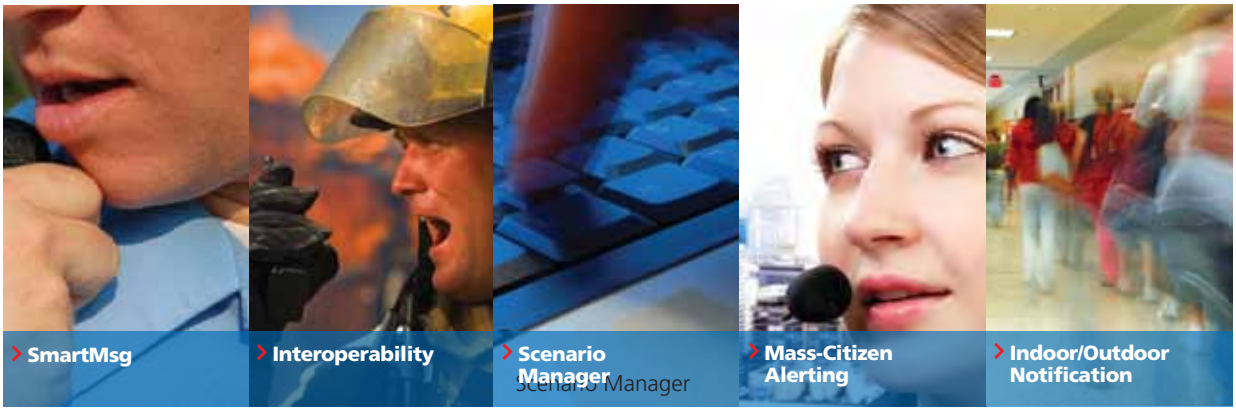
Interoperable communications, alert notification and multi-agency disparate system integration…any time, any place, any device.

SmartMsg™ software supports voice, text, video and file attachment connections across the entire spectrum of communications devices—from phones to pagers to PCs. Requiring little to no hardware, our software-based solution provides a comprehensive and cost-effective alternative for making total multi-device communications interoperability an integral part of your operations.

IP-based SmartMsg connectivity modules give you the flexibility to go with as much or as little interoperability as you need. This includes a system that features built-in Voice-over-IP (VoIP) to allow two-way text-to-voice and live-voice communications over any type of radio (VHF, UHF, hybrid cellular phone/radio devices, etc.).

SmartMsg software also extends radio signal ranges, and enhances the reliability of radio links, a problem common to large concrete parking facilities. SmartMsg even gives users the ability to accurately track communications history in order to assess both employee and operational accountability. This solution is an effective and economical way to incorporate the advantages of interoperability into your operations.





Alert notification and secure-messaging software that is instantly interoperable with any device over any networking medium.

Simultaneous text and voice broadcast to radios, cell phones, PCs, pagers and wireless PDAs – regardless of platform or manufacturer.

Incident planning and execution tool that blends together workflow, communication, alert notifications and the efforts of agencies and first responders.

A secure and reliable method of notifying mass citizenry.

Provide a fully integrated solution with traditional indoor and outdoor products.

SmartMsg at a Glance

- **Full Communications Interoperability** — Integrated voice and data communication; PCs, radios, TDD/TTY devices and pagers can communicate seamlessly. Multi-band radio interoperability with support for both one-way alerts and two-way communication.
- **Scenario Management** — The ScenarioMgr incident planning and execution module allows communication scenarios to be chained together based on events and their dependencies, with other tasks or procedures in a pre-determined, step-by-step decision tree format.

  ScenarioMgr is uniquely suited for network and emergency operation centers, healthcare facilities and IT help desks for both commercial enterprises and public agencies.
- **Distributed Messaging Architecture** — Scalable, redundant deployment with automated fail-over simultaneously supports thousands of users across hundreds of servers.
- **Secure and Encrypted Communication** — Applicable for alert notifications, VoIP communication, radio linked talk groups and two-way text or voice communication; system includes option for PIN-code authorization.
- **Multi-Lingual Messaging** — Real-time translation of more than 14 languages for alert notifications and multi-language secure messaging, with auto-translation between users of different native languages.
- **Seamless Immediate Recovery** — Network disruptions are handled automatically thereby providing transparent recovery for users.
- **Pre-Defined Scenarios, Ad hoc and System Automated Alert Notifications** — Ad hoc or template message creation supports the distribution of information to specific sets of circumstances, including pre-defined or free-form response options.
- **Custom Response Options** — Provides for pre-defined data entry forms for custom responses, real-time data gathering, data export and acknowledgement tracking options.
- **Intelligent Message Routing and Escalation** — Automatic routing and escalation of alert notifications based on pre-established rules contained in user profiles.
- **Automated Alerts** — Data integration with external systems and sensor activity enables urgent alerts to be initiated by external events such as motion, duress, heat, etc.
- **Integrated Public Alert Warning System (IPAWS)**— A SmartMsg interface with FEMA's Integrated Public Alert Warning System (IPAWS) quickly bridges alerts from various authorities in order to expedite communications with critical emergency personnel, and to issue mass notifications to citizens whenever disaster strikes.

Integrated Command Solutions

For solutions that span virtually every aspect of safety and security for your organization, turn to Federal Signal. You'll discover the world's most extensive product line, supported by a global network of distributors offering a wealth of diverse industry experience. Let us help you design your entire communications system into a single, seamless, fully integrated solution.

AUDIBLE / VISUAL SIGNALS

Event notification devices that can provide alarm specific messages and color-coded warning signals.

ACCESS CONTROL

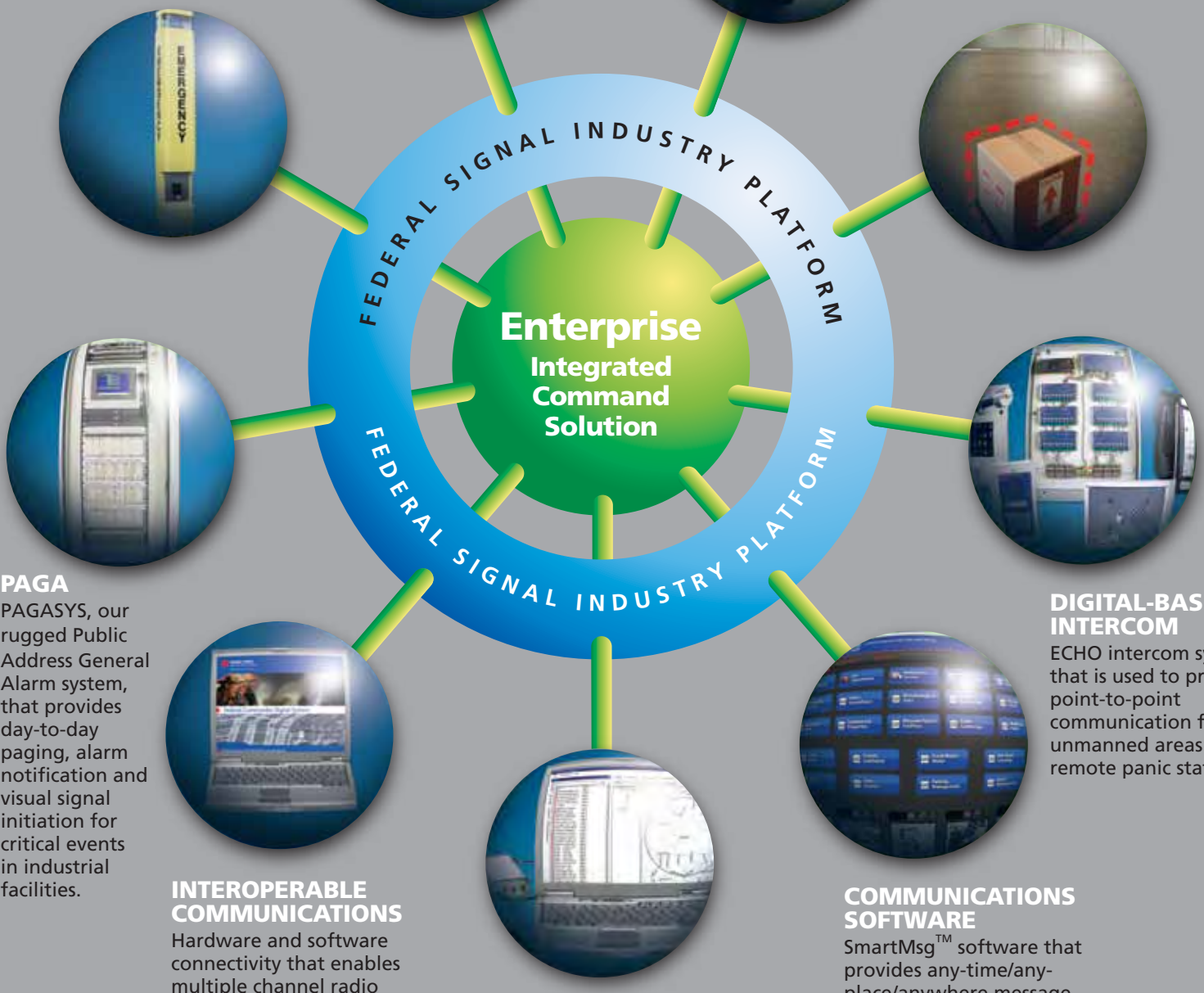
Security hardware infrastructure that consists of door monitoring, personnel tracking and CCTV control.

MUSTER STATION

Remote kiosks designed to provide critical information for employee gathering areas in the event of a facility evacuation.

VIDEO ANALYTICS

Automation and intelligence software for CCTV equipment that enables early warning perimeter detection while increasing security staff effectiveness.



PAGA

PAGASYS, our rugged Public Address General Alarm system, that provides day-to-day paging, alarm notification and visual signal initiation for critical events in industrial facilities.

DIGITAL-BASED INTERCOM

ECHO intercom system that is used to provide point-to-point communication for unmanned areas or remote panic stations.

INTEROPERABLE COMMUNICATIONS

Hardware and software connectivity that enables multiple channel radio inputs to broadcast information on a common output path.

COMMUNICATIONS SOFTWARE

SmartMsg™ software that provides any-time/any-place/anywhere message service to notify on and off-site personnel of an event.

EVENT-MANAGEMENT SOFTWARE

Scenario Manager software designed to automate incident response activity based on user policy and procedure.

FEDERAL SIGNAL
Safety and Security Systems

Protecting people and our planet

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