



HARDWIRED INTER-COMMUNICATIONS SYSTEMS FOR SPECIAL OPERATIONS RESPONSE TEAMS

- **Secure communications**
- **Wired, Fiber Optic, or IP system architecture**
- **Non radio dependant**
- **Ability to control escalation by taking stations or central control points offline from central or secondary control locations**
- **Escalation response control through easy touchscreen control panels.**
- **Field proven system design**
- **System fault diagnostics**
- **Priority level paging**
- **Field configurable zones**
- **Windows™ GUI, Graphical User Interfaces for control locations**
- **Scalable system architecture**
- **I/O , inputs and outputs**
- **Full complement of field station options**
- **Modular construction**

ECHO-ALPHACOM

Hostile Encounter Response Communications (HERC)

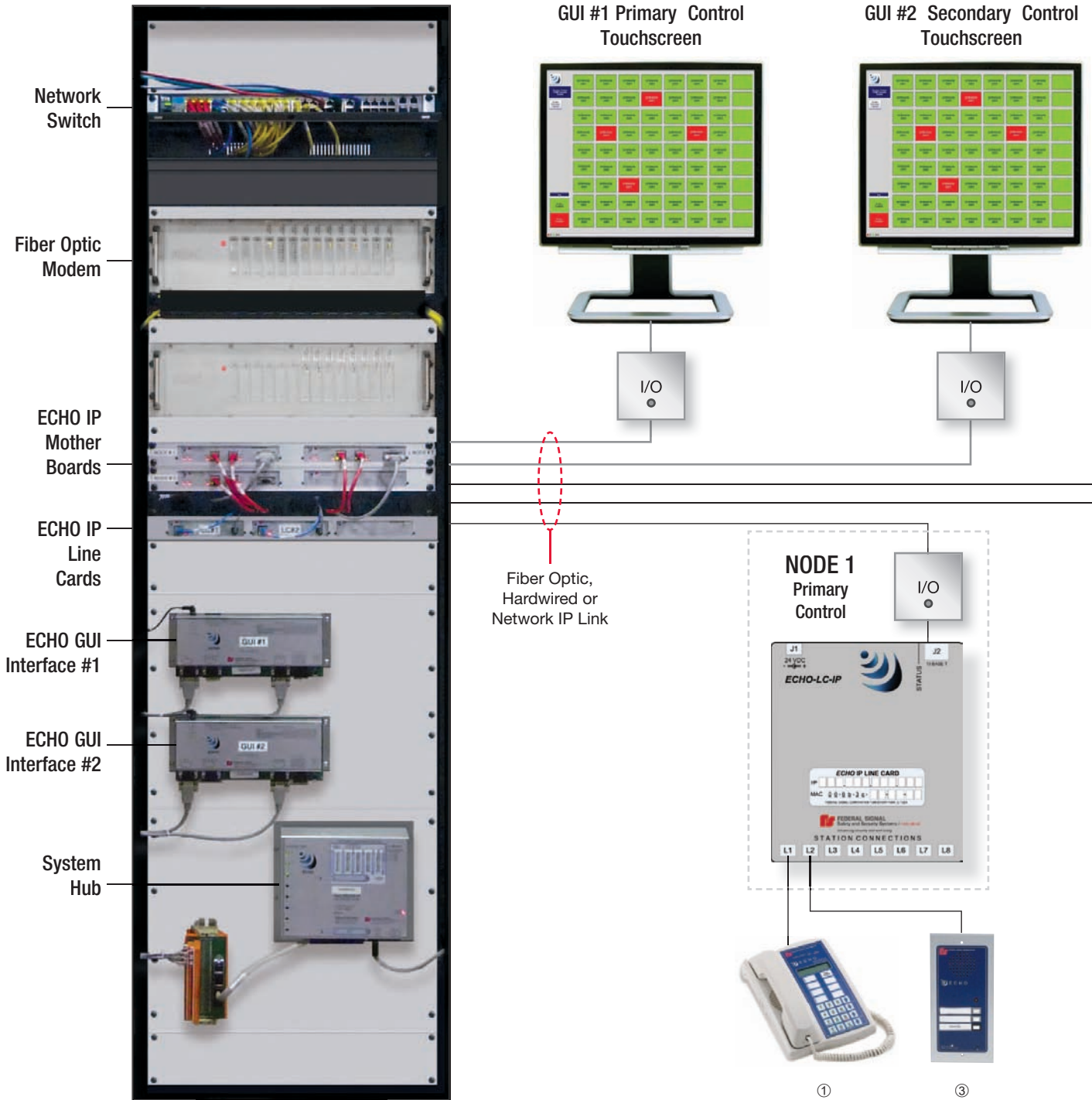
ALPHACOM is ideally suited for nuclear power, water treatment and chemical plants, military bases, or locations that demand extremely secure communications, and that cannot afford to be dependent on radio frequency (RF) based platforms for security reasons. Central command touchscreen panels ensure full system scalability during escalating security operations. Providing both primary and secondary command points, these control panels can be graphically customized to the precise requirements of the application.

Conventional communication systems that rely on radio frequency or party line communications are uniquely susceptible to compromise by hostile tactics. Hand-held radios can be taken from downed security personnel and used by intruders to eavesdrop or create traffic on the channel, intended to impair coherent communications. From its central command points, ALPHACOM can take compromised field stations offline individually or in groups. The system permits both public address and hands-free communications into remote areas overtaken by hostile perpetrators or affected by ill-intentioned sabotage of security communications.

On board system fault diagnostics eliminate any doubt as to the integrity of the system. In the event a cut line or field station failure is detected, the system automatically alerts the master control station with both audible and visual warnings. In addition to indicating the fault, on-board diagnostics pinpoint the exact station and/or field wiring that is experiencing the problem. This results in a quick security assessment and/or troubleshooting with minimal downtime.

Redundant central GUI touchscreen controllers are ergonomically friendly, and can readily be customized to the exact requirements of the facility. The secondary control location supports the capability to take the primary control off line in the event that area security is compromised. Full system audio monitoring of the remote area also makes it possible to verify personnel status or monitor a "man down" situation





① Primary & Secondary Control

E-MDS

Echo Master Desk Station (E-MDS): This unit serves as the administrative master station. All field substations hotline call to these master stations. The caller ID (location) and system fault indicator offer the ability to page, call and listen to remote field locations.



② Field Station Outdoor/Robust

E-SSSB2L



ECHO Stainless Steel Security Substation/2 Buttons (E-SSSB2L): This hands-free stainless steel heavy-duty field station has built-in speakers and is vandal resistant. E-SSSB2L can call directly to central control locations or any other field station. The unit offers two programmable stainless steel pushbuttons and an online LED call status indicator.

③ Indoor Station

E-DD2



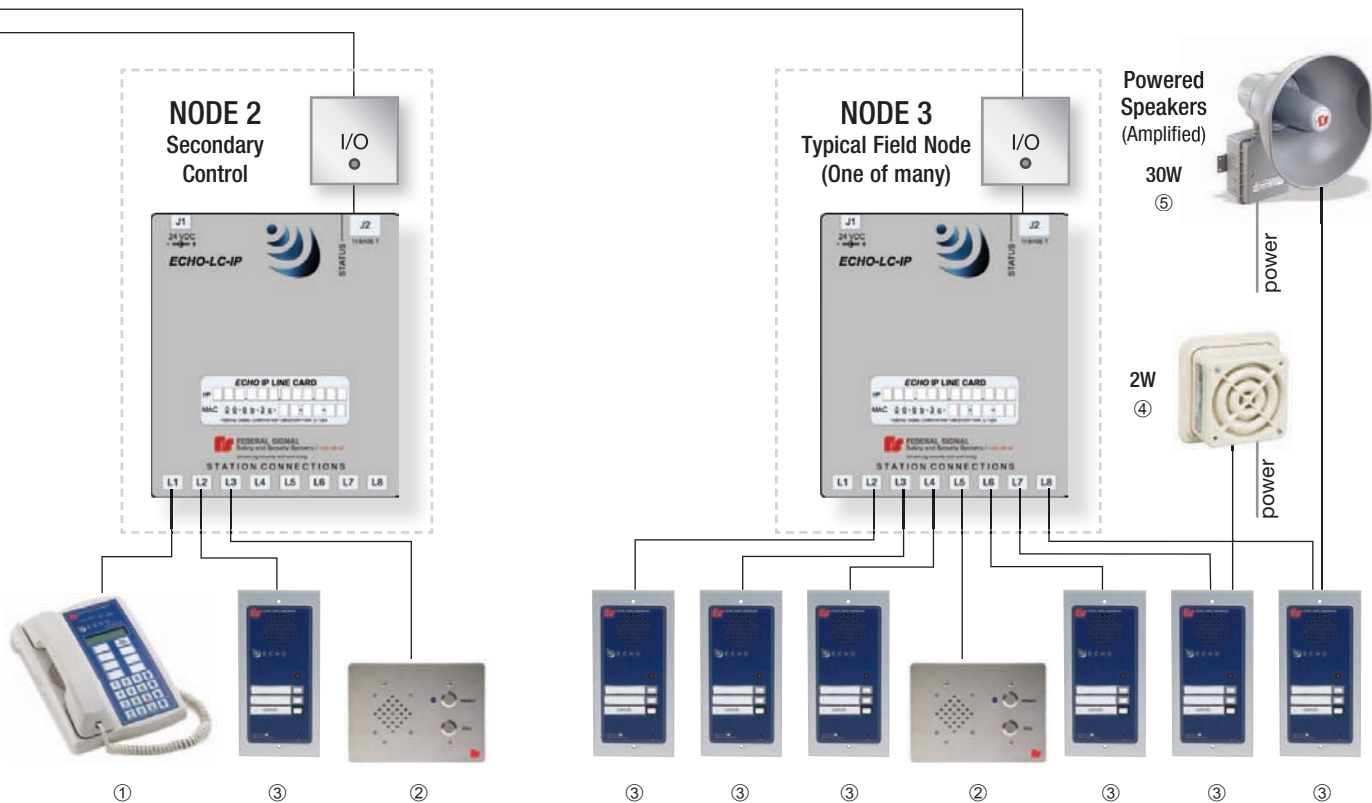
ECHO Direct Dial Station/2Button and Cancel (E-DD2): This hands-free direct dial station includes two programmable buttons, a cancel function, and an online LED status indicator. This unit also offers a built-in speaker and optional output for high power amplified speakers (up to 10 per station)



Touchscreen Control Panel

Custom Touchscreens with Specialized Software

Federal Signal can supply custom touchscreens with specialized software that meets a customer's exact system requirements. This screen capture example represents how a system with various field stations can be taken off-line by a simple screen touch of the corresponding button. The button will then change color to indicate that it's off-line. If multiple primary and secondary touchscreens exist, they will graphically mimic each other's status ensuring redundancy. The secondary control has the ability to take the primary control off-line and will assume total system control.



④ 2-Watt Loudspeaker



T-50GC

Speaker Amplifier (T-50GC): This amplified powered speaker is designed to produce crisp, clear tones, digital voice messages and live public address. This speaker is designed with a built-in volume control and is ideal for indoor locations.

⑤ 15-Watt – 30-Watt Amplified Speakers



T-300GC or T-302GC

Speaker Amplifier (T-300GC or T-302GC): Designed for indoor and outdoor use where high audio output levels and long range coverage is required, the T-300GC and T-302GC produces crisp, clear tones, digital voice messages and live public address. Speaker variations include Div 2 hazardous location and explosion-proof models with built-in volume control.



ECHO Digital Industrial Intercom 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 1.2 miles and beyond. Systems can be commissioned and customized quickly in the field or remotely with pushbutton menu selections or a point-and-click software interface. Spare parts are standardized and minimal.

- *Addressable intercom*
- *Public address and general alarm*
- *Paging and telecommunications*
- *Ordinary location, hazardous area and weatherproof stations*
- *Supervised systems*
- *30 channels*
- *Field programmable*
- *UL, cUL, ATEX*

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ATEX

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