

Digital Switching and Routing

In the Fast-Paced World of Command & Control Your Voice/Data Messages Must Go Through Reliably

FEATURES

- Open Architecture supports both legacy and commercial interfaces (ISDN, Ethernet, IP, etc.)
- Tactical Voice and Radio Baseband Versions
- Remote and automated control of switch from any PC/Workstation
- Single integrated voice terminal provides Multiple/Simultaneous internal and external communication channels (Keyswitch Integrated Terminal Equipment (KITE))
- 100% Non-Blocking for any number of calls
- Programmable audio and digital interfaces for radio baseband switching
- Powerful conferencing and netting services
- Incorporates military grade security provisions
- Compact, modular, rugged packaging, single or multi-mode architecture
- Proudly Engineered and Made in the USA

MARCOM® INTEGRATED COMMUNICATIONS SYSTEM

The MarCom® Integrated Communication Switch is the foundation of the newest and most capable digital integrated voice/data switching system available for affordable communications equipment supporting command & control and radio room automation.

MarCom® uses the latest Commercial Off The Shelf (COTS) digital technology to give the command and control user a low cost, user friendly solution, to the voice, video, and data communications needs of complex joint coalition missions. Built-in redundancy, rugged construction, and fail-safe circuits ensure your call and messages will go through. MarCom® allows a single terminal for each operator to replace every other voice terminal, significantly reducing shipbuilder cost, weight and space, and increasing operator efficiency well beyond today's legacy stovepipes.

The MarCom® has the flexibility to integrate with both legacy and modern communication standards for affordable and easy upgrades as technology evolves.



APPLICATION

- Shipboard/Mobile Interior and Radio Communications Automation
- Radio Baseband Circuit Switching
- Air Traffic Control
- Secure Switching
- Command & Control Centers
- Secure/Plain Voice Conferencing

FUNCTIONS

- Secure/Plain Radio/Crypto Access
- Intercom/Interphone
- Telephony- ISDN and POTS
- Public Address/Ship Alarms
- Conferencing/Netting
- Radio Cross-Banding
- Interface with Existing or future Systems-wired or wireless

BENEFITS

- Low cost integration of mixed commercial and legacy military systems
- Low cost expandability compared to older cross point switch technology
- Highly efficient user operations with one voice terminal, for all voice systems
- Low cost logistics - minimal training and few spares
- Greatly reduced manpower for operation and maintenance
- Information protection and connectivity assurance
- Low acquisition, installation, and expansion cost using a single system with multiple capabilities and significant redundancy



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DELIVERING TRANSFORMATIONAL COMMUNICATIONS

SPECIFICATIONS

MarCom Integrated Communication System

PHYSICAL CHARACTERISTICS

Size: 19"W x 23"D x 21"H (Standard Chassis)
19"W x 20.5"D x 10.5"H (Compact Chassis)

Weight: 85 lbs. (full 7 card complement) - Compact
140 lbs. (full 20 cards) - Standard

PERFORMANCE CHARACTERISTICS

General:

- Digital Time Division Multiplex (TDM) Switch
- 2048 Digital PCM Timeslots
- Fully non-blocking, modular architecture
- Redundant Common Control Processor(s) control switch configuration and operation
- External administration via EIA-232 or Ethernet 10 Base F/AUI with SNMP
- Accepts external timing source (ETS) with automatic shift to internal if ETS is OSS

Integrated Voice Communication Systems: (IVCS)

- ISDN BRI 2B+D and POTS lines to users
- ISDN POTS NT Adapters to analog legacy voice cryptos, radios, announcing, sound powered nets, and wireless systems
- ISDN PRI trunks to commercial PABX
- Redundant Common Control Processor and Uninterruptible Power Supply
- Minimum 8 lines or 3 trunks per card: any card pair in any of the 18 available slots (Standard Chassis)
- Modular, supporting multi-node architectures and dual homing
- Voice Over IP Compatibility with Full Conferencing
- 25 mS latency (propagation delay) available to radio trunks

Radio Baseband Circuit Switching (BBS):

- Programmable audio/digital interface ports and interface types
- Failsafe Mode
- Supports all DOD radio/COMSEC interfaces

Security:

- Crosstalk meets isolation US Navy certification for red/black
- Security tag bits and SW/HW checks prevent inadvertent connections and multiple security classes
- Common switching paths for control signals and data provides authentication of switch signals

Environmentally Qualified:

- Shock: Mil-S-901D, Grade A, Class 1, Type A
- Vibration: MIL-STD 167
- Temperature: MIL-STD 810 (-40 to 70°C)
- Salt/Fog: MIL-STD-810
- Relative Humidity: 95%, non-condensing MIL-STD-810
- EMI: MIL-STD 461R

SPECIAL FEATURES

The MarCom® comes in two configurations, an integrated ISDN voice, application and a radio baseband switch application. While using the same core MarCom® elements, the two configurations are optimized for characteristics unique to the application.

Integrated Voice Communication Systems:

- Integrates existing legacy/stovepipe systems and commercial systems at the switch level.
- Single Integrated Terminals replace telephone, intercom, radio handsets, and announcing microphone units at each user location
- Programmable color LCD terminal with dynamic legend push buttons
- Virtually unlimited conferencing, netting and multi-circuit monitoring, both radio and interior
- 8 Simultaneous non-blocking channels
- Air Traffic Control features
- Command and Control Net features
- Interfaces to commercial PABXs and VOIP systems for shipwide integrated telecommunications and PSTN access
- Simplifies interfaces which reduces cabling and allows cable plant re-use on backfits

For Additional Information Contact:

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Cleared by DoD/DFOISR for Public Release under DFOISR case number 05-S-0123 on October 25, 2004
All Data and Specifications Subject to Change

MARC-07/04