IOC -1200 C-SERIES
INTER OPERATE CONTROLLER

IOC-1200 C- Series complete with IOC Controller Software

Benefits

- **Modular interoperability system employing proven Radio over IP (RoIP) technology**
- **Sophisticated DSP algorithms provide adaptive hybrid, VOX, VMR (voice modulation recognition), noise reduction, audio delay, and more.**
- **Easily deployed in tactical, transportable, fixed, and mobile applications.**
- **Remotely change radio channel with the purchase of channel changing option.**
- **IOC Controller software provides full system status and control from a PC, locally or remotely over an Ethernet network.**
- **Connects up to twelve (12) audio devices with the ability to expand to twenty four (24) audio devices.**

IOC-1200 C-Series Overview

The IOC-1200 C-Series offers unsurpassed local and wide area interoperability by directly connecting or networking any of the following devices:

- **UHF, VHF, HF, P25 radios**
- **IDEN**
- **Cellular**
- **Land line telephones**

The IOC-1200 C- Series enables communications between users of these devices by cross connecting each device's baseband audio. The IOC-1200 C- Series offers a rich set of operational features and wide scale adaptability with virtually any voice communications device.

The IOC-1200 C- Series includes VoIP / RoIP technology to provide a means for regional, state, multistate, and national interoperability. The unit is completely scalable and field configurable to meet the customer and application's needs and it is easily controlled using the IOC Controller software provided. It provides three different methods of operation for system redundancy and is neither computer nor network dependent for its operation.

Local Interoperability Overview

During local response, first responders are responsible for ensuring real time communications across multiple platforms with a moment's notice. They require an interoperable communications system that provides day to day operations along with meeting the demands of large scale incident management. The IOC technology provides a fast, reliable and easy to use solution that can be deployed to any scene and be operational within minutes. This rapid deployment capability, paired with the means for expansion, makes the IOC-1200 C-Series the preferred interoperability for local response.

Wide Area Interoperability

During times of national emergencies resulting from acts of terrorism or natural disasters, homeland security professionals should have the ability to communicate with onsite first responders, local and federal law enforcement, and other federal and state resources. The IOC-1200 C-Series leverages VoIP / RoIP technology to achieve a coordinated response regardless of geographical boundaries.

Multiple IOC-1200 C-Series can be integrated into a wide area interoperability system (WAIS) using a new or existing IP network. The WAIS Controller software provides an intuitive icon based GUI to monitor and control local and wide area cross connections by simple point and click procedures.

Solution Summary

- **Voice prompts provide connection status and help guide operation**
- **Can interconnect radios in any band including HF, VHF, UHF, 800 trunked, P25; also cell phone, Landline PSTN, and iDEN**
- **Radio templates for supported devices simplify and speed system setup**
- **Connection to a Wide Area Interoperability System using the WAIS Controller**

Applications

- **Tactical**
- **Mobile**
- **Transportable**
- **Fixed Site**
- **Wide Area System**

Mission Support

Photo caption: Left: A typical ACU1000 fixed site configuration. Top Right: ACU controller software. Bottom Right: WAIS controller software.

- **24/7 support**

  Optional extended warranty (additional charge)
- **Interface cables available for over 300 radio makes/models**

Local Operator Interface Module

Front Panel: Handset jack, Headphone jack, Speaker, Volume, and Speaker on/off.
Voice Prompts: English language standard, Chinese language standard and others available. 80 Messages typical, 254 possible
Keypad: Provides manual IOC-1200-C-Series programming and local system control

Control Module

Handset Interface: RJ12 Connector: Microphone input, Earphone driver, PTT input
Interfaces: Async Full Duplex RS232, Baud Rates 300 bps to 115.2 kbps. RJ45 Connector, 10/100 Base-T Ethernet
Program and Control: Ethernet (built in web page), Telnet, RS232, IOC Controller, WAIS Controller.

Radio/ 4wire Interface Module

Audio Input: Balanced or Unbal 600 ohms or HiZ; 46dBm to +12dBm levels; 100Hz to 3200Hz
Audio Output: Balanced or Unbal 600 ohms; 26dBm to +12dBm levels; 100Hz to 3200Hz.
Digital I/O: COR/Squelch and AUX inputs, PTT and AUX outputs
Serial Interface: Async Full Duplex RS232, Baud Rates 300 bps to 115.2 kbps. RJ45 Connector, 10/100 Base-T Ethernet
Configuration: Ethernet (built in web page), Telnet, RS232, IOC Controller
Algorithms: VOX or VMR Voice Detection; Noise Reduction; DTMF; Audio Equalizer, Audio Delay and more

Phone System Module

Phone Line: RJ11 Connectors; 24 dBm to 0 dBm levels
Algorithms: DTMF Detection and Generation; DSP Adaptive Hybrid, DSP VOX, and Recorder Tones

Local Phone Module

Phone Set Interface: RJ11 Connectors; 20 mA loop current; on/off hook detection; ring generator
Call Progress Tones: Dial, Busy, and Ring back tones
Algorithms: DTMF Detection; Adjustable level VOX, Audio Delay.

General/Environmental

AC Input Power: 115/230 VAC + 15% 4763 Hz, 80 VA Typical, 100 VA Maximum.
DC Input Power: +11 to +15 VDC @ 4A Nominal.
Size: 5.25" H x 19"W x 11"D (13.3 x 48.3 x 28 cm).
Temperature: Operating: 20 to +60 degrees C. Storage: 40 to +85 degrees C.
Humidity: Up to 95% @ 55 degrees C

Keyword: IOC