

## V4 Marine Communication System

### About ICS Electronics

ICS Electronics Limited is a world leading marine electronics company. We only work in the marine sector focusing on delivering solutions that are designed to excel at meeting the operational, management and regulatory needs. The V4 Marine Communication System (V4 MCS) is the flagship of our advanced Coast Station, GMDSS compliant systems.

We have been at the forefront of developing user friendly and simple to operate marine communication systems for over 30 years. The V4 MCS benefits from our experience and knowledge of Coast Station needs and has the regulatory requirements built into the system functions/features.

### V4 Overview

The ICS V4 MCS is a fully integrated, modular and flexible radio communication system for shore based marine operations. V4 brings TCP/IP based technology allowing greater flexibility to the system design making full use of remote control networks. Where established networks exist and client users wish to upgrade or extend coverage, the V4 MCS provides a cost effective, easy to implement solution to assist in the planning process.

### Modular & Flexible

The V4 MCS is a highly flexible system with system ranging from a single operator and a single radio to national GMDSS systems with over 100 operators and over 300 radios. In addition, the system components are modular allowing phased implementation of projects and assistance with budgetary planning. Upgrades can be seamless, often with no disruption to existing components and services.

### Proven Track Record

ICS has delivered Coast Station systems in over 50 countries with over 100 systems in service, including major systems for the UK Coastguard and the United State's Coast Guard's Rescue21 service.



**Clutter-free workstations using V4 MCS**

### Features

- IMO GMDSS Compliant, A1, A2, A3, A4 & NAVTEX
- Flexible, Modular Design
- Fully Scalable System
- Integrated VHF DSC, VHF Voice, MF/HF DSC, MF/HF Voice, NAVTEX & Radio Telex
- Central Management of all Radio Communications
- Touch Screen Operator Console & Radio/Telephone Dispatcher
- Radio over IP (RoIP), Voice over IP (VoIP) Audio Switch with Voting and Quasi-Synchronous Modes
- Synchronisation of Multi Receive Site IP Packets (when using RoIP)
- Full DSC Messaging and Automatic Channel Selection for Voice Communication
- Integration with AIS/VTs, SAR & Command and Control Systems
- RSSI & Automatic Transmitter Selection with In-built Voting System
- Voce Recording options
- MMSI Database with Search Features (can interface to external AIS/VTs databases)
- Reduced Operator Workload
- "Any Workstation, Any Operator, Any Radio" Principle - Configurable by Authority/Login
- IP Network based
- Dual Redundant and N+1
- Fault Detection System Built-in
- Comprehensive, Training & Support
- 4th Generation Technology

### Reduced Operating Costs

The V4 MCS is proven to have had significant operational and financial benefits to our customers including:

- Reduced operating costs
- Reduced operator workload
- Reduced system maintenance
- Efficient management of centralised technical resources
- Efficient use of shared data resources
- Efficient response during emergency situations
- Efficient system maintenance reducing system downtime



- Integrated Marine Communication Systems
- MF/HF (A2/A3/A4)
- NAVTEX
- VHF (A1)

### RoIP/VoIP Marine Audio Switch

The latest addition to the V4 MCS is the ICS Marine Radio Over IP (RoIP) and Voice over IP (VoIP) Audio switch. Used in conjunction with the ICS V4 Radio RoIP Gateway and the ICS V4 Radio Operator Telephony Unit (RTCU) the full potential of a modern marine communication system is realised!



### ICS V4 RoIP Gateway

Our Audio switch is different from others in that it has been designed from the start to meet specific challenges and requirements for marine systems e.g. multi-site receive and central synchronisation of voice packets.

Like the V4 MCS, the V4 audio switch is highly flexible allowing a wide range of configurations to be adopted, integrating trunk telephony, PABX, internal VoIP telephony, cross radio and telephony connections, voice recording together with touch screen control.

There are numerous benefits of the ICS V4 audio switch over traditional systems - functional, operational, maintenance, administration, efficiency and cost. Replacing expensive leased lines to remote radio sites can alone justify moving to RoIP/VoIP.

### Easy to Use Operator Interfaces

ICS understand that critical operating systems need to be intuitive and easy to understand. Over the past 30 years we have placed significant emphasis in the development of V4 user interface with input from our user community, operators & system managers and human factor consultants. Furthermore the system continues to be improved through periodic (optional) system software updates. ICS can provide bespoke customisation to meet individual needs.

### Regulations & Compliance

ICS Electronics do not just sell equipment and services; we actively participate in promoting and helping set industry best practice through international committees, maritime organisations and technical forums around the world including IMO, ETSI, IEC, ITU, IALA. ICS Electronics is often consulted by international/national agencies and administrations for guidance on marine communication issues.

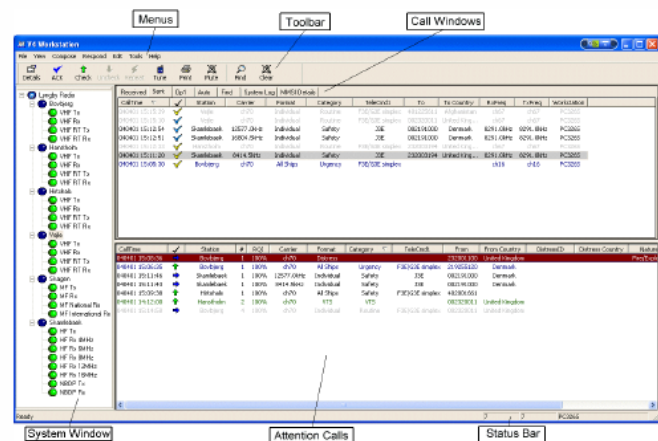
### Quality

ICS Electronics is an ISO 9001:2008 certified company. We continually strive to improve our company, services and equipment to exceed customer expectation



### Contact Us

If you would like any further information or quotation for a V4 MCS system then please contact to discuss your requirements using the details at



V4 Interface showing Remote Radio Sites and DSC Panel