

DSC

Digital Selective Calling System

The image shows two windows of the Jotron DSC Client software. The top window is titled 'History' and displays a list of 'Received messages'. It shows messages from Site A and Site B to 'All ships'. The bottom window is titled 'Messages Report' and shows a detailed list of messages with columns for Time, Count, Site, Type, Destination, Source, Details, and Status. Both windows have a 'JOTRON' logo in the top right corner.

Time	Count	Site	Type	Destination	Source	Details	Status
2015-12-10 08:13:57	2	Site B	34	Urgency and safety call	All ships	Viking (0025762390) SelfMmsi (0025762390)	Received
2015-12-10 08:13:59	2	Site B	35	Routine individual call acknowledgement	All ships	Viking (0025762390) SelfMmsi (0025762390)	Position request (121)
2015-12-10 08:13:59	2	Site B	34	Routine individual call	All ships	SelfMmsi (0025762390) SelfMmsi (0025762390)	F/E/G/E simple (100, Ch 67)
2015-12-10 08:14:08	2	Site B	34	Routine individual call	All ships	ColorSpeed (0025762480) SelfMmsi (0025762390)	F/E/G/E simple (100, Ch 67)
2015-12-10 08:04:52	2	Site A	29	Urgency and safety call	Viking (0025762390) SelfMmsi (0025762390)	Position request (121)	
2015-12-10 08:04:52	2	Site B	29	Urgency and safety call	Viking (0025762390) SelfMmsi (0025762390)	Position request (121)	
2015-12-10 08:04:54	1	Site B	47	Urgency and safety call	ColorSpeed (0025762480) SelfMmsi (0025762390)	Text (118)	

Time	Count	Site	Type	Destination	Source	Details	Status
2015-12-10 08:13:57	2	Site B	34	Urgency and safety call	All ships	Viking (0025762390) SelfMmsi (0025762390)	Received
2015-12-10 08:13:59	2	Site B	35	Routine individual call acknowledgement	All ships	Viking (0025762390) SelfMmsi (0025762390)	Position request (121)
2015-12-10 08:14:08	2	Site B	34	Routine individual call	All ships	SelfMmsi (0025762390) SelfMmsi (0025762390)	F/E/G/E simple (100, Ch 67)
2015-12-10 08:04:52	1	Site A	29	Urgency and safety call	Viking (0025762390) SelfMmsi (0025762390)	Position request (121)	
2015-12-10 08:04:52	2	Site A	29	Urgency and safety call	Viking (0025762390) SelfMmsi (0025762390)	Position request (121)	
2015-12-10 08:04:54	1	Site A	29	Urgency and safety call	Viking (0025762390) SelfMmsi (0025762390)	Position request (121)	
2015-12-10 08:04:54	1	Site B	47	Urgency and safety call	ColorSpeed (0025762480) SelfMmsi (0025762390)	Text (118)	

DSC

Jotron Digital Selective Calling System (DSC) is an advanced shore station system, providing features and networking capabilities to meet the complex challenges of today's maritime environment

The DSC system consists of client and server software applications that runs on the Windows™ Operating System and Jotron 7000 series VHF coastal radios and MF/HF radios from alternative manufacturers.

The Jotron vhf radios has a built-in digital DSC modem that guarantees reliable system operation and simplicity. Client/server software applications are used for receiving and sending DSC messages, acknowledge or relay distress alarms as defined by ITU-m493.

Runs on multiple Microsoft™ Windows versions: Windows 7, 10 and 11 Windows Server 2008, 2012, 2016, 2019, 2022

The system is designed to meet the requirements of Coastal Port and VTS Stations and cannot be used onboard ships and vessels without other equipment ensuring that the GMDSS requirements for Ship-Borne radio installations are met. poritio ratemque cusapiet pere landis dene con pratem si doleceritis.

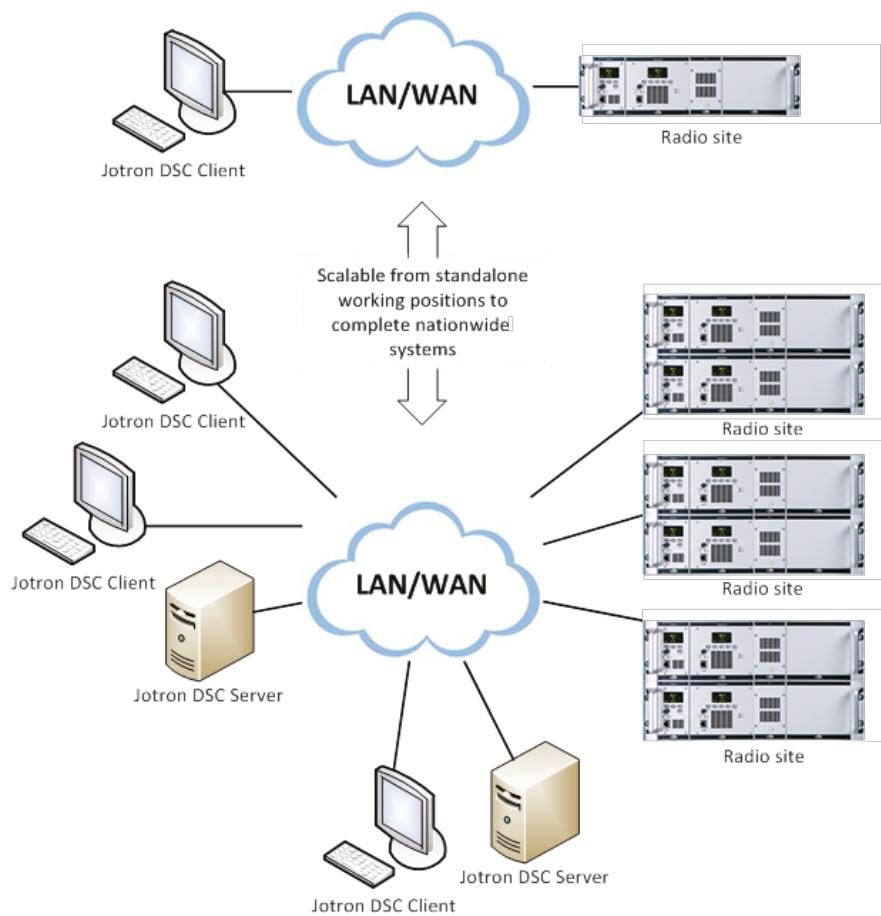
Features

- Professional IMO and ITU compliant solution
- High reliability and simple system maintenance thanks to digital DSC modem built into Jotron radios
- Advanced message handling and archiving
- Interface to Jotron RRC-7700 system for VHF message handling
- Fully IP based system requires minimal network bandwidth. DSC messages are digitally processed at the Jotron radios, converted to IP and are sent to our DSC server.
- Possibility to share a single transmitter radio between DSC system and voice communication system. Transmitter will automatically switch to VHF channel-70 for sending a DSC message
- MF/HF capable using Jotron gateways towards analogue radios
- Configurable DSC message templates
- Scalable server/client architecture. Suitable for standalone working positions and expandable to large installations with multiple working positions and radio sites
- API towards VTMIS systems for integration to customers systems
- Reliable communication within the system using industry-standard TCP/IP network
- DSC messages are archived in an SQL database. Archiving period is configurable and limited only by available storage capacity on the computer. Archived messages can be searched, printed or exported to Microsoft Excel
- System status monitoring and fault indication at working position

Flexible Architecture

The architecture is flexible and scalable. Multiple clients can connect to a server to operate the same radio sites, a client can also connect to multiple servers at the same time.





Specifications

JOTRON DSC SYSTEM PARTS

- Jotron DSC client (software component)
- Jotron DSC server (software component)
- TA-7650C, DSC enabled coastal transmitter unit
- RA-7203C, DSC enabled coastal receiver unit
- RGW-7700, DSC enabled gateway for MF/HF DSC

COMPLIANT TO THE FOLLOWING DSC STANDARDS

- ITU-R M.493-16
- ITU-R M.1080
- ITU-R M.821-1

DSC

Example operation

Two screenshots of the Jotron DSC Client software interface are shown, illustrating the DSC message history and message creation.

Screenshot 1: History messages

The top window shows the 'Received messages' history. It lists messages from Site B to Site A and Site B to Site B, categorized by type (Emergency and safety call, Routine individual call, Routine individual call acknowledgement, and Position request). The details for each message include the source, destination, and a brief description of the message content.

Time	#	Site	RSID	Type	Destination	Source	Details
2015-12-10 08:11:47	2	Site B	34	Emergency and safety call	All ships	Viking (0021762390)	F18/G18 simplex (1000, Ch 16)
2015-12-10 08:12:30	2	Site B	25	Emergency and safety call		SelfNet (0021762390)	Position request (122)
2015-12-10 08:12:30	2	Site B	34	Routine individual call acknowledgement	SelfNet (0021762390)	SelfNet (0021762390) F18/G18 simplex (1000, Ch 17)	
2015-12-10 08:11:48	2	Site B	34	Routine individual call	ColorSpeed (0021762390)	SelfNet (0021762390) F18/G18 simplex (1000, Ch 17)	
2015-12-10 08:11:48	2	Site B	29	Emergency and safety call	ColorSpeed (0021762390)	SelfNet (0021762390) Position request (121)	
2015-12-10 08:04:09	2	Site A	29	Emergency and safety call	Viking (0021762390)	SelfNet (0021762390) Position request (121)	
2015-12-10 08:04:04	1	Site B	47	Emergency and safety call	ColorSpeed (0021762390)	SelfNet (0021762390) Test (110)	

The bottom window shows the 'Sent messages' history, listing messages from Site B to Site A and Site B to Site B, categorized by type. The details for each message include the source, destination, and a brief description of the message content.

Time	#	Site	Type	Destination	Source	Details	Status
2015-12-10 08:11:48	2	Site B	Routine individual call	ColorSpeed (0021762390), SelfNet (0021762390)	F18/G18 simplex (1000, Ch 17)	Sent	
2015-12-10 08:04:52	2	Site B	Emergency and safety call	Viking (0021762390), SelfNet (0021762390)	Position request (121)	Sent	
2015-12-10 08:04:09	2	Site B	Emergency and safety call	Viking (0021762390), SelfNet (0021762390)	Test (110)	Sent	
2015-12-10 08:04:04	2	Site B	Emergency and safety call	ColorSpeed (0021762390), SelfNet (0021762390)	Test (110)	Sent	

Screenshot 2: DSC message creation

The left window shows the 'Send DSC message' dialog. It allows selecting a template (e.g., Individual station call (120)), defining the message format (e.g., Safety (120)), and specifying the destination (e.g., Viking (0021762390)). The right window shows a detailed view of a selected message, specifically an 'Emergency and safety call' from Site B to Site A at 2015-12-10 08:04:52, with details such as the source, destination, and message content.