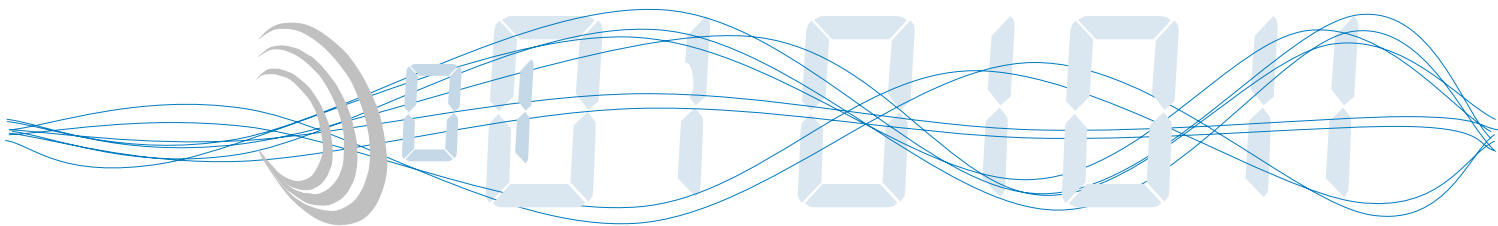




## Master Control Station - MCS

MCS is the central digital unit of the system. The MCS supports all the digital and audio interfaces required to configure a platform's communication needs. It interfaces directly to the vehicle prime power supply and is the sole point of connection to the vehicle D.C. distribution panel. The MCS is designed to survive the transients specified in MIL-STD 1275A(T) and provides a conditioned and regulated supply to the remaining units and Active Noise Reduction (ANR) headsets (if fitted). The MCS incorporates electronic circuit breakers offering full protection from power spikes and surges without the need for replaceable fuses. The MCS controls communications between six FFCS's, six radios and up to four MOS-2's. Any number of the six radios may be used to transmit and/or receive simultaneously by different operators. The MCS itself provides audio connections for the first two of the six radio transceivers with the remainder being provided by Radio Interface Terminals (RIT's). In addition to radios, the MCS provides audio interfaces for vehicle alarms, a loudspeaker, and a pair of field wires (used to connect to a self-powered field telephone or another vehicle equipped with a ROVIS / AN/VIC-1 system). The distance between the two link vehicles or to the field telephone can be up to 2000 m. The MCS continually performs a built-in test (BIT) routine on the system. The BIT is totally user transparent. It is initiated automatically at switch-on and remains active for as long as the system is powered without preventing or interfering with communications. If a failure does occur in either a cable or a digital component, the BIT instantly detects it and displays a clear, easily understood text error message on the MCS alphanumeric display. All system control is exercised from the MCS, enabling the commander to select the system operating mode and to program the level of radio access available at each of the FFCS's. No matter how the system is programmed, all users retain full access to the intercom. Only the level of radio access available to each crew member is affected by the program selected on the MCS. The MCS user can specify a number of pre-programmed operating modes which are stored and retained in memory.



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## Specifications and Standards

Chelton products are designed and independently tested to international standards.

### Environmental

Reliability (MTBF) - MIL-HDBK-217

Environmental - MIL-STD-810E :

Low Temperature (-40°C Operational, -57°C Storage, Method 502.3, Procedure I and II)

High Temperature (Hot, Method 501.3, Procedure I and II)

High Temperature plus Solar Radiation (+71°C, Method 505.3, Procedure I and II)

Humidity (Method 507.3, Procedure I and II)

Atmospheric Pressure (945 to 1060 millibars)

Elevation (Method 500.3, Procedure I and II)

Sand & Dust (Method 510.3)

Rain (Method 506.3, Procedure I)

Salt Fog (Method 509.3 Procedure 1)

Immersion (Method 512.3, Procedure I)

Vibration (Method 514.4, Procedure 1, Category 8)

Shock (Method 516.4, Procedure IV and VI & MIL-S-901)

Fungus (Method 508.4)

Explosive Atmosphere (Method 511.3, Procedure 1)

Electromagnetic Compatibility - MIL-STD-461C

Part 4 (CE01, CE03, CE07, CS01, CS02, CS06, RE02, RS02 and RS03)

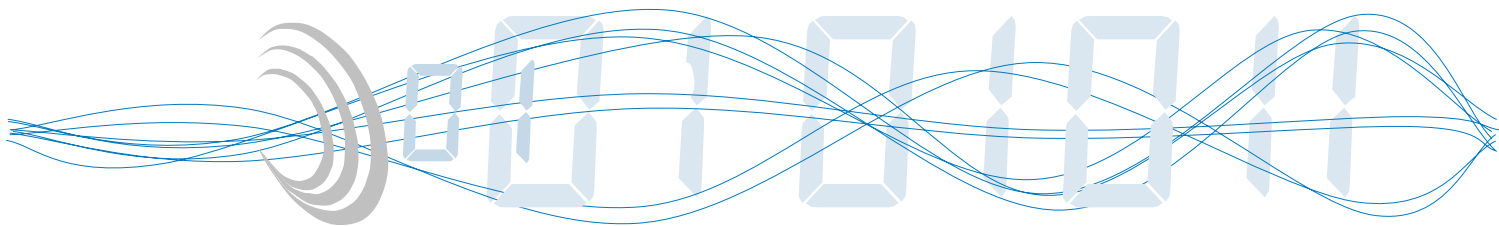
Electromagnetic Pulse - MIL-STD-461C part 4, (RS05 and CS11)

Electrostatic Discharge - IEC 801-2:2, level 4

Rapid Speech Transmission Index (RASTI)

### Mechanical Dimensions and Weights

Height (mm)	Width (mm)	Depth (mm)	Mounting (mm)	Weight (kg)
78	140	115	140	0.9



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