

## A Small but Definite Step Towards “Make in India” Initiative!

### THE COMPANY

**SOS SYSTEMS ON SHIP** is an integrated solution provider in the field of electronics Command Control & Communication (3C), a unique blend of traditional and modern state of art technologies

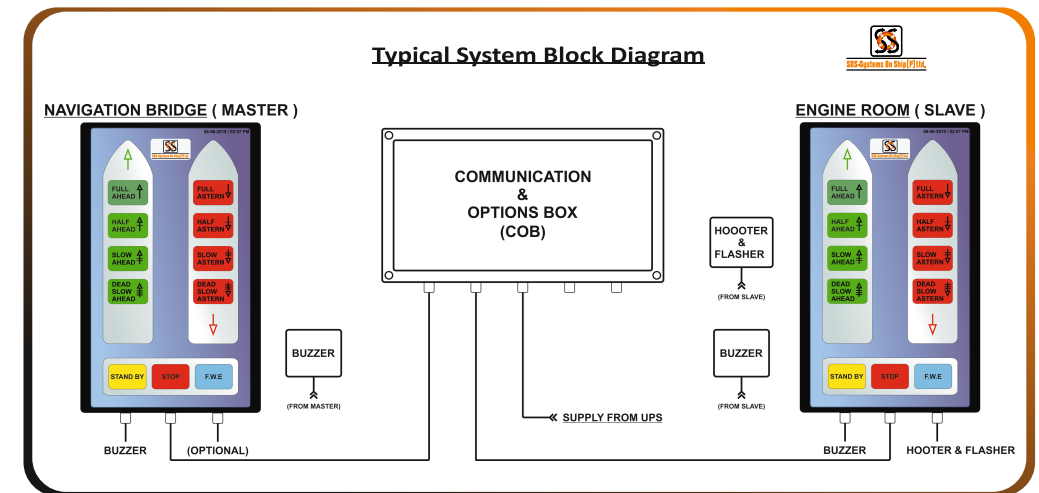
**SYSTEMS ON SHIP** provides a complete solution for requirement from concept to an end product on turn-key basis. SOS believes that each ship is a unique entity and comes with its own unique problem of command , control and communication thus only a tailored solution would only meet and satisfying marine customers fully. A small group of dedicated engineers who have multi-discipline knowledge and field exposure to the marine environment leave no stone unturned to meet the user specifications. Our solutions are customer centric. We have received appreciation from all our customers and our spread across the board within a short span of time speaks volume and we believe that is true measure of our customer satisfaction. Every single repeat order from our customer makes us humble and inspires us to rededicate to achieve higher and better.

### BRIEF DESCRIPTION

An engine order telegraph system **EOT20-02** designed and developed by systems on ship is meant to replace the existing old point to point telegraph used for communicating between the bridge control room and engine room where due to ambient noise the voice communication is unreliable. Also traditionally wherever there is critical and crucial execution of command, the written command has preference over the verbal command.

The systems is designed using advance touch control HMI at either end. The system acts depending upon the configuration as point to point command transfer system. At a given time one HMI act as Master unit and the other act as Slave unit. The system architecture make it possible to have multi master multi slave configuration thus the design is scalable to meet any complex command control scenario. The command are predefined and agreed as per user defined protocol and are displayed on the HMI A command usually is initiated by pressing the desired command button on the touch screen of the Master unit. The command is transmitted in a serial data package to the slave unit where the command is displayed by corresponding command by flashing the command and generating audio alarm to draw attention of the operator. Once acknowledged the flashing command at Slave side the unit becomes steady and the audio alarm is silenced. In case the command is not acknowledge within specified time, an error is generated. the system is released to issue another command.

The data communication between the Master Unit and other networked unit is through serial Rs485 protocol. Alternately data can also be transferred through Ethernet on power line using power line communication eliminating need of running extra cables. In case multiple units configuration the remaining units other than master and slave units act as repeaters and do not play any active role. As part damage control the command center can also have flexibility and the stations can be on line transferred in a seamless manner thereby the repeater unit can play a role of Master or a Slave. At a given line the unit displays status of each networked unit and there status.



### SALIENT FEATURES :-

- Rugged Construction
- 10 inch Touch screen Display Interface
- Easy To Operate
- High MTBF > 30000 Hrs
- Very Low MTTR < 30 Min
- Real time data logging with ship's Name , Voyage NO., Time & Command Execution History (Optional)
- Hard Copy of voyage Command History (optional)
- Complete Voyage History as Backup in Pen drive (optional)

### OPTIONAL FEATURES :

**1) PRINTER :-** The Printer used is a 40column serial printer with special RF interface for wireless operation making it most convenient on board installation. For continuous record of VOYAGE data, it is recommended that continuous paper roll is loaded into the printer. In addition to the normal command history, the printer also prints system status and alarm conditions. Thus, by keeping the printer all the time on, the user can have all the necessary information and status from the printouts.

**2) BLACK BOX :-** The Black Box device its name from the famous cockpit voice and

data recorder used in the avionic industry. The device is available as an option and is fitted into the communication Box (JB) as a temper proof enclosure. The data is stored onto a non-volatile media with retention of approximately 5 years under power down condition and has capacity to store up to 10,000 set of command history. The device can provide useful information to the owner and to the insurance Company during accident or such casta strophe

**3) SYSTEM CONFIGURATION :-** The **EOT20-02** software controlled design can easily customized to ship specific requirements depending upon the size and class of ship, the requirement of number of master and slaves, supply voltage and data logging formats etc.

**3.1) BASIC CONFIGURATION** - The basic configuration consist of one master unit, one slave unit , one communication & Options Box \*Printer depending upon the customer requirement.

**3.2) EXTENDED CONFIGURATION** - If the you required multiple master or multiple slave configuration with all data logging hardware (Printer , soft data like pen drive accessibility , ups backup and a black box maybe supplied at an additional cost