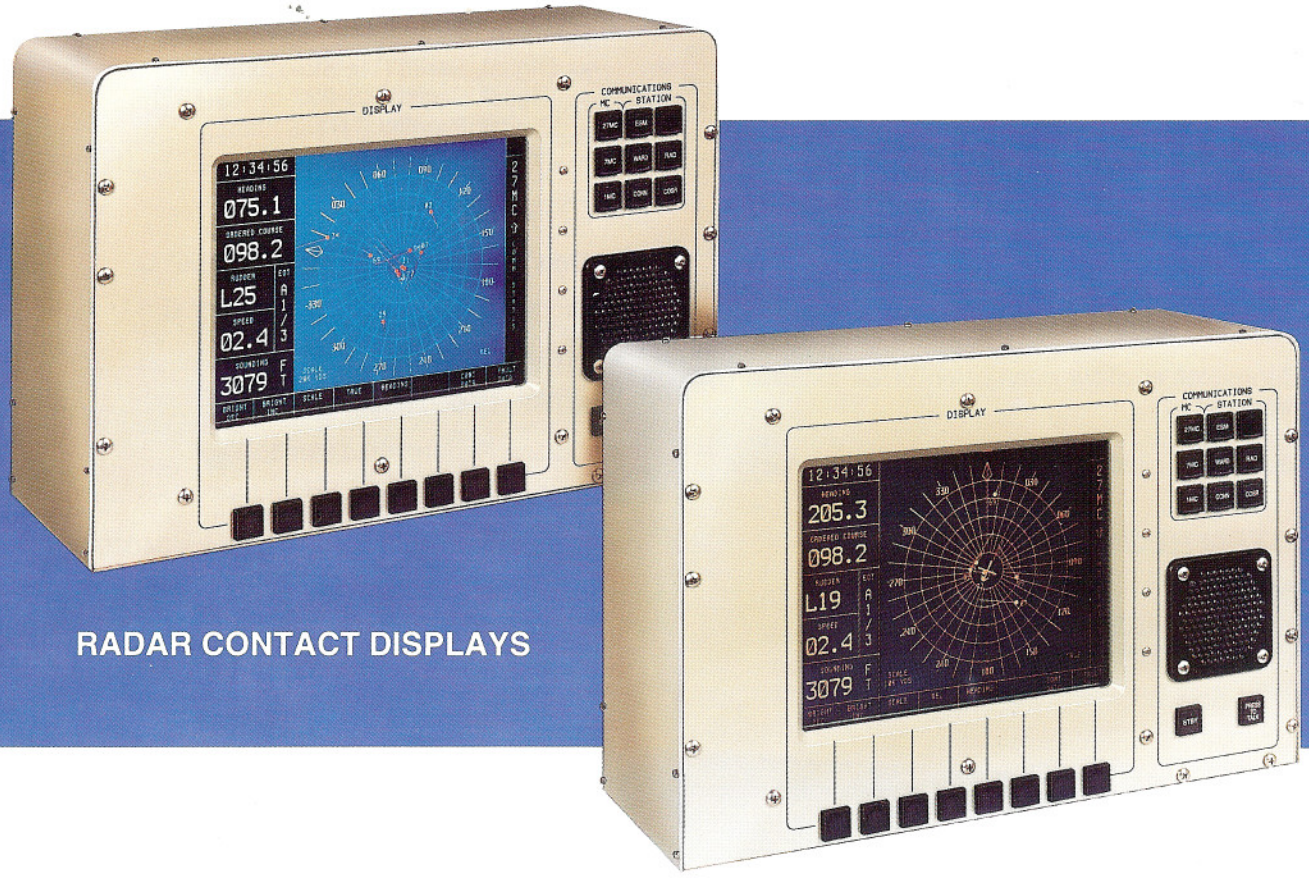
LORAL LIBRASCOPE'S ADVANCED PORTABLE SHIP CONTROL UNIT (PSCU) FOR SUBMARINES



RADAR CONTACT DISPLAYS

Librascope's new Portable Ship Control Unit (PSCU) is smaller, lighter and easier to transport to the bridge trunk than the old PSCU. The new PSCU is completely watertight. The new liquid crystal display provides improved viewing and is easier to operate under adverse environmental conditions.

The new PSCU presents heading information on a compass rose format, radar contact information for up to ten contacts using a PPI format, and a tabular listing of radar contacts including Closest Point of Approach information.

Four display page formats allow rapid selection of heading, radar, closest point of approach, and fault localization information via "soft" switches. Foreground and background color selections are also provided by the "soft" switches.

The PSCU System components include: (1) the PSCU and (2) Electronics Enclosure.

PSCU - The PSCU measures approximately 16.75" wide by 11.25" high by 6" deep. Weight is approximately 25 pounds. It provides the display and man-machine interface.

Electronic Enclosure - The PSCU Electronic Enclosure measures approximately 12" wide by 15" high by 15" deep. The unit is located within the pressure hull, typically in the control area. It receives own ship, sensor, and radar data and converts this data to digital format for communication with the PSCU.

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FEATURES

Major features of the new PSCU include:

- Continual display of a COMPASS ROSE, REAL TIME, HEADING, ORDERED COURSE, RUDDER ANGLE, SPEED, ENGINE ORDER TELEGRAPH, and DEPTH on a color active matrix Liquid Crystal Display.
- Selectable display of RADAR CONTACTS (NTDS symbols) using a PPI type display format. Three selectable range scales with display of up to 10 contacts.
- Provides selectable display of Closest Point of Approach information for radar contacts.
- Pushbutton control of AN/WIC-2B communication circuits and stations and two JA phone lines.
- Connector to allow connection of an external gyro repeater.
- Mates with existing bridge trunk cable/connector.

SYSTEM REQUIREMENTS

- Power
  - 115V 60Hz 2.5 amps (EE only)
  - 28VDC (from AN/WIC-2B)
- Signals
  - Own Ship Course & Speed
  - Depth Below Keel
  - Radar Bearing and Range
  - Radar CPA (optional)
  - Engine Order Telegraph
  - Ordered Course
  - AN/WIC-2B
  - Sound Powered Phone
- Formats
  - Digital, Serial (Mil-Std-1553B)
  - Digital, Serial (RS-232 or RS-432)
  - Digital, Parallel (NTDS Fast)
  - Analog/Synchronous

SYSTEM INFORMATION

- Operating Temperature: -43 to +55° C
- Storage Temperature: -45 to +55° C
- MTTR: 30 minutes (estimated)
- MTBF: 12,000 hours (estimated)
- On-line Performance Monitoring
- Off-line Fault Localization
- Processors: Main 68020; Graphics 34020
- EE to PSCU Interface: RS-422
- Display: Flat Panel, Color Active Matrix Liquid Crystal, 8" x 6" (640 x 480 pixels)

For additional information, write or telephone:
Loral Librascope, 833 Sonora Ave., Glendale, California 91201-2433
Telephone 818-244-6541 • FAX: 818-502-7298 • TELEX 215620

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