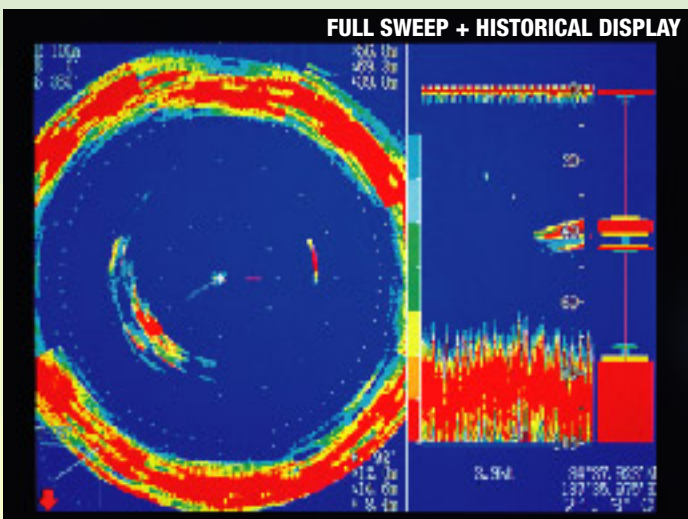
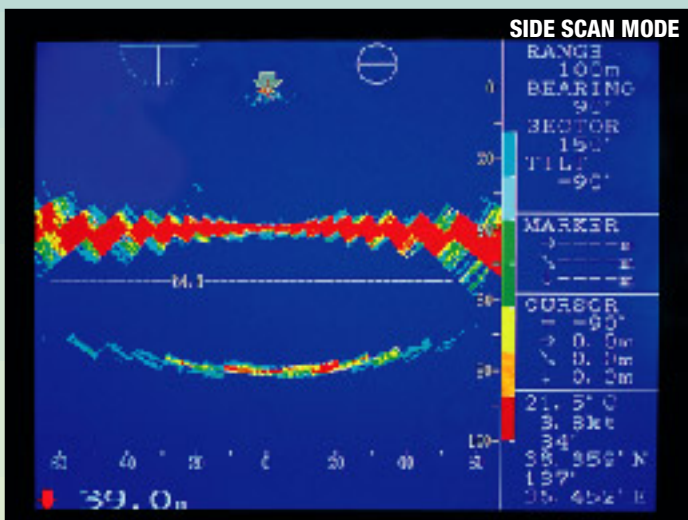
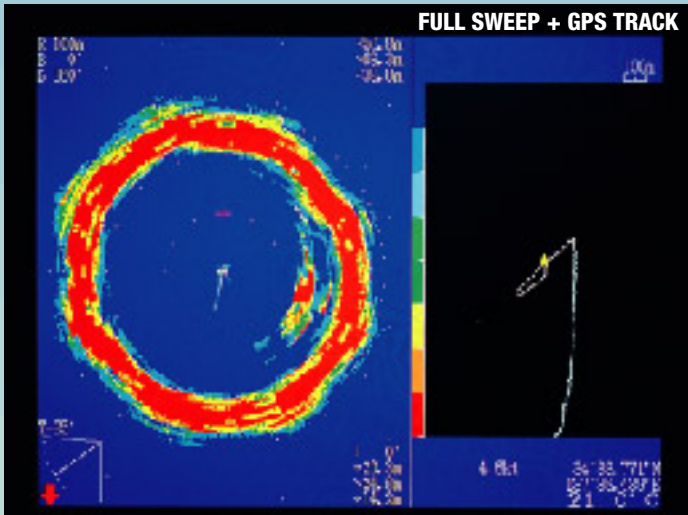
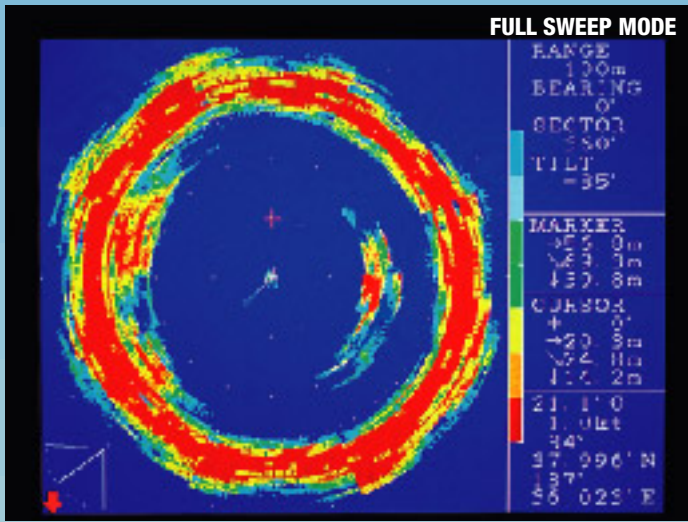




Multi Directional Searchlight Sonar

CSL-1000 CSL-2000 CSS-3000 Series



MAJOR FEATURES:

Color palette function allows you to define desired target color arrangement from a total of 4096 colors.

Five main display modes are selectable: Full Sweep, Sector Sweep, Off-Centered Sweep, Side Scan, and Echo Sounder.

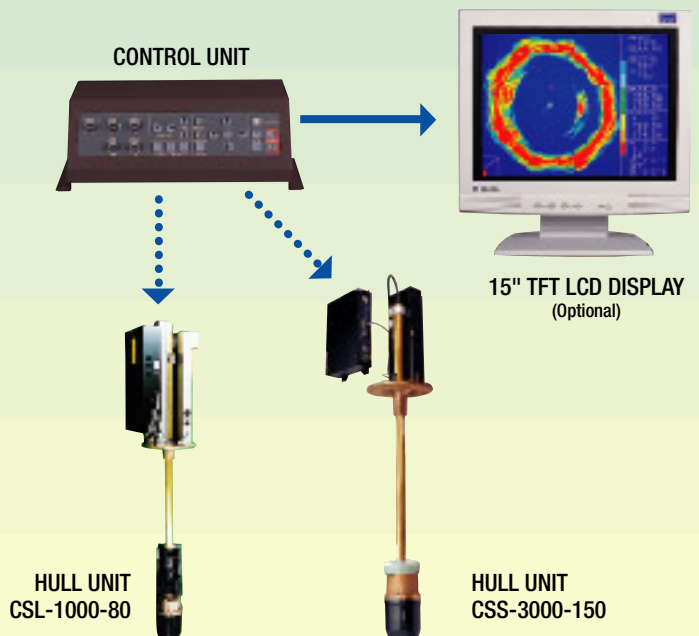
Target lock function allows you to track a specific target automatically.

Transducer stabilizer is built in as standard, compensating for the vessel's pitching or rolling under heavy sea conditions.

NMEA-0183 interface is built-in as standard, allowing GPS-based track to be displayed alongside of the Full Sweep Mode screen.

High speed scanning (for CSS-3000-150): 3 seconds maximum for 360 degree sweep at 40 meter range.

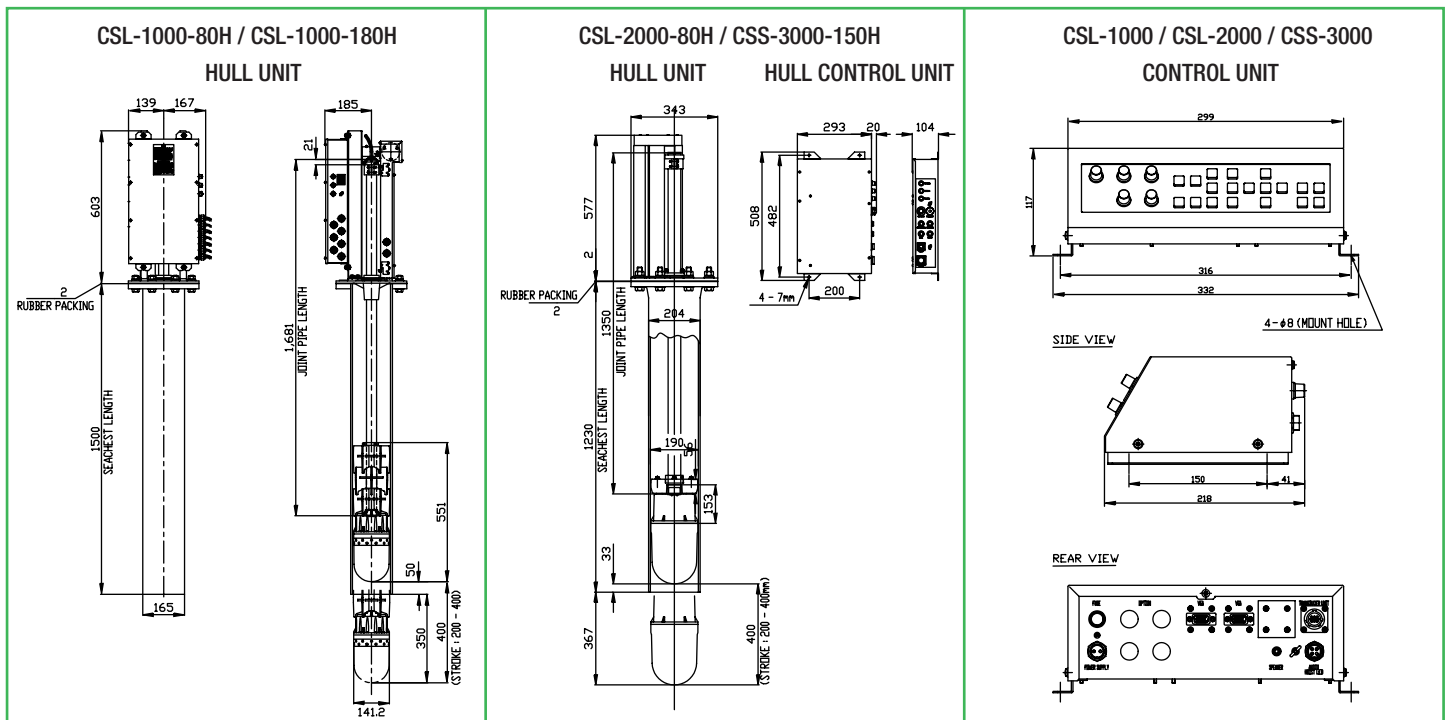
Video output is available in universal VGA format. Just adding a standard PC monitor completes an advanced sonar system. A 15-inch daylight-viewing TFT LCD display is optionally available.



CSL-1000, CSL-2000 and CSS-3000 Series

SPECIFICATION

SONAR TYPE	Search Light Sonar			Sector Scanning Sonar	
	CSL-1000-80	CSL-1000-180	CSL-2000-80	CSS-3000-80	CSS-3000-150
MODEL NUMBER	CSL-1000-80	CSL-1000-180	CSL-2000-80	CSS-3000-80	CSS-3000-150
FREQUENCY	80 kHz	180 kHz	80 kHz	80 kHz	150 kHz
TRANSMIT POWER	1.5 kW	1.5 kW	1.5 kW	1.2 kW	1.0 kW
BEAM ANGLE (-6dB)	19(H) x 15(V) degree	10(H) x 10(V) degree	15(H) x 14(V) degree	11(H) x 18(V) degree	14(H) x 7(V) degree
HULL UNIT WEIGHT	44.9 kg	44.9 kg	60.1 kg	60.1 kg	60.1 kg
SOUNDOME DIAMETER	142mm	142mm	186mm	186mm	186mm
SEACHEST DIAMETER	146mm (6inch)	146mm (6inch)	190mm (8inch)	190mm (8 inch)	190mm (8 inch)
JOINT PIPE LENGTH	1681mm, (1981 and 3000mm as optional)			1350mm, (1550, 2120 and 3000mm as optional)	
SOUNDOME STROKE	200~400mm			200~400mm	
HOISTING SPEED	12 sec for 400mm stroke at 24VDC			12 sec for 400mm stroke at 24VDC	
POWER SUPPLY	20V~30V DC / 60W			20V~30V DC / 110W	
NORMAL RANGES	20~2000MT, 12~1600FM/BR, 80~6000FT			40~2000MT, 20~1600FM/BR, 120~6000FT	
OFF-CENTER RANGES	30~3000MT, 18~2400FM/BR, 120~9000FT			60~3000MT, 30~2400FM/BR, 180~9000FT	
SCANNING SPEED (360°)	4.3 sec / 20m range, 8.0 sec / 100m range, 12.8 sec / 200m range			3.0 sec (40m range), 6.0 sec (320m range)	
SCANNING SECTOR (SONAR MODE)	5 degree step: 5, 25, 45, 85, 125, 165, 205, 360			45 degree step: 45, 135, 225, 360	
	10 degree step: 10, 30, 50, 90, 130, 170, 210, 360			6°, 12°, 18°, step scanning also available	
SCANNING SECTOR (SIDE SCAN MODE)	3 degree step: 3, 27, 45, 63, 93, 117, 147, 177			6 degree step: 6, 30, 54, 78, 102, 126, 150, 174	
	5 degree step: 5, 25, 45, 65, 95, 115, 145, 175			12 degree step: 12, 36, 60, 84, 108, 132, 156, 180	
TILT ANGLE	1 degree step + 5 degree ~ - 90 degree			1 degree step + 5 degree ~ - 90 degree	
CONTROL UNIT	Power supply:10.5 - 40VDC / 9W, 296mm(W) x 100mm(H) x 200mm(D) Weight 3.2Kg				
DISPLAY OUTPUT	Standard VGA format as 640 x 480 pixels, Two VGA output connectors are available.				
DISPLAY UNIT	User supplied VGA(XGA) monitor , 15.1 XGA TFT Monitor is supplied by JMC as optional.				
OPTIONAL ACCESSORY	Remote control unit, NMEA-0183 output connector for target position, External Speaker				



NOTE: Above specifications are subject to change without notice or obligation.

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