

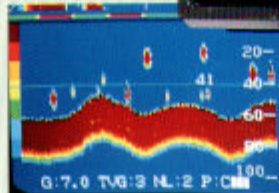
FURUNO[®]

COLOR SEARCHLIGHT SONAR

Fast full circle scan or high resolution vertical sounder

Model CH-28

- Bright, non-fading steady pictures on 10" rectangular CRT in 8 colors, depending on received echo strength
- 2-unit construction for simple installation
- Noise limiter, interference rejector and TVG (Time Varied Gain)
- High speed scan over 360 degrees in steps of 6 degrees. Choice of any sector from 8 sectors
- Instant Scan Reverse
- Choice of hull unit: 350 mm travel or low profile 250 mm travel with transducer retraction at 4 sec at 15 knots of ships speed
- Optional Vessel Motion Sensor for electronic stabilization of transducer for ± 20 degrees of pitch/roll



Historical presentation

The CH-28 is a new cost-effective, compact Color Searchlight Sonar added to the already successful FURUNO family of searchlight sonars.

The 10-inch color screen offers high-definition full-circle scanned sonar pictures either centered or off-centered, a combination of full-circle and Historical presentation, and Vertical sounding. The Historical presentation shows as many as the last four complete 360 degree scans, and facilitates identification of weak or intermittent targets that might be difficult to detect on the full-circle scan display. The vertical sounding presentation, where transducer is automatically tilted down to -90 degrees, helps observe straight below your ship in the same manner as a vertical sounder. It provides higher resolution picture, due to

relatively narrower beamwidth and less sidelobes than normal echo sounders.

FURUNO's proven transducer control machinery is combined in this equipment with digital control circuitry to provide quicker and more accurate control than ever. The 6-degree-step scan updates the picture more quickly. In the unique "Scan Reverse" mode, you can instantly reverse the direction of transducer rotation by pressing [SCAN REV] key, and you will not miss a target of interest. The optional Vessel Motion Sensor MS-100 stabilizes the transducer against vessel roll and pitch.

Superimposed on the screen are the indications of range in use, tilt angle, horizontal range, slant range and depth to a selected target.



The future today with FURUNO's electronics technology.

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Catalogue No. E-350d

TRADE MARK REGISTERED
MARCA REGISTRADA

SPECIFICATIONS OF CH-28

1. Range scales and Pulselength

Range		1	2	3	4	5	6	7	8	9	10	11
Unit	Meter	10	20	40	60	100	150	200	250	300	400	600
	Foot	30	60	100	200	300	400	600	800	1000	1200	1800
	Fathom	5	10	20	40	60	80	100	120	150	200	300
*Pulselength (ms)		0.2	0.2	0.4	0.6	1.1	1.6	2.2	2.7	3.3	4.4	6.6
Time to train full circle (sec)		11	11	11	11	11	14	18	23	27	36	53

Note: m, ft, fa can be selected on Menu. *Pulselengths vary depending on the unit of range scale (shown here on metric scale).
Another scale setting: 50, 100, 120, 140, 160, 180, 200, 240, 280, 320, 360 selectable on Menu.

2. Presentation

Non-fading picture on a 10" color screen, 8 colors depending on received echo strength, Background color selectable between black for nighttime use and blue for daytime use.

3. Display Mode

- (1) Plan presentation (can be off-centered)
- (2) Combination of Plan and Historical presentations
- (3) Vertical Sounding presentation

4. Audio Monitor 1000 Hz, 2 W (Trumpet speaker)

5. Output Power 800 W rms

6. Frequency and Beamwidth

180 kHz, 6.5° conical (at -3dB)

7. Transducer Control (for Plan presentation)

Tilt: Manual control +5° to -90° in 1° steps, 10 sec approx.

Train: Manual or automatic control at 6° steps.

Train sector can be selected among 6°, 36°, 60°, 96°, 120°, 156°, 180° and 360° (nominal)

Train center can be set in any direction in 6° steps.

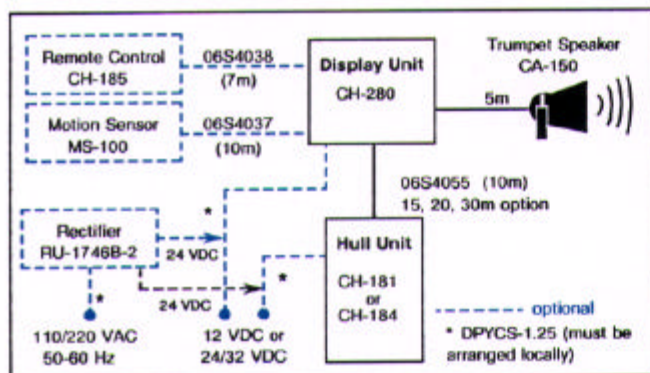
Direction of transducer train reversed instantly by pressing [SCAN REV] key.

8. Power Supply

- 12 VDC or 24/32 VDC, 110 W (180 W in XDR up/down)

Specify 12 VDC system or 24/32 VDC system

- 110/220 VAC, 50-60 Hz, 1φ with optional rectifier RU-1746B-2 (24 VDC system only)



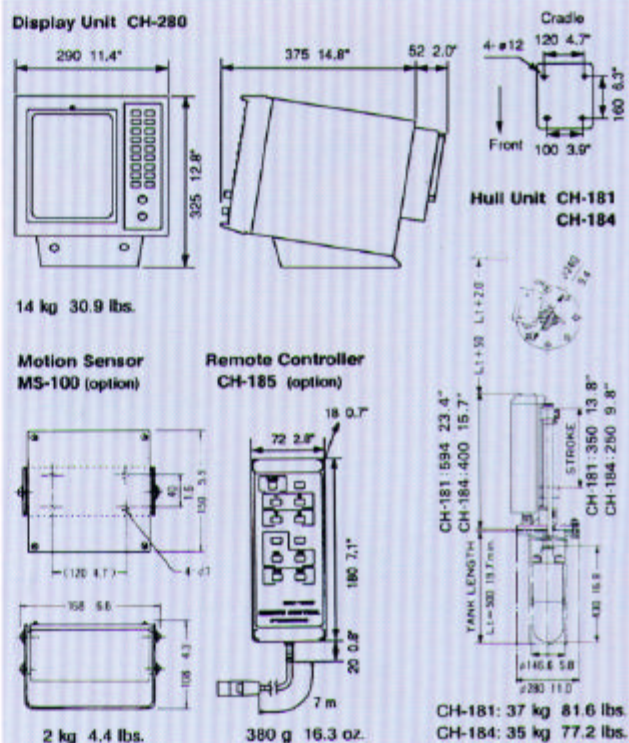
9. Equipment List

Standard

1. Display Unit CH-280* 1 unit
 2. Hull Unit CH-181* (350 mm travel) or CH-184* (250 mm travel, low profile with quick retraction of Xdr (4 sec. approx at 15 knots).) 1 unit
 3. Trumpet Speaker CA-150 1 unit
 4. Standard Spare Parts and Installation Materials 1 set
- * Specify 12 VDC system or 24/32 VDC system

Optional

1. Remote Control Unit CH-185
2. Motion Sensor MS-100
3. Transducer Tank (steel or FRP)
4. Rectifier Unit RU-1746B-2 for 24 VDC system with 110/220 VAC supply



SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

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