

# **CHAPTER 1 OVERVIEW**

## **1.1 Introduction**

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The RA40C/41C/42C represents a compact, high-performance color marine radar that delivers a peak power output of 2 kW(RA40C) or 4 kW(RA41C/42C) from the antenna and uses an 10-inch color liquid crystal display.

In addition to a microcomputer, it incorporates a video signal processing LSI and a newly developed LSI chip exclusively designed for radars, thus providing versatile functionality and high performance.

### **Features**

1. A thin display unit incorporating a liquid crystal display.
2. Easy operation using only a few keys and menu screens.
3. A position of key and its function can be set in position ( Selectable soft function key).
4. Easy operation by the rotary knob.  
Gain, STC, FTC, EBLs, VRMs etc. can be controlled by the rotary knob.
5. A short and a long range echo can be seen at a time ( Dual range radar).
6. Semi-3D screen display for easy identification of targets in noise.
7. Capable of continuous distance range changes (Continual variable range).
8. Waterproof construction of display allows installation at any desired location.

## **1.2 Organization of This Manual**

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This manual provides a wide range of information necessary to operate the RA40C/41C/42C radar ranging from the basic knowledge on radars to the methods of operating, installing, and maintaining the radar. The manual also provides rather detailed technical information on how to adjust video display to obtain clear images. You are requested to read this manual thoroughly from beginning to end in order to understand the various functions of the radar so you can take full advantage of its advanced functions. If you are using a radar for the first time, refer to the basic data on radars in CHAPTER 2.

This manual consists of the following chapters:

USING RADAR FOR THE FIRST TIME	.....	CHAPTER 2
INSTALLATION	.....	CHAPTER 3
FUNCTIONS AND NAMES	.....	CHAPTER 4
OPERATION	.....	CHAPTER 5
INSPECTION AND MAINTENANCE	.....	CHAPTER 6
TROUBLESHOOTING	.....	CHAPTER 7
PRODUCT SPECIFICATIONS	.....	CHAPTER 8

If you are an experienced user of radars, skip CHAPTER 2 and begin from CHAPTER 3.