

COLOR VIDEO SOUNDER FF-88



Icom Inc.

IMPORTANT

READ ALL INSTRUCTIONS carefully and completely before using the video sounder.

SAVE THIS INSTRUCTION MANUAL —

This instruction manual contains important safety and operating instructions for the FF-88.

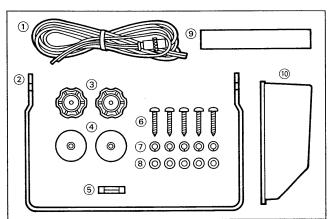
FOREWORD

Thank you for purchasing Icom's FF-88 COLOR VIDEO SOUNDER.

This video sounder uses an 8 bit CPU and high resolution color CRT, so you can detect fish schools, plankton, or the sea bottom clearly in 12 colors.

If you have any questions regarding the operation of the FF-88, contact your nearest authorized Icom Dealer or Service Center.

UNPACKING



Accessories included with the FF-88:	Qty.
① DC power cable	1
② Mounting bracket	1
3 Mounting screw knobs	2
Rubber washers	2
⑤ Spare fuses (5 A)	1
6 Self-tapping screws (M6 x 30 mm)	
7 Spring washers (M6)	5
® Flat washers (M6)	5
Sponge	
® Viewing hood	

CAUTIONS

WARNING! NEVER disassemble the video sounder, or touch internal parts. High-voltage (more than 1000 V) is used in the video sounder. This will cause fatal electrical shock.

NEVER let metal, wire or other objects touch any internal part of the video sounder.

NEVER place the video sounder within the reach of children or babies at any time.

NEVER expose the video sounder to rain, saline water or any liquid.

NEVER connect the video sounder to AC or more than 40 V DC. This will ruin the video sounder.

AVOID using the video sounder near any magnetic materials like a loudspeaker or large power transformer as they cause a partial shading on the CRT display.

AVOID placing the video sounder near heating equipment or in direct sunlight or where hot or cold blows directly on it.

AVOID using the video sounder in areas where the temperature is over +50°C or under 0°C.

AVOID using strong agents such as benzine or alcohol for cleaning the video sounder as they may damage the surfaces.

WARNING: DO NOT try to install a transducer by yourself. Drilling your boat is necessary for installation. If the transducer is installed incorrectly, the boat will sink in the worst case. BE SURE to ask your boat dealer to install a transducer.

EXPLICIT DEFINITIONS

The following explicit definitions apply to this instruction manual.

WORD	DEFINITION		
WARNING	Personal injury, fire hazard or electrical shock may occur.		
CAUTION	Equipment damage may occur.		
NOTE	If disregarded, inconvenience only. No personal injury, fire hazard, or electrical shock.		

TABLE OF CONTENTS

IME	PORTANT i	6. ME	NU OPERATION 12~	18
FO	REWORD i	6-1	Display selection and sub functions	12
UN	PACKING i	6-2	2 MENU 1 13~	14
CA	UTIONS i		Key panel backlighting [ILLUM]	13
EX	PLICIT DEFINITIONS i		Interference reduction [IR]	
TAI	BLE OF CONTENTS ii		■ Noise reduction [NR]	
			Transmit pulse [PL]	
1.	FEATURES 1		Transmit power [TX POWER]	
	1-1 Theory of the video sounder 1		■ Bottom discrimination [DISCR]	
	1-2 Features 1		■ Trip log [TRIP LOG]	
		6-3		
2.	DISPLAY DESCRIPTION 2		Event [EVENT]	
	•		Alarm [SHLOW ALM], [DEEP ALM],	
3.	CONTROL FUNCTIONS 3~4		[TEMP ALM]	16
		6-4		
4.	BASIC OPERATION 5~8		■ Data indication ON/OFF [NMBRS]	
	.4-1 Power ON/OFF 5		■ Display backing color [BKG COL]	
	4-2 Minimum operation 5		■ Speed synchronization [SPD SYNC]	
	4-3 Depth range setting 6		■ Unit of water depth [DEPTH]	
	4-4 Phase shift setting 6		■ Draft correction [OFF SET]	
	4-5 Sensitivity adjustment 6		■ NMEA data [NMEA DATA]	
	4-6 Sensitivity of outer layer adjustment 7		■ Unit of water temperature [TEMP]	
	4-7 Frequency selection 7		■ Unit of ship speed [SPEED]	
	4-8 Brightness adjustment 7		Speed adjustment [SPD ADJ]	
	4-9 Mode selection 8			
		7. DIS	SPLAY INTERPRETATION 19~	20
5.	ADVANCED FUNCTIONS 9~11	7-1		
	5-1 Display speed setting 9	7-2		
	5-2 Range of bottom expansion setting 9	7-3		
	5-3 Depth measuring	7-4		
	5-4 Range of part expansion setting 10	7-5		
	5-5 Event function	7-6		
	5-6 Auto function	7-7		
		7-8		
			,	
			STALLATION AND CONNECTION 21 \sim	
			Connection diagram	
		8-2	Main unit installation	22
		8-3	3	
		8-4	Transducer and sensor connection	22
		8-5	Navigation receiver system	
			connection	
		8-6	External alarm connection	22
		9. MA	AINTENANCE	23
		9-1		
			Pruse replacement	
			•	

6-2 MENU 1

All descriptions on pgs. 13 and 14 must be read after selecting the MENU 2 display. See p. 12 for the display selection.

Key panel backlighting [ILLUM]

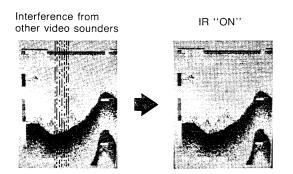
The backlighting of the key panel can be turned ON and OFF for your convenience.

- Push [UP] and [DOWN] to set the cursor to "ILLUM" on MENU 1.
- 2) Push [BRT/SET].
 - Cursor and "ILLUM" turn red.
- 3) Push [UP] or [DOWN] to select "ON" or "OFF."
 - The selected condition turns red.
- 4) Push [BRT/SET] to set the condition.
 - Cursor and "ILLUM" turn white.

■ Interference reduction [IR]

This function reduces the interference from other video sounders or from the generator of your ship. The function can be turned ON and OFF for your convenience.

- Push [UP] and [DOWN] to set the cursor to "IR" on MENU 1.
- 2) Push [BRT/SET].
 - Cursor and "IR" turn red.
- 3) Push [UP] or [DOWN] to select "ON" or "OFF."
 - The selected condition turns red.
- 4) Push [BRT/SET] to set the condition.
 - · Cursor and "IR" turn white.



Noise reduction [NR]

This function suppresses background noise caused by dirty water, etc. Select the desired reduction level among levels $1 \sim 4$ or Function OFF (0).

- Push [UP] and [DOWN] to set the cursor to "NR" on MENU 1.
- 2) Push [BRT/SET].
 - Cursor and "NR" turn red.
- 3) Push [UP] and [DOWN] to select the desired level.
 - The selected level turns red.

Level	Description	Function
0	Function OFF	All noise remains.
1	Min. noise reducing .	Blue noise is reduced.
2)	· Gray noise is reduced.
3	·	Cyan noise is reduced.
4	Max. noise reducing	· Green noise is reduced.

- 4) Push [BRT/SET] to set the value.
 - · Cursor and "NR" turn white.

NOTE: If NR is set to level 3 or 4, very small fish schools will not be displayed on the screen.

■ Transmit pulse [PL]

The width of the transmission pulse can be changed to either normal or long.

- Push [UP] and [DOWN] to set the cursor to "PL" on MENU 1.
- 2) Push [BRT/SET].
 - · Cursor and "PL" turn red.
- Push [UP] or [DOWN] to select "NORM" or "LONG."
 - The selected condition turns red.

Pulse width	Normal	Long
Distance resolution	Good	Bad
Detection ability	Bad	Good

Effective uses

Normal pulse Discrimination of fish school distribution and finding fish on the sea bottom.

Long pulse Searching deep waters or finding small fish schools.

- 4) Push [BRT/SET] to set the condition.
 - Cursor and "PL" turn white.

Count on us!	
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