# **FTGMDC**

#### **INSTRUCTION MANUAL**

VHF MARINE TRANSCEIVER

# FT-2800

Survival craft portable two way marine VHF radiotelephone

In line with fully compliant of the International Maritime Organization: A.809 (19), A.694 (17), A.762 (18), MSC.149 (77)

SHISHI FEITONG COMMUNICATION EQUIPMENT CO.,LTD.



#### **PREFACE**

Thank you for choosing FTGMDC FT-2800, to guarantee your portable two way marine VHF radiotelephone safe use, please read this the instructions manual carefully.

FTGMDC FT-2800 survival craft portable two way marine VHF radiotelephone for the ship and field communication, can be assigned to use the international maritime radio service all 88 VHF simplex channels, follow IMOA.809 (19) and resolutions MSC. 149 (77) of the relevant standards and recommendations related to the ITU-R and prescribed A.694 (17) the resolution requirements.

Comply with state regulations, combined with the actual use the high stability, easy to operate for the purpose.

A new generation of well-designed with a high level of multi-functional survival craft portable two way marine VHF radiotelephone.

FT-2800 uses high-quality waterproof additional facilities related devices, the use of reasonable circuit hardware and software, in line with the actual needs of customers, to facilitate navigation. So sailed on a crowded routes can be more secure, truly multifunction, high reliability, simple operation, intuitive display, good communication effects.

FTGMDC FT-2800 survival craft portable two way marine VHF radiotelephone Is your best choice, thank you for your choice again.

I wish you smooth sailing!

August 1, 2005

#### **CHARACTERISTICS**

- · Controlled by microcomputer synthesizers, to ensure high frequency stability was kept on each channel.
- Work up to 88 channels.
- Can be accessed by microphone / speaker, rear hooks, convenient fixed.
- Battery easy disassembly.
- · Long life, strong ability to adapt to the environment.
- Compact and flexible.
- Waterproof function, can be placed at 1 meter underwater for more than 5 minutes, less susceptible to oil or seawater erosion.
- Yellow appearance, easily identifiable, especially in the dark.
- Original battery large capacity the maximum rated power and 1:9 the duty cycling can work 8 hours battery life of 2 years.



# **CAUTION**

- (For security reasons) Please read this manual before use.
- This equipment convenient used in several applications, others needed to avoid eavesdropping. Tentatively keep in mind about state secrets, industrial information secrets would be heard by other people talk.
- In this case, please note the following precautions.

$\triangle$	If used improperly, malfunction phenomenon occur.
	Do not charge the original battery.
	Do not place the battery near the fire, there will be an explosion hazard.
30	Do not expose the battery at temperatures below -30°C.

170	Do not expose the battery at a temperature higher than +70°C, otherwise there is a risk of explosion.
	Do not touch the battery with wet substance.
<u>^</u>	Do not short circuit the battery.
<u>^</u>	Unless an emergency situation to use this device, otherwise do not tear the seal on the original battery. No seal will be consider to expire.
	This equipment is waterproof design, if unauthorized removal your peril.

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# 1. TECHNICAL INDEX

	Item	Numeric	Unit
Integrated	Frequency Range	156.025~157.425	MHz
	Modulation	FM (16K0G3E)	
	Receiving System	Super heterodyne frequency twice	
	Frequency tolerance	±10ppm (-20°C~+60°C)	ppm
	Working voltage	DC 6.4V	V
	Antenna impedance	50Ω	Ω
	Dimensions	W (52) × H (145) × D (32)	mm
	Net Weight	200g (±2%)	g
	Output Power	≤ 2W (B) / 1W (S)	W
Emission	Modulation limit	≤±5KHz	KHz
	Modulation sensitivity	20mV ± 10mV	mV

	Item	Numeric	Unit
шЭ	Audio Distortion	≤ 7%	
Emission	Spurious components	≤ -53dB	dB
	Reference sensitivity	≤ 0.40µV (12dB SINAD)	μV
Received index	Static impatient open	≤ 0.25µV	μV
	Blocking thresh- old limit	≥ 5KHz	KHz
	Adjacent channel	≥ 65dB	dB
ndex	Inter modulation	≥ 58dB	dB
•	Spurious response	≥ 65dB	dB
	Audio output	0.5W (8Ω)	W
	Audio Distortion	≤ 7%	

## 2. CHANNEL LISTS

Channel number			Frequen	cy (MHZ)
USA	INT	CAN	Transmit	Receive
	01	01	156.050	160.650
01A			156.050	156.050
	02	02	156.100	160.700
02A			156.100	156.100
	03	03	156,150	160.750
03A			156.150	156.150
	04		156.200	160,800
04A		04A	156.200	156.200
	05		156.250	160.850
05A		05A	156.250	156.250
06	06	06	156.300	156.300
	07		156.350	160.950
07A		07A	156.350	156.350
08	08	08	156.400	156.400
09	09	09	156.450	156.450
10	10	10	156.500	156.500
11	11	11	156.550	156.550
12	12	12	156.600	156.600
13*	13	13*	156.650	156.650
14	14	14	156.700	156.700
15*	15*	15*	156.750	156.750
16	16	16	156.800	156.600
17*	17	17*	156.S50	156.850
	18		156.900	161.500
18A		18A	156.900	156.900

Channel number		Frequency (MHZ)		
USA	USA INT CAN		Transmit	Receive
	19		156.950	161.550
19A		19A	156.950	156.950
20	20	20	157.000	161.600
20A			157.000	157.000
	21	21	157.050	161.650
21A		21A	157.050	157.050
	22		157,100	161.700
22A		22A	157.100	157.100
	23	23	157.150	161.750
23A			157.150	157.150
24	24	24	157.200	161.800
25	25	25	157.250	161.850
26	26	26	157.300	161.900
27	27	27	157.350	161.950
28	28	28	157.400	162.000
	60	60	156.025	162.625
60A			156.025	156.025
	61		156.075	160.675
61A		61A	156.075	156.075
	62		156.125	160.725
62A		62A	156.125	156.125
	63		156.175	160.775
63A			156.175	156.175
	64	64	156.225	160.825
64A		64A	156.255	156.255

Channel number			Frequency (MHZ)		
USA INT CA			Transmit	Receive	
	65		156.275	160.875	
65A	65A	65A	156.275	156.275	
	66		156.325	160.325	
66A	66A	66A*	156.325	156.325	
67	67	67	156.375	156.375	
68	68	68	156.425	156.425	
69	69	69	156.475	156.475	
70#	70#	70#	156.525	156.525	
71	71	71	156.575	156.575	
72	72	72	156.625	156.625	
73	73	73	156.675	156.675	
74	74	74	156.725	156.725	
75	75	75	Disabling	Disabling	
76	76	76	Disabling	Disabling	
77*	77	77*	156.875	156.875	
	78		156.925	161.525	
78A		78A	156.925	156.925	
	79		156.975	161.575	
79A		79A	156.075	156.975	
	80		156.025	161.625	
80A		80A	157.025	157.025	
	81		157.075	161.675	
81A		81A	157.075	157.075	
	82		156.125	161.725	
82A		82A	157.125	157.125	

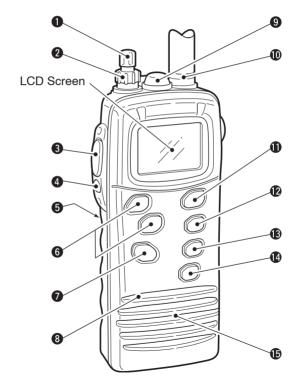
Channel number			Frequen	cy (MHZ)
USA	USA INT CAN		Transmit	Receive
	83	83	157.175	161.775
83A		83A	157.175	157.175
84	84	84	157.225	161.825
84A			157.225	157.225
85	85	85	157.275	161.875
85A			157.275	157.275
86	86	86	157.325	161.925
86A			157.325	157.325
87	87	87	157.375	161.975
87A			157.375	157.375
88	88	88	157.425	162.025
88A			157.425	157.425

Meteorology	Frequency (MHZ)		
Weteorology	Transmit	Receive	
01	Disabling	162.550	
02	Disabling	162.400	
03	Disabling	162.475	
04	Disabling	162.425	
05	Disabling	162.450	
06	Disabling	162.500	
07	Disabling	165.525	
08	Disabling	161.650	
09	Disabling	161.775	
10	Disabling	163.275	

<sup>\*</sup>Means only as low-power #Delegates unable to Launch

### 3. PANEL DESCRIPTION

#### ■ Panel Introduction



#### **■** Functional Overview

- **1** Power/Volume button [POW/VOL]: Used to turn on and off the power, and adjust the volume.
- **2 Squelch control button [SQL] :** For adjusting the tone squelch.
- **3** Launch buttons [PTT]: Press to into the emission state.
- 4 Monitor button [MONI]
- **6** Battery Cover
- **⑥ Up button** [▲] **/Down button** [▼] **:** For channel number or increment **/** decrement.
- **16 channel button [16] :** CALL Channel 16.
- Microphone
- Microphone/Speaker port
- 1 Antenna Port
- **1)** Weather Channel button [CH/WX]: Normal channels and weather channel, press 2 seconds to switch.
- **Dual watching button [DW]:** Press to into the double listening, you can long press 2 seconds into the third listening.
- **® Scan button [SCN]:** Press to enter the scan, long press 2

seconds to set or clear channel markers.

- **Power selection button [H/L]:** H/L power switching, press two seconds can lock or unlock the keyboard.
- Speaker

#### 4. BASIC OPERATIONS

#### ■ Switch on/off machine

 Clockwise rotation of button [POW/VOL] to switch ON; at this time the screen displays as right column;



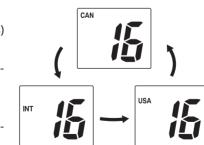
 Off button [POW/VOL] is rotated counterclockwise.

## ■ Choose channel groups

Long press [CH/WX] 2 Seconds

Can sequentially select a channel group:

- CAN (Canadian Channels)USA
- (United States Channel)
- INT (International channels)



#### **■** Channel selection

♦ Channel 16 can be invoked Press [16].



◆ CALL channel adjustment Long press [16] 2 Seconds. Until the screen appear the words "CALL".



♦ Call the Weather Channel There are 10 weather channels, You can set an alarm prompts in setup mode.



Press [CH/WX] enter or exit.

**Note:** When the weather alarm signal received, the machine will be issued "beep" sound and onscreen "WX" words flashing.



♦ Incrementing or decrementing the current channel Press [▲] channel increments; Press [▼] descending channel.

If you long press you can quickly increment or decrement.

# **■** Choose transmit power

Press [H/L] can Launch power between 0.5W and 2W switch.

#### **■** Transmit and receive

#### ♦ Launch

- ① Select the working channel;
- ② Press and hold on **[PTT]** button on the microphone;
- ③ speak into the microphone use normal voice:
- ④ Release the **[PTT]** button to stop launch, back to the receiving state.

#### ♦ Receiving

① Power ON, counter-clockwise rotation [SQL] buttonin the end, Then rotate [POW/VOL] button adjust the volume, Then clockwise rotation [SQL] button until the

- noise just disappears.
- ② Choose working channel (Such as: signal is received, the squelch opens automatically speaker sound, while the screen appears "Receiving" word).
- ③ If the received signal is intermit, you can rotate counterclockwise **[SQL]** button to adjust.

## **■** CALL channel settings

CAN, INT, USA each channel Group may also set each channel as the a CALL channel.

- ① Long press [16] 2 Seconds until the screen appear the words "CALL", as shown on the right column;
- ② Long press [16] 5 Seconds Issued by the machine until the "drop" long sound become 2 sound on "drop" of short tones and screen showing digital channels flash;
- ③ Press [▲] / [▼] choose desired channel;
- 4 Press [16] to confirm.





# ■ Settings channel marker

All channels can be set to mark channel, Screen Display "TAG" words indicate, The channel marked channel.

Long press **[SCN]** 2 Seconds, Can set or clear channel markers.

# USA LOW ALT

# ■ Dual channel watching

with the TAG:

be monitored.

③ Press [SCN] pause Scan

◆ Dual listening Dual listening: The current channel and channel 16 take turns listening;

Priority Scanning: In normal

channel scanning CH 16 still can

4 And then Press [16] to terminate



**Priority Scanning** 

- ① Press **[DW]** On the screen "DUAL" flash that has entered the double listening status;
- ② Press [16] or [DW] termination of listening.

#### ♦ Triple Watch

**Triple Watch:** Current channel, Channel 16 and CALL channel alternately listening;

1 Long Press [DW] 2 Seconds, On



# ■ Channel scanning

This machine is divided into a normal scan and priority scan:

#### NOTE:

- Only channel is marked as a scanning target channel.
- You can then set the mode to set the channel 16 priority scan.
- ① Rotation **[SQL]** Button to turn off the noise:
- ② Press [SCN] start scanning;
  Normal Scan: Scan channel and
  weather channel that is marked



Normal Scan



the screen "TRI" flash that has entered three listening status.

**NOTE:** Two listening, press the **[PTT]** key to pause the double listening; Such as screen rightmost "16" represents the word disappears into the double listening pause, then three seconds delay to restore machine double listening.

② Press [16] or [DW] termination of listening.

# ■ Kevboard Lock

This feature locks the keys on the keypad to prevent unexpected frequency change or function blocked. Long Press [H/L] 2 Seconds, Until the screen appears "--o" To set or unlock the keypad.



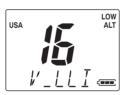
**NOTE:** After the keypad is locked, **[PTT]** key, **[MONI]** key and Still available.

# ■ Settings channel name

- (1) Select the desired channel group and channel:
- ② While holding down the [MONI] and [DW] until the first letter of the channel name flashes:
- ③ Press [▲] / [▼] Select Input alphabet:
- (4) Press [SCN] shift to the right; Press [H/L] shift to the left;
- (5) Press [DW] Finish and exit.









# ■ Setting method

- ① Hold down the [MONI] key, and then turn on the power to enter setting mode;
- (2) Press [MONI] button to select the item;
- ③ Press [▲] / [▼] change settings;
- 4 Press [16] save the settings and directly into the normal operation or shutdown exit.

# ■ Setting items

③ SCAN TYPE (Scan Type)

ON/OFF (1) **BEEP** (Key tone)



② WX ALERT (Weather alert) ON/OFF

ON/OFF





III

WX AL

SERN

7 POWER SAVE (Power Saving) ON/OFF



8 SELF CHECK (Self-Test) ON/OFF



# 5. SETUP MODE



(5) AUTO SCAN (Auto Scan)

⑥ BACKLIGHT (Backlit)



ON/OFF

ON/OFF









