T-M1 User Manual

Checklist:

    Open the package carefully, check the product and accessories according to the following list,please inform your supplier immediately if any damage or missing happened.

NO.	Item	QTY
1	FM transceiver	2
2	Charger	1
3	Charging line	2
4	Special Earphone	2
5	User Manual	1
6	Certificate/Warranty Card	1

Function Description:

Function	Description	Remark
Channel	22/14/8/20	Customization
Silent Code	**38**CTCSS+**83**CDCSS	
Watch time function	Real time Clock	24 hour system
Channel Scan	Check busy channel	
Alarm	Alarm clock function	
Power saving function	Extending standby time	

Description for LCD Icon

LCD panel

Indicative Sign	Name	Contents
	Channel/Hour/Volume level	Current Channel:Intercom mode Displaying time:Hours at Clock mode Volume Level: Current level when adjusting volume level
	CTCSS/DCS/Minute	CTCSS/CDCSS: Intercom mode Displaying time:Minutes at Clock mode
	Battery Meter	Higher number of grid,the more quantity of electricity

	Alarm	Icon is lighted when alarm is on.
	Scan Indicator	Icon is lighted when scanning.
	Intercom indicator	Icon is lighted:Intercom mode Icon is off:Clock mode

Unit Description：
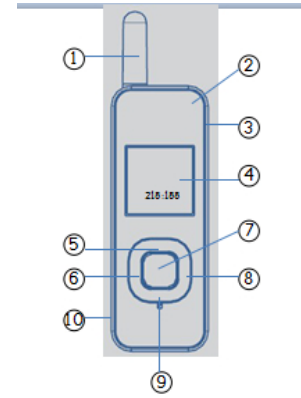
NO.	Name	Description
1	Antenna	
2	Indicator light	Red light is on: Transmitting signal Green light is on: Receiving Signal
3	USB Socked	Charging Interface
4	LCD panel	Operation status indicator, clock,channel etc.
5	Scan key	Scan/Monitor key
6	Down key	decrease channel/volume
7	Power/Menu	Power on/off,Menu entrance
8	Up key	Increase channel/volume
9	Call key	Alert key
9	Earphone Jack	Earphone interface

Fast Function guideline:

Function Introduction	Brief Description
Mode Switch（Power ON/OFF）	Pressing the " " for 2 seconds，"Di" sound will be heard in the earphone，" " Icon will be lighted on to enter into intercom mode。It will enter into clock mode when the " " icon goes out。
Intercom	Pressing the "PTT"key on the earphone，and talking into the microphone。The machine

	will enter receiving mode after releasing the "PTT" key。
Calling Setup	The transceivers must be set as same channel and CTCSS in order to intercom. 1、Press the"MENU"key shortly，Channel number blinking，adjusting channel by using the "UP/DOWN" key； 2、Press the"MENU"key shortly again，CTCSS/DCS number blinking，adjusting CTCSS/DCS by using the "UP/DOWN" key；
Clock Setup	1.Press "MENU" key repeatedly until Hour Digit blinking。 2.Increase/Decrease the HOUR number by pressing "UP/DOWN" key to current hour(0-23). 3.Pressing "MENU" key shortly, the MINUTE digit blinking. 4.Increase/Decrease the MINUTE number by pressing "UP/DOWN" key to current minute (0-59). 5.Press "MENU" key shortly to save the setting and exit.
Alarm Setup	1.Press the "MENU" key repeatedly,until the "Alarm Icon ▓" is light on。 2.Press the "UP/DOWN" key to start/close the Alarm. 3.Press the "MENU" key shortly to setup the alarm time. Please refer to "Clock Setup".
Scanning	Press the "SCAN" key to enter/exit scanning mode.
Monitoring	Press the "Monitor" key continuously to monitor current channel is busy or not.

Battery Information：

■ Charge note

　Please charge the transceiver when battery low.

　Battery meter will roll display while charging. The rolling will be stopped when the battery is full.

CTCSS Table（Hz）

Silent code	FREQ	Silent code	FREQ	Silent code	FREQ	Silent code	FREQ
1	67.0	11	97.4	21	136.5	31	192.8
2	71.9	12	100	22	141.3	32	203.5
3	74.4	13	103.5	23	146.2	33	210.7
4	77.0	14	107.2	24	151.4	34	218.1
5	79.7	15	110.9	25	156.7	35	225.7
6	82.5	16	114.8	26	162.2	36	233.6
7	85.4	17	118.8	27	167.9	37	241.8
8	88.5	18	123	28	173.8	38	250.3
9	91.5	19	127.3	29	179.9		
10	94.8	20	131.8	30	186.2		

]DCS Table

Silent code	DCS CODE	Silent code	DCS CODE	Silent code	DCS CODE	Silent code	DCS CODE
38	023D	57	134D	76	251D	95	371D
39	025D	58	143D	77	252D	96	411D
40	026D	59	152D	78	255D	97	412D
41	031D	60	155D	79	261D	98	413D
42	032D	61	156D	80	263D	99	423D
43	043D	62	162D	81	265D		
44	051D	63	165D	82	266D		
45	054D	64	172D	83	271D		
46	065D	65	174D	84	274D		
47	071D	66	205D	85	306D		
48	072D	67	172D	86	311D		
49	073D	68	174D	87	315D		
50	074D	69	205D	88	325D		
51	114D	70	212D	89	331D		
52	115D	71	223D	90	332D		
53	116D	72	225D	91	343D		
54	125D	73	226D	92	346D		
55	131D	74	243D	93	351D		
56	132D	75	244D	94	356D		

Specification

Channel	22
Working Temperature	－20℃~60℃
Standard Voltage	3.7V
Battery Capacity	620 mAh
Channel Spacing	12.5 K/25KHz
SIZE(excluding antenna)	69mmx25mmx13mm
Weight	35 g
Antenna Impedance	50Ω

Transmitting Part		Receiving Part	
Freq Stability	≤±2.5 ppm	Sensitivity	≤−120 dBm
Output power	< 2W	Adjacent selectivity	≥70 dB
Modulation	F3E	Intermodulation immunity	≥70 dB
Residual FM	≤ -35 dB	SN ratio	≥48 dB
Audio Distortion	≤ 3%	Audio Distortion	≤ 3%

Trouble shooting：

Trouble	Reason and Solution
Fail to boot	Battery low
Fail to transmit	Please confirm that the PTT is pressed completely and Battery Voltage.
Fail to receive	Confirm the machine is set to same channel and CTSS/DCS. Confirm the PTT key is released completely. Obstacles,indoor or in the car may interfere with the call,change your position.
Noise and inference	Current channel may be occupied,tune to another channel
Limited Call	Check distance between the machines is too long .

FCC Statement

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: 1) this device may not cause harmful interference, and
2) this device must accept
any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

--Reorient or relocate the receiving antenna.

--Increase the separation between the equipment and receiver.

--Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

--Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. User should avoid un-intended operation of usage when it is collocated with other transmitters or antenna。

This device should be installed and operated with minimum distance 5mm between the radiator&your body

RF Exposure Warning Statements

The Two-Way radio complies with the following RF energy Exposure standards and guidelines:

United States Federal Communications Commission, code of Federal Regulations; 47CFR part 2 sub-part J.

American National Standards Institute (ANSI)/Institute of Electrical and Electrical Engineer (IEEE) C95.1-1992.

Institute of Electrical and Electronics Engineers (IEEE) C95.1-1999 Edition.

International Commission on Non-Ionizing Radiation Protection（ICNIRP）1998.

To ensure optimal radio performance and make sure human exposure to radio frequency electromagnetic energy is within the guidelines set forth in the above standards, always adhere to the following procedures.

Antenna Care Use only the supplied antenna. Unauthorized antennas, modifications, or Attachments could damage the radio and may violate FCC regulations. Do not hold the antenna when the radio is "IN USE." Holding the antenna affects the effective range.

Body-worn Operation To maintain compliances with FCC RF exposure guidelines, if you wear a radio on your body when transmitting, always place the radio in a manufacturer supplied or approved clip, holder, holster, case or body harness for this product, use of non-manufacturer

approved accessories may exceed FCC RF exposure limits.

FCC Licensing Information

This radio operates on General Mobile Radio Service (GMRS) frequencies and is subject to the Rules and Regulations of Federal Communication Commission (FCC). The FCC requires that all operators using GMRS frequencies obtain a radio license before operating their equipment.