Foreword

Thank you for choosing the FM transceiver LS-A8. This product is designed to meet the requirements of a radio that is easy to operate and give excellent performance.

LS-A8 FM Transceiver
user's manual

Safety Information

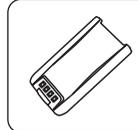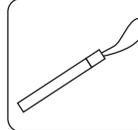Please read the following information for your personal safety.

1. Please turn off the radio prior to entering hazardous areas e.g. inflammable or Blast zones.
2. Do not use a radio with a damaged antenna. It may cause minor burns if the damaged antenna comes in contact with your body.
3. Do not attempt to disassemble or repair the radio. This should be left to qualified personnel.
4. To avoid interference with equipment, always switch off your radio in sensitive places where warning signs are posted e.g. at hospitals or health clinics.
5. Turn off your radio before boarding an aircraft. Any use of the radio must be in accordance with the airline's regulations or as per flight crew's instructions.
6. Do NOT expose the radio to direct sunlight for long periods.
7. Do NOT place the radio on or in close proximity of hot surfaces.
8. Do NOT place the radio in excessively dusty, humid or wet places.

Main Features

- High Output Power (8W)
- High Capacity battery (2000mAH)
- High / Medium / Low Transmit Power Settings
- Monitor / Monitor Momentary
- CTCSS/DCS
- Caller ID: PTT ID
- Compandor
- Scrambler Function
- VOX function

- Channel Position Lock option
- Busy Channel Lockout
- Wide / Narrow Bandwidth Options
- Programmable Keys
- Scan and Priority Channel Scan
- Channel Number Audio Indication
- Battery Capacity Indication
- Emergency Alarm Function
- Software Read / Write Password

Unpacking

Carefully unpack the radio and its accessories to identify them as illustrated below. If you find any missing or damaged parts, please contact your dealer immediately.

Items	QTY.
Radio	1
Antenna	1
Battery Pack	1
Charger Pod	1
Power Adaptor	1
Belt Clip	1
Belt Clip Screws	2
User Manual	1
Hand Strap	1

Antenna   Radio   Battery Pack   Charger Pod

Power Adapter   Belt Clip & Screws   Hand Strap   User Manual

N.B Pictures are for illustration purposes only. The actual accessories supplied may vary.

Operation Instruction

Power On/Off / Volume

Turn the Power / Volume Knob (Fig.1) clockwise to switch ON the radio. A beep will be heard and a voice message will indicate the current channel number. Turn the knob clockwise / anti-clockwise to adjust the volume. Turning the knob fully anti-clockwise will switch off the radio.

Figure 1

Changing Channels

Turn the Channel Selector knob to change channels. If the 'Channel number announcement' feature is enabled (see section under Software Programmable Features), the radio will announce the channel number when the knob is turned.
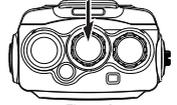
Figure 2

Transmit/Receive

Hold the radio about 2.5cm to 5cm from your mouth. It is important that the antenna is 2.5 cm away from your face. Press the PTT button, the red LED will be illuminated and whilst keeping it pressed, speak into the microphone in your normal voice. And release the PTT key to receive, the green LED will illuminate.
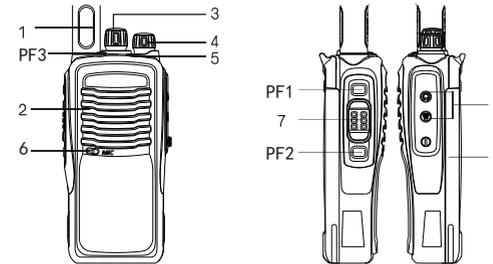
Figure 3

Programmed Button Operation

Set up the programmed functions by Programming Software, press the PF1 or PF2 or PF3 to active the corresponding function. Press again to exit this function.

Overview:

Figure 4

Note: These side buttons PF1. PF2. PF3 can be allocated for certain functionalities. This is can be done with software. The features that can be programmed are listed on backfaces. Each button can be programmed for two features only (Short press 0.5S, Long press 2.5S).

NO.	Feature	Functionality
1	Antenna	Transmit/Receive signals, deliver wider communication coverage.
2	Speaker	
3	Channel Selector Knob	Turn the knob to select a channel from 1-16.
4	Power / Volume Knob	Turn clockwise to switch ON the radio and to increase the volume. Turn anti-clockwise to decrease the volume. To switch OFF, turn it anti-clockwise until a click is heard.
5	LED Indicator	Green: In Receiving mode. Red: In Transmitting mode.
6	MIC	Microphone
7	PTT (Push-To-Talk) Key	Press and hold PTT key to transmit and release it to receive signals.
8	SP/MIC cover	To protect against Dust / Water
9	Battery Pack	
10	Side Button PF1	These buttons can be allocated for certain functionalities. This is can be done with software. The features that can be programmed are listed on backfaces. Each button can be programmed for two features only (Short press 0.5S, Long press 2.5S).
	Side Button PF2	
	Side Button PF3	

Programmed Functions (PF Button)

The following functions can be programmed using software and they are activated by using PF1, PF2 or PF3 buttons. These user selectable functions i.e. they can be activated / deactivated by the user.
Each button can be programmed to store two functions.
Once programmed, the two functions per button can be activated by pressing a PF button briefly (0.5 seconds) or for longer (2.5 seconds). See below:

NO.	Feature	Functionality
1	Monitor	The radio will un-mute only when it receives a carrier signal.
2	Monitor Momentary	
3	Squelch Off	The radio will un-mute no matter there is a carrier signal or not.
4	Squelch Off Momentary	
5	Check Battery Capacity	To know the current battery capacity.
6	Scrambler	To make the communication private.
7	Compander	To improve the SNR, that will make communication clearer.
8	TX Power Adjustment	Adjust the transmitting power of current channel.
9	VOX On/Off	Activate/de-activate the VOX function.
10	Scan	Scan the activities from other channels.
11	Channel Lock	To lock the radio to the current channel. This disables the channel knob.
12	Emergency Alarm	To transmit Emergency Alarm signals.

Note: Your dealer may have programmed some of the features listed above for you.

Software Programmable Features

The following nine features can be only activated by software.

NO.	Feature	Application
1	PTT ID	The PTT ID is used for connecting or disconnecting with the repeaters or telephone systems.
2	Channel Number Announcement	When you power ON the radio or turn the channel knob, the radio will automatically announce the current channel position.
3	QT/DQT	If QT/DQT is set on a channel, the radio will only receive signal with matching QT/DQT codes.
4	Wide/Narrow Bandwidth	You can select the channel spacing as Wide (25KHz) or Narrow (12.5KHz) bandwidth.
5	Busy Channel Lockout (BCL)	When BCL function is on, it stops the radio from transmitting on a channel which is already in use.
6	Time Out Timer (TOT)	The TOT function limits the transmitting time of the radio to stop the user from occupying the channel for too long.
7	Battery Save Mode	It is used to save battery.
8	Tail Tone Eliminate	This function is used to mute the tail tone after the carrier signal disappears.
9	Wire Clone	Wire Clone allows you to copy the original setting of one radio to others.

Troubleshooting

Issues	Solutions
No power.	1.The battery has run out. Please recharge the battery or replace it with a new one. 2.The battery is not properly installed. Please remove the battery and install it again.
Cannot talk to or hear from other group members.	1.Make sure your radios are in the same channel and same QT/DQT settings. 2.Make sure you are within their communication range.
Hear calls from non-group members.	Change the CTCSS/CDCSS settings, and so as your group members.
No voice or low voice while transmitting	1.Make sure the volume control knob is turned properly. 2.Send the radio to your dealer to examine the microphone..
Noise always on	Group members are too far away from each other and can't receive. Please go within the communication range and try again.

SPECIFICATION

Frequency Range	136-174 MHz, 400-470 MHz
Channels	16
Channels Spacing	25 KHz /12.5 KHz
Working Voltage	DC 7.4V
Frequency Stability	±2.5 PPM
Operating Temperature Range	-25 ℃ to + 55℃
Antenna Impedance	50 Ω
Dimension (L×W×H)	136*58*36 mm
Weight (including Antenna and Battery)	246 g
TRANSMITTER	
Output Power	H: 8W, M: 5W, L:1W
Modulation Mode	16kΦF3E/8kΦF3E
Modulation Limited	±5 KHz/±2.5 KHz
Audio Distortion	≤5%
Residual Frequency Modulation	-45 dB / -40 dB
Adjacent Channel Power	-70 dB / -60 dB
Spurious and Harmonic Wave	-36 dBm<1GHz -30 dBm>1GHz
RECEIVER	
Receiving Sensitivity	≤0.18 uV / 0.22 uV
Adjacent Channels Selectivity	≥70 dB / 60 dB
Intermediation	≥60 dB
Spurious Response Rejection	≥70 dB
SNR	≥50 / 45 dB
Audio Output Power	1.0W
Audio Distortion	≤5%

Note: The above specifications are in according to the TIA/EIA-603 standard to test. Due to the continous development of the technology, the above specifications are subject to change without notice.