# MnyTone®

Qixiang Electon Science & Technology Co.,Ltd. **www.qxdz.cn** 



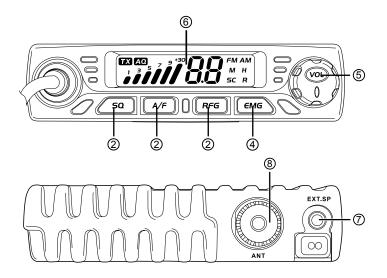
# **SMART**

# 10 METER AMATEUR MOBILE RADIO



**USER'S MANUAL** 

# **■ KNOW ABOUT THIS RADIO**



1	Squelch control, SQ, ASQ switch key
2	Mode/Scan key
3	RF Gain control
4	CH9/CH19/Keypad lock
5	Power On/Off Volume control
6	LCD
7	External speaker Jack
8	Antenna Jack

#### ■ HOW TO USE THIS RADIO

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- Turn VOL switch clockwise to power on the radio, the LCD displays the Norms and then displays channel number.
- Turn VOL switch anti-clockwise, until hear Ka Ta, the radio is powered off.

#### ★ Volume Control

Turn clockwise to increase volume, anti-clockwise to decrease volume.

#### ★ Channel Control

- 1. Short press [ UP ] or [ DN ] to change working channel.
- 2. Hold [ UP ] or [ DN ] can fast change working channel.

### **★ Squelch Level Control (O.F to 2.8 level available)**

- Short press 50, until LCD displays SQ and then displays X.X, X.X stands for SQ level, the bigger value stands for high squelch level.
- 2. Short press [ UP ] or [ DN ] to change SQ level.
- Hold [ UP ] or [ DN ] can fast change SQ level.
- 4. Hold 50 or wait for 3 seconds to store and exit.

#### **★ ASQ Control(A.1-A.9 level available)**

- Hold 50 key, until LCD displays AQ, the ASQ function turned on. The LCD will displays "A.X", "X" stands for the ASQ level.
- 2. Short press microphone [ UP ] or [ DN ] to change SQ level
- 3. Hold microphone [UP] or [DN] can fast change ASQ level.
- 4. Hold 50 or wait for 3 seconds to store and exit.

#### ★ Mode Control

- 1. Short press (A/F) key to switch between AM /FM mode.
- 2. The LCD displays the selected mode.

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- Short press (RFG) key, LCD displays R and the present RF gain level flashes.
- 2. Short press microphone [ UP ] or [ DN ] to change level.
- 3. Short press **RFG** key to exit RF gain level control.

Note: When RFG function is on, the LCD displays R. If RFG level is 6 means the attenuation is 6dBm.

# ★ Emergency Channel

- 1. Short press EMG key to choose CH9, the channel number flashes.
- Short press EMG key again to choose CH19, the channel number flashes.
- 3. Short press EMG key third time to return to last normal channel.

# ★ Keypad Lock

- Hold EMG key for over 2 seconds to lock the keys, LCD displays "LC".
- Hold EMG\(\) key for over 2 seconds again to unlock the keys, LCD displays OF.

Note: In lock Mode all keys except PTT is valid.

#### ★ Scan Function

- Hold A/F to start scan function, "SC" falshes in the LCD;
- 2. Press [ UP ] or [ DN ] to change scan direction during scan;
- 3. Press A/F or [PTT] key to exit scan function.

#### ■ Band Control

- Hold A/F to power on radio, until LCD displays the bands;
- 2. Press [ UP ] or [ DN ] to choose wanted bands;
- 3. Power off and power on again.

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- Hold RFG and PTT key to power on;
- Press [ UP ] or [ DN ] to choose wanted power level, PH is 8W, PL is 4W;
- 3. Power off and power on again.

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Choose a  $8\Omega$  external speaker with 3.5mm mono connector.

# ★ Resume Factory Default

- 1. Hold 50 key to power on radio, until the LCD displays "RT".
- All channel and function setting will resume factory default after above operation.

# **■ SPECIFICATION**

GENERAL								
Modulation Mode		AM/FM						
Frequency Range		28.000-29.700MHz						
Frequency Tolerand	e	±5.0ppm						
Input Voltage		13.2V						
Dimensions		109x104x25mm						
Weight		421g						
Ferquency Control		PLL Synthesizer						
Operating Temperat	ture Range	-20℃ ~ +50℃						
	Transmit	2A MAX						
Current Drain	Receive	Squelched 0.3A						
	VOL Max	0.8A						
Antenna Connector		UHF,SO-239						
	TRANS	SMITTER						
Power Output		8 Watts FM/AM						
Transmission interf	erence	inferior to 4nW(-54dBm)						
Frequency Respons	se	300-3000Hz						
Modulated signal di	stortion	inferior to 5%						
Output Impedance		50 ohms						
	REC	EIVER						
Sensitivity		Less than 1uV for 10dB(S+N)/N						
Image Rejection		70dB						
Adjacent Channel R	Rejection	60dB						
IF Frequencies		1st 10.695MHz						
ii i requencies		2nd 455KHz						
Automatic Gain Cor	atrol(AGC)	Less than 10dB change in audio						
Automatic Gain Goi		Output for inputs from 10 to 50000uV						
Squelch		less than 1uV						
Audio Output Powe	r	1Watts						
Frequency Respons	se	300-3000Hz						

# FREQUENCIES TABLE

BAND ID	HA	HB	HC	HD	HE	HF	HG	HH	HI
CH-01	28.000	28.200	28.400	28.600	28.800	29.000	29.200	29.400	29.600
CH-02	28.005	28.205	28.405	28.605	28.805	29.005	29.205	29.405	29.605
CH-03	28.010	28.210	28.410	28.610	28.810	29.010	29.210	29.410	29.610
CH-04	28.015	28.215	28.415	28.615	28.815	29.015	29.215	29.415	29.615
CH-05	28.020	28.220	28.420	28.620	28.820	29.020	29.220	29.420	29.620
CH-06	28.025	28.225	28.425	28.625	28.825	29.025	29.225	29.425	29.625
CH-07	28.030	28.230	28.430	28.630	28.830	29.030	29.230	29.430	29.630
CH-08	28.035	28.235	28.435	28.635	28.835	29.035	29.235	29.435	29.635
CH-09	28.040	28.240	28.440	28.640	28.840	29.040	29.240	29.440	29.640
CH-10	28.045	28.245	28.445	28.645	28.845	29.045	29.245	29.445	29.645
CH-11	28.050	28.250	28.450	28.650	28.850	29.050	29.250	29.450	29.650
CH-12	28.055	28.255	28.455	28.655	28.855	29.055	29.255	29.455	29.655
CH-13	28.060	28.260	28.460	28.660	28.860	29.060	29.260	29.460	29.660
CH-14	28.065	28.265	28.465	28.665	28.865	29.065	29.265	29.465	29.665
CH-15	28.070	28.270	28.470	28.670	28.870	29.070	29.270	29.470	29.670
CH-16	28.075	28.275	28.475	28.675	28.875	29.075	29.275	29.475	29.675
CH-17	28.080	28.280	28.480	28.680	28.880	29.080	29.280	29.480	29.680
CH-18	28.085	28.285	28.485	28.685	28.885	29.085	29.285	29.485	29.685
CH-19	28.090	28.290	28.490	28.690	28.890	29.090	29.290	29.490	29.690
CH-20	28.095	28.295	28.495	28.695	28.895	29.095	29.295	29.495	29.695
CH-21	28.100	28.300	28.500	28.700	28.900	29.100	29.300	29.500	
CH-22	28.105	28.305	28.505	28.705	28.905	29.105	29.305	29.505	
CH-23	28.110	28.310	28.510	28.710	28.910	29.110	29.310	29.510	
CH-24	28.115	28.315	28.515	28.715	28.915	29.115	29.315	29.515	
CH-25	28.120	28.320	28.520	28.720	28.920	29.120	29.320	29.520	
CH-26	28.125	28.325	28.525	28.725	28.925	29.125	29.325	29.525	
CH-27	28.130	28.330	28.530	28.730	28.930	29.130	29.330	29.530	
CH-28	28.135	28.335	28.535	28.735	28.935	29.135	29.335	29.535	
CH-29	28.140	28.340	28.540	28.740	28.940	29.140	29.340	29.540	
CH-30	28.145	28.345	28.545	28.745	28.945	29.145	29.345	29.545	
CH-31	28.150	28.350	28.550	28.750	28.950	29.150	29.350	29.550	
CH-32	28.155	28.355	28.555	28.755	28.955	29.155	29.355	29.555	
CH-33	28.160	28.360	28.560	28.760	28.960	29.160	29.360	29.560	
CH-34	28.165	28.365	28.565	28.765	28.965	29.165	29.365	29.565	
CH-35	28.170	28.370	28.570	28.770	28.970	29.170	29.370	29.570	
CH-36	28.175	28.375	28.575	28.775	28.975	29.175	29.375	29.575	
CH-37	28.180	28.380	28.580	28.780	28.980	29.180	29.380	29.580	
CH-38	28.185	28.385	28.585	28.785	28.985	29.185	29.385	29.585	
CH-39	28.190	28.390	28.590	28.790	28.990	29.190	29.390	29.590	
CH-40	28.195	28.395	28.595	28.795	28.995	29.195	29.395	29.595	

Our Qixiang Electron Science & Technology Co.,Ltd radio generators RF electromagnetic energy during transmit mode. This radio is designed for and classified as "Occupational Use Only", meaning it must be used only during the

course of employment by individuals aware of the hazards, and the ways To Minimize Such hazards.

This radio is NOT intended for use by the "General Population" in an uncontrolled environment. This radio has been tested and complies with the FCC RF exposure limits for "Occupational Use Only". In addition, our Qixiang Electron Science & Technology Co.,Ltd radio complies with the following Standards and Guidelines with regard to RF energy and electromagnetic energy levels and evaluation of such levels for exposure to humans:

---IEEE Std. 1528:2013 and KDB447498, Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields.

---American National Standards Institute (C95.1-1992), IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz. ---American National Standards Institute (C95.3-1992), IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields-RF and Microwave.

The information listed above provides the user with the information needed to make him or her aware of RF exposure, and what to do to as-sure that this radio operates with the FCC RF exposure limits of this radio. Electromagnetic Interference/Compatibility

During transmissions, Qixiang Electron Science & Technology Co.,Ltd radio generates RF energy that can possibly cause interference with other

devices or systems. To avoid such interference, turn off the radio in areas where signs are posted to do so. DO NOT operate the transmitter in areas that are sensitive to electromagnetic radiation such as hospitals, aircraft, and blasting sites.

#### Occupational/Controlled Use

The radio transmitter is used in situations in which persons are exposed as consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure.

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

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 a 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