AnyTone®

ARES II Instruction Manual



CONTENTS

FUNCTIONS & FEATURES	1
STANDARD ACCESSORIE	2
OPTIONAL ACCESSORIE	2
INSTALLATION	2
GETTING ACQUAINTED	6
HOW TO USE YOUR RADIO	8
SLIDE SWTICH	9
FUNCTION MENU	10
ERROR CODE	11
SPECIFICATIONS	11

FUNCTIONS & FEATURES

- PA/FM/AM/USB/LSB mode
- Weather Channel 150-170MHz programmable(Optional)

- CTCSS/DCS Code
- PWR, RX RSSI S-Meter
- PC programmable
- Echo Function
- SQ, ASQ Function
- RF Gain Adjustment
- Mike Gain Adjustment
- RF PWR Adjustment
- Programmable RB
- NB/ANL Function
- Offset Function
- Beep Voice Prompt
- +10KHz Function
- TOT Function
- HI-CUT Function
- Busy channel lock
- Monitor
- LED Brightness Adjustment
- SWR Protection
- Voltage Protection
- VOX Function
- RX noise reduction
- TX noise reduction
- NPC function
- SCAN function

STANDARD ACCESSORIES











Radio

Microphone

Mounting Bracket

Microphone Hanger

Non-slip Mat









Self-tapping Screws



DC Power Cable

Screws for Pads for bracket bracket

Adiustina screws

Spare Fuses (10A,250V)

 $(\overline{D}) \rightarrow (\overline{D})$

OPTIONAL ACCESSORIE





USB Programming Cable

External Speaker

INSTALLLATON

Choose the most appropriate setting from a simple and practical point of view. Your radio should not interfere with the driver or crash the driver's knee or leg when rush brake.

1. Using the self-tapping screws and pads(2 sets) to fix the bracket.



- 2. Put the Non-slip mat on the 2 ends of the bracket and put in the radio. Then insert the adjusting screws and check careful each screws, make sure the screws and machine will not loose when the car shaking.
- 3. Choose suitable angle by the 3 screw holes in the two ends of bracket.



Microphone connection

- 1. Plug microphone connector into jack.
- 2. Pull on the screw for microphone connector.



ANTENNA INSTALLATION

Before using this radio, please install a high efficent and harmonious adjusted CB antenna, suitable antenna type and correct installation will bring excellent communication.

To match with the radio, the antenna and cable shall with characteristic impedance of 50ohm, or the antenna system will not efficient enough and will disturb TV, radio or other electronics.

- 1. Screw the antenna connector into the antenna jack.
- 2. Grounding the antenna system to ensure best performance of this radio.



WARNING:

- ▲ Connect antenna firstly before transmiting, or it might damage the radio.
- ▲ To avoid the risk of fire, electric shock, radio damage, all base station shall equip of lightning protector
- ▲ Be sure choose a matching antenna, you may enquiry our dealers.
- 3. The position of antenna can be put as following example:



POWER CONNECTION

This radio adopt 13.8V power supply, never connect it to 24V battery, And the 13.8V car battery shall with sufficient current, or the LCD will become dark and Transmit power will drop down.

- 1. Connect positive red power cable with the + terminal of the battery.
- 2. Connect negative black power cable with the terminal of the battery.
- 3. Connect the DC power cable to the transceiver's power supply connector.
 - ▲ We suggest not use cigar lighter as it often bring down the voltage.
 - ▲ Locate the power cable away from high temperature, moisture, portfire and cable insulator.
 - ▲ Use a full power cable even it is longer than need, do not take off the fuse holder from the cable.



Replacing Fuse

This radio adopt 10A, 250V fuse.

If the fuse blows, determine the reason, then correct the problem.

After the problem is resolved, replace the fuse. If newly installed fuses continue to blow, disconnect the power cable and contact your autho-rized dealer or an authorized servicecenter:

1. Pull the two fuse cover in difference direction and open it.



- 2. Replace the broke fuse with good one, and close the fuse holder.
- 3. Be sure to use suggested fuse, or it might damage the radio.



Restall Microphone Hanger

Choose a ideal location which will not interfere the driver. Using supplied self-tapping screws and pads(2 sets) to fix the hanger.



Kinstall External Speaker

If use an external speaker, please choose 80hm speaker with 3.50mm mono band (doulbe cable) plug.

- 1. Locate the external speaker in a suitable place.
- 2. Plug into the speaker jack.



GETTING ACQUAINTED

🕷 Front Panel



No.	Functions
1	S-Meter
2	Control NB/ANL function on/off
3	NRC function on/off /set
4	Control Monitor/10K on/off
5	ECHO function on/off /set
6	Choose H and L band group
7	TX/RX indicator
8	Channnel display
9	Mike connector
10	Power on/off volume level control
11	Squelch level control
12	SSB frequency FINE function
13	Control RF gain level
14	Choose PA/FM/AM/USB/LSB mode
15	Choose working band
16	Control Mike gain level
17	Control power level
18	Channel Switch

🕷 Rear Panel



No.	Functions
19	External SP Jack
20	PC programming port
21	External PA Jack
22	Antenna Jack
23	Power Supply Jack

* Microphone



■ HOW TO USE YOUR RADIO

🗰 OFF/ON Radio

- 1. Turn VOL clockwise to switch on the radio, the radio emit a beep. When the LED displays frequency or channel, the radio is on.
- 2. Turn VOL anti-clockwise to switch off the radio, the radio is OFF when hear Ka Ta from the switch.

Rev Volume Control

When the radio is turned on, turn VOL clockwise will increase the volume, turn VOL anti-clockwise will reduce the volume.

Note: Adjust the volume during communication to get suitable level.

Revealed Control

When the radio is standby, turn SQ outter shaft clockwise to adjust squelch level.

🕷 Mic Gain Control

When the radio is transmiting, turn MIG inner shaft to adjust Mic gain. Turn it clockwise to increase gain, anti-clockwise to reduce gain.

🗮 RF Gain Control

When the radio is receiving, turn RFG outter shaft to adjust RF gain. Turn it clockwise to increase gain, anti-clockwise to reduce gain.

RF POWER Concentric

Valid forr AM and FM mode only. Reducing the power for communication with a radio without RF gain, default set to maximum for normal use.

🗮 Scan Function

CB Channels Scan (long press 7 seconds)

(1) In CB mode, press and hold [UP/DN] keys in the microphone for 7 seconds until hear a beep sound, the CB scan function starts.

The dot between the two channel digits flashes to indicate that the scanning is active.

(2) Rotary channel switch or [UP/DN] keys in the microphone to change scan direction.

(3) short press [PTT] to exit scan.

WX Channels Scan (long press 3 seconds)

(1) In WX mode, press and hold [UP/DN] keys in the microphone for 3 seconds until hear a beep sounds to start WX scan function.

The dot between the two channel digits flashes to indicate that the scanning is active.

- (2) Rotary channel switch or [UP/DN] keys in the microphone to change scan direction.
- (3) Short press [PTT] to exit scan.

🕷 Working Mode Control

Turn the mode switch to choose PA/FM/AM/USB/LSB mode.

🕷 Working Band Control

Turn the band switch to choose A/B/C/D/E/F band.

Channel Selection

Turn the channel knob to select desired channel. Clockwise to increase, anti-clockwise to reduce channel.

■ SLIDE SWTICH

No.	Function	Position	Description
1	NB/ANL		Trun on NB and ANL function
			Turn on ANL fucntion
			Turn off NB/ANL fucntion
2	NRC		Turn off NRC fucntion
			Turn on NRC fucntion
			NRC level set: rr for RX noise reduction level tr for TX noise reduction level.
3	MON + 10K		Turn on MON, 32 levels available by programming
			No function
		MON OFF +IOK	Turn on +10KHz function
	ECHO		Turn off ECHO fucntion
4			Turn on ECHO fucntion
			Echo volume and delay level set: EL for volume lvel set, Et for echo delay level set.
5	BAND	H U wx	Choose higher frequency band group
		H O	Choose lower frequency band group
		H L WX	Turn on Weather channel function(Optional)

FUNCTION MENU

- 1. Press the $\left[\textbf{UP} \right]$ key of the microphone to enter into the radio function menu.
- Rotate the channel switch or press the [UP/DN] key of the microphone to select the menu function options.
- 3. Press the [PTT] key of the microphone to enter into the menu setting.
- 4. Rotate the channel switch to select the desired setting.
- 5. Turn off to save and exit the function settings.

No.	Function	LCD Display	Description
1	BEEP	ЪΡ	Available setting: oF, 01-09 levels Default: oF
2	Roger Beep	гb	Available setting: oF, 01–05 levels Default: oF
3	WX alarm	RL	Available setting: oF, on Default: on
4	Dimmer	d	Available setting:1–3 Default: 3
5	NPC	'n٩	Available setting: oF, on Default: on (It is valid for AM/SSB mode only, adjust MIC to control microphone gain)
6	VOX level	υL	Available setting: oF, 01–09 levels Default: oF
7	VOX delay	υ Έ	Available setting: 01–09 levels Default: 3
8	Scan type	Sn	Available setting: ti(timne scan), Sq(squelch scan) Default: Sq
9	Micrphone type	ካሪ	Available setting: EL(condenser), dy(dynamic) Default: EL
10	Fine adjust	Fn	oF: turn on frequency fine adjustment. r: turn on fine adjustment for RX frequency t: turn on fine adjustment for TX frequency rt: turn on fine adjustment for TX /RX frequency Default: rt (±500Hz)
11	SWR display	Sr	on: turn on SWR display oF: turn off SWR display Default: oF
12	Reset	r	NB/ANL slide switch to OFF, press PTT to reset all radio data to factory default NB/ANL slide switch to NB/ANL, press PTT to reset all channel data to factory default

■ ERROR CODE

When the RX/TX indicator light on yellow,LED displays code,means the radio meet problem.

- E1: Voltage too low
- E2: Voltage too high
- E3: WX function invalid
- E4: Current BAND invalid
- E5: TX SWR too high

GENERAL		
Frequency Range	28.000-29.695MHz(Programmable)	
Frequency Band	L band: A/B/C/D/E/F H band : A/B/C/D/E/F	
Channel	40channels(programmable)in each band	
Frequency Control	Phase-Locked-Loop Synthesizer	
Frequency Tolerance	± 5.0 ppm	
Temperature Range	-20℃to +50℃	
Microphone	with push-to-talk /UP/DN and coiled cord	
Input Voltage	13.8V	
Dimensions (in mm)	287(L)x200(W)x61(H)	
Weight	1.5kg	
Antenna Connector	UHF, SO239	

SPECIFICATIONS

1	FRANSMITTER	
Power Output	AM:1-12W(adjustable) FM:1-40W(adjustable) USB/LSB:1-35W(adjustable)	
Drain	8A(with modulation)	
Modulation	FM/AM/SSB	
Inter-modulation Distortion	SSB: 3rd order, more than -25dB; 5th order, more than -35dB	
SSB Carrier Suppression	55dB	
Unwanted Sideband	50dB	
Frequency Response	AM/FM: 450 to 2500Hz	
Output Impedance	50ohms, unbalanced	
RECEPTION		
Sensitivity	AM:1.0 μ V for 10 dB(S+N)/N at greater than 1/2watt of audio output. FM: 1.0 μ V for 20 dB (S+N)/N at greater than 1/2 watt of audio output. SSB: 0.25 μ V for 10dB(S+N)/N at greater than 1/2-watt of audio output.	
Selectivity	AM/FM:6dB@3KHz,50dB @9KHz SSB: 6 dB@2.1KHz,60dB @3.3KHz	
Adjacent-Channel Selectivity	60dB AM/FM &70 dB SSB	
Image Rejection	More than 65dB	
IF Frequency	AM/FM: 10.695 MHz 1st IF, 455 KHz 2nd IF SSB: 10.695 MHz	
RF Gain Control	45dB adjustable for optimum signal reception	
Automatic Gain Control(AGC)	Less than 10dB change in audio output for inputs from 10 to 100,000 microvolt	
Squelch	Adjustable; threshold less than 0.5 μV. Automatic Squelch Control(only AM/FM)0.5 μV	
ANL	Switchable	
Noise Blanker	RF type, effective on AM/FM and SSB	
Audio Output Power	3 watts into 8 ohms	
Frequency Response	AM/FM: 300 to 2800Hz	
Built-in Speaker	8 ohms, round	
External Speaker(Not Supplied)	8 ohms, disables internal speaker when connected	

Note: Specifications are subject to change without notice due to advancements in technology.