



## GENERAL

	<u>VHF</u>	<u>UHF</u>
<b>Model No.:</b>	RQX-157/XT	RQX-457/XT
<b>FCC ID:</b>	AIERIT18-156	AIERIT18-456
<b>Industry Canada ID:</b>	1084A-RIT18-156	1084A-RIT18-456
<b>FCC Rule Parts:</b>	74, 90, 95J	74, 90, 95A
<b>Frequency Range:</b>	150-165 MHz	450-470 MHz
<b>Max. Freq. Separation:</b>	15 MHz	20 MHz
<b>RF Channels:</b>	1 Channel, Independent TX/RX frequencies.	
<b>Synthesizer Step Size:</b>	2.5 kHz	6.25 kHz
<b>Frequency Stability (-30 C to +60 C):</b>	± 2.5 PPM TX/RX	± 1.5 PPM TX/RX
<b>Tone/Code Signaling:</b>	CTCSS (Quiet Call) Digital Coded Squelch (Digital Quiet Call) Selcall ID Encode 2-Tone Paging Decode DTMF ANI Encode	
<b>Dimensions:</b>	<b>Light Duty:</b> 7.0" H x 5.0" W x 3.0" D	
	<b>XT:</b> 11.5" H x 9.5" W x 3.0" D	
<b>Weight:</b>	<b>Light Duty:</b> 3 lb. 12 oz. w/ antenna & 6 D-cell batteries	
	<b>XT:</b> 9 lb. 10 oz. w/ antenna & 6 D-cell batteries	
<b>Enclosure Material:</b>	<b>Light Duty:</b> Velox & Thermo Plastic O-ring sealed	
	<b>XT:</b> Velox & Reinforced Fiberglass	
<b>Environmental:</b>	Splash resistant, shock & vibration per Ritron test	
<b>RJ11 Telephone Jack:</b>	Internal RJ11 jack is used for PC programming	
<b>Antenna Fitting:</b>	50 Ω BNC Connector	

## RECEIVER

	<u>Wide Mode</u>	<u>Narrow Mode</u>	<u>Wide Mode</u>	<u>Narrow Mode</u>
<b>Modulation Acceptance:</b>	± 5.0 kHz	± 3.75 kHz	± 5.0 kHz	± 3.75 kHz
<b>Sensitivity (12 dB SINAD):</b>	0.15 μV	0.19 μV	0.16 μV	0.18 μV
<b>Adjacent Channel (EIA):</b>	- 70 dB	- 60 dB	- 70 dB	- 60 dB
<b>Spurious Rejection:</b>	- 70 dB	- 60 dB	- 70 dB	- 60 dB
<b>Image Rejection (EIA):</b>	- 60 dB	- 60 dB	- 80 dB	- 80 dB
<b>Intermodulation (EIA):</b>	- 65 dB	- 65 dB	- 65 dB	- 65 dB
<b>Noise Squelch Sensitivity:</b>	Programmable per channel, factory set for 12 dB SINAD			
<b>Frequency Response:</b>	300 - 3000 Hz, de-emphasized		300 - 3000 Hz, de-emphasized	
<b>2-Tone Frequency Range:</b>	300 - 1500 Hz		300 - 1500 Hz	
<b>2-Tone Decode Deviation Requirement:</b>	2.5 - 3.5 kHz	1.5 - 2.5 kHz	2.5 - 3.5 kHz	1.5 - 2.5 kHz
<b>Audio Output:</b>	1 Watt into 8 Ω, with < 5 % THD @ the earphone jack			
<b>Receiving System:</b>	Dual conversion superheterodyne			
<b>I.F. System:</b>	1st-43.65 MHz, 2nd - 450 kHz		1st-43.65 MHz, 2nd - 450 kHz	
<b>L.O. Injection:</b>	Low side	Low side	High side	High side
<b>QC/DQC Decode Deviation Requirement:</b>	500 - 850 Hz	350 - 500 Hz	500 - 850 Hz	350 - 500 Hz
<b>QC/DQC Decode Time:</b>	per EIA Standards			

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## TRANSMITTER

	<u>Wide Mode</u>	<u>Narrow Mode</u>	<u>Wide Mode</u>	<u>Narrow Mode</u>
<b>Emission Designator:</b>	16K0F3E	11K0F3E	16K0F3E	11K0F3E
<b>Deviation:</b>	± 5.00 kHz	± 2.50 kHz	± 5.00 kHz	± 2.50 kHz
<b>FM Hum and Noise:</b>	- 48 dB	- 40 dB	- 48 dB	- 40 dB
<b>Audio Distortion:</b>	< 3 %	< 6 %	< 3.5 %	< 6 %
<b>RF Power Output @ + 13 VDC:</b>	1.0 Watt	1.0 Watt	2.0 Watts	2.0 Watts
<b>Spurious &amp; Harmonics:</b>	- 57 dBc	- 57 dBc	- 55 dBc	- 55 dBc
<b>Audio Response:</b>	Meets FCC & EIA requirements			
<b>Time-out Timer:</b>	60 seconds, programmable			

## POWER REQUIREMENTS w/ INTERNAL BATTERIES

	<u>VHF</u>	<u>UHF</u>
<b>Off:</b>	0 mA	0 mA
<b>Sleep:</b>	60 mA	40 mA
<b>Standby:</b>	105 mA	80 mA
<b>Avg. Standby w/ Power Saver:</b>	65 mA	45 mA
<b>Receive:</b>	190 mA	165 mA
<b>Transmit:</b>	550 mA @ 1.0 Watt	425 mA @ 1.0 Watt 525 mA @ 1.5 Watts
<b>Power Supply:</b>	All models, Internal 6 D-Cell Battery Holder	

## BATTERY LIFE @ 1 WATT w/ 6 D-CELL BATTERIES

		<u>Alkaline</u>	<u>Ni-Cd</u>
<b>Battery Life:</b>	<b>VHF</b>	479 days	171 days
	<b>UHF</b>	544 days	194 days
<b>Capacity:</b>		14,000 mA AH	5,000 mA AH
<b>Usage/Day:</b>		10 times	10 times
<b>Receiver:</b>		10 seconds each time	10 seconds each time
<b>Transmit:</b>		10 seconds each time	10 seconds each time
<b>Standby:</b>		40 seconds each time	40 seconds each time

## POWER REQUIREMENTS w/ EXTERNAL +12VDC IN

	<u>VHF</u>	<u>UHF</u>
<b>Off:</b>	0 mA	0 mA
<b>Sleep:</b>	60 mA	50 mA
<b>Standby:</b>	105 mA	90 mA
<b>Avg. Standby w/ Power Saver:</b>	65 mA	65 mA
<b>Receive:</b>	190 mA	180 mA
<b>Transmit:</b>	550 mA @ 1.0 Watt	425 mA @ 1.0 Watt 575 mA @ 1.5 Watts
<b>Power Supply:</b>	All models, Internal connector for external 12 VDC supply	

## CONTROLS

<b>On/PTT:</b>	Radio emits the Transmit Beep when turned on and will transmit as long as the button is pressed.
<b>Program Button:</b>	Internal button is used for field programming the 7 Series callbox.
<b>Programming Display:</b>	Internal display indicates the programming digits when field programming the RQX callbox.