



GENERAL

FCC ID:	AIERIT16-446
Industry Canada ID:	1084A-RIT16446
FCC Rule Parts:	22, 74, 90, 95A
Frequency Range:	450 - 470 MHz
Max. Freq. Separation:	20 MHz
RF Channels:	Up to 10 Channels, Independent TX/RX frequencies.
Synthesizer Step Size:	12.5 kHz
Frequency Stability:	± 2.5 PPM (-30 C to +60 C) TX/RX
Tone/Code Signaling:	CTCSS (Quiet Call) Digital Coded Squelch (Digital Quiet Call) 2-Tone Paging Decode DTMF ANI Encode
Dimensions:	1.5" H x 3.75" W x 6.0" D
Weight:	1 lb. 5 oz. with antenna
Enclosure Material:	Steel with e-coat finish
Earphone Jack:	3.5 mm, disconnects the internal speaker for external earphone, speaker / microphone, or headset. Also provides cable connection for PC programming.
Microphone/PTT:	2.5 mm, disconnects the internal microphone for external Speaker / microphone or headset.
Antenna Fitting:	BNC

RECEIVER

	<u>Wide Mode</u>	<u>Narrow Mode</u>
Modulation Acceptance:	± 5.0 kHz	± 3.75 kHz
Sensitivity (12 dB SINAD):	0.20 µV	0.20 µV
Adjacent Channel (EIA):	- 65 dB	- 50 dB
Spurious Rejection:	- 60 dB	- 60 dB
Image Rejection (EIA):	- 65 dB	- 65 dB
Intermodulation (EIA):	- 65 dB	- 65 dB
Noise Squelch Sensitivity:	Programmable per channel, factory set for 12 dB SINAD	
Frequency Response:	300 - 3000 Hz, de-emphasized	
Audio Output:	1 Watt into 8 Ω, with less than 5 % THD @ the earphone jack	
Receiving System:	Dual conversion superheterodyne	
I.F. System:	1st-43.65 MHz, 2nd - 450 kHz	
L.O. Injection:	Low side	
QC/DQC Decode Time:	per EIA Standards	

www.ritron.com

TRANSMITTER

	<u>Wide Mode</u>	<u>Narrow Mode</u>
Emission Designator:	16K0F3E	11K0F3E
Deviation:	± 5.00 KHz	± 2.50 KHz
FM Hum and Noise:	- 40 dB	- 37 dB
Audio Distortion:	< 2 %	< 6 %
RF Power Output:	2.5 Watts @ +13 VDC	
Spurious & Harmonics:	- 55 dBc	
Audio Response:	Meets FCC and EIA requirements	
Time-out Timer:	60 seconds, programmable	

POWER REQUIREMENTS @ 12VDC

Standby:	71 mA
Sleep:	25 mA
Avg. Standby with Power Saver:	28.5 mA
Receive:	250 mA
Transmit:	750 mA @ 2.5 Watts

CONTROLS

On/Volume Up:	Radio emits the Channel Beep when turned on, followed by increasing volume as indicated on the Channel Display.
Volume Down/Off:	Decreasing volume as indicated on the Channel Display, with two tones when turned off.
Both Volume Buttons:	<p>Alternates between Tone Squelch (single beep) and Carrier Squelch (two beeps). On channels programmed for 2-tone paging decode, three beeps indicates 2-tone paging is set.</p> <p>If both buttons are held down until the radio beeps repeatedly, squelch will be disabled.</p>
“Z” Button:	<p>The Special Function “Z” button can be programmed for one of the following features:</p> <ul style="list-style-type: none">• Scan – The radio emits the Scan Beep and the display will rapidly flash the channels as they are scanned, and will stop when a channel is received.• Send DTMF ANI – The radio transmits the pre-programmed DTMF ANI string, and the ANI string is heard on the speaker.• Monitor – Alternates the receiver between Tone squelch (single beep), carrier squelch (two beeps), and 2-tone paging decode (three beeps).• Call Tone – The radio transmits a Call Alert Tone that is also heard on the speaker.
PTT: Channel:	<p>Activates the transmitter, and is programmable for a single “transmit beep”. The Channel Beep will sound whenever channel 1 is selected.</p> <p>When the scan channel is selected the radio emits the Scan Beep.</p>
Channel Display:	<p>The 7-segment LED display indicates current operating channel.</p> <p>When the scan channel is selected the display will rapidly flash the channels as they are scanned, and will stop when a channel is received.</p> <p>The channel display also indicates volume level whenever a volume control is pressed.</p>
Transmit/Monitor Lamp:	A single light in the lower right corner of the channel display is lit continuously when the transmitter is active and blinks when the receiver detects a carrier.