#### A Whole New RELM of Poss1b1l1t1es

## KNGSERIES



Tier 2

**KNG** 



# KNG SERIES

The KNG Series is offered in four frequency bands and two design options, with or without (Tier II) an alphanumeric keypad.



KNG - P150/TII VHF 136 - 174 MHz KNG - P400/TII UHF 380 - 470 MHz KNG - P500/TII UHF 440 - 520 MHz KNG - P800/TII UHF 763 - 870 MHz









#### Wireless Tactical OTAR (KZA05 84)

With RELM's Wireless Tactical OTAR (WTO), you are provided with the flexibility to upgrade encryption keys wirelessly and effortlessly without ancillary equipment, infrastructure or key management facilities. WTO operates radio-to-radio and is completely contained in the KNG radio units which means no additional equipment is required beyond initi alizati on .

## (KZA0581)

Multicas Vote Scan

Multicast Vote Scan capable KNG Series radios automatically select the bes site to operate from in a wide area system. Channels in the multicas conventional system are added to the scan list and designated as "voted channels. The KNG radio scans all voted channels and selects the channe with the best signal.

#### AES/DES ENCRYPTION (KZA0577)

AES (Advanced Encryption Standard) development has been a co-operative venture between the U.S. government and the private industry sector resulting in a universal encryption system. AES and DES (Digital Encryption Standard) allows you to communicate with other radios that have the specific keyprogrammed. RELM's AES/DES Encryption is NIST certified, validated FIPS 140-2 Type III encryption with a 256 keyload



### **ADVANCED FEATURES**

#### 1-6 Watts RF Power Output

Extend the radio's reach with up to 6 Watts of signal clarity. High and low settings are programmable by channel for power efficiency.

#### 512 Channels, Dynamic Grouping

Custom-tailored user groups can be programmed into the KNG by radio users and can also be field changed or reprogrammed whenever necessary.

#### 100 Programmable Quick Call ID's

Connect with select radio users easily and ASAP through RELM's Quick Call function.

#### **Busy Channel Selections**

Designed to prevent other radio communications and interference on channels being used.

#### Channel/Priority/Group Scan

Find an available channel for communications: scan by channel, priority channel, or scan by groups, one group at a time.

#### **Talk Around**

This feature allows you to bypass or "talk around" a repeater for a direct connection.





#### **Proble11n Prevention Features**

The Keyp, ad lock prevents you from accidentally hitting a button that may activate functions unintentionally.

#### **Class A Specifications**

The KNG P<sub>i</sub>ort able provides the clearest sound with the least distortion among comparable P25 radios, The KNG meets or exceeds the best performance numbers of all U.S. manu 1facturers' comparable top-tier P25 digital radios in 110 of 11 key categories of TIA Class A specifications

#### Birdie F:ree

Only RELM' Wireless goes the extra mile to create a truly birdie free radio, which means there are no blacked out frequencies on our portable.









## **BUTTONS AND FUNCTIONS**



**Navigation Buttons** 

### **FEATURES**

#### **Superior Audio Quality**

The KNG comes equipped with a 1.6" diameter speaker, giving you the loudest and clearest sound with the least distortion.

#### Long Battery Life

The KNG works as long as you do, putting in 12+ hours of reliable communication everyday.

#### Custom Programming

Our intuitive menu system and feature set is fully customized to fit your needs.

#### Waterproof IP67 Rating

Dust tight and waterproof - the KNG Portable is specially designed to withstand 30 minutes of water immersion at 1 meter depth.

#### MIL-STD-810C/D/E/F

The KNG Portable has gone through rigorous testing and meets or exceeds military requirements.

#### **APCO Project 25**

The KNG Portable meets or exceeds APCO P25 standards.

#### Large LCD Display

Day or night, get all the information at a glance with our 13 character, 5 line LCD Display.

#### Field or USB PC Programmable

Easy of use. The KNG can programmed via USB port on virtually any PC.

Specification-	KNG-P150	KNG-P400	KNG-P500	KNG-PB00
Frequency Range	136 - 174 MHz	380 - 470 MHz	440 - 520 MHz	763 - 870 MHz
Channels w/ Varia∄e Zone Size	512	512	512	512
Zones (up tol	32	32	32	32
Operating Voltage	10 V	10 V	10 V	10 V
Channel Spacing				
Chann e ncrements	1.25 kHZ	12.5 kHZ	12.5 kHZ	
Ope_rati g Tempe rat ure			I	-Jo·C-+60 PC
Dimensions $\{ \mathbf{W} \ \mathbf{x} \ D \ x \ H \}$	2.5 <b>x</b> 1.8 <b>x</b> 5.5 in	2.5 x 1.8 x 5.5 in	2.5 x 1.8 x 5.5 in	2.5 x 1.8 x 5 .5 in
Weight w/ Battery	16 oz	16 oz	16 oz	16 oz
Standby Current Draw	75 mA	85 mA	85 mA	85 mA
FCCID	K95KNGP150	K95KNGP400	K95KNGP500	K95KNGP800
Receille				
Sensitivity: 12db <b>SINAD</b>	-121 dBm	-119 dBm	-121 dBm	-119 dBm
P25 Sensitivity: 5% BER	-121 dBm	-119 dBm	-121 dBm	-119 dBm
Adjacent Chan nel Rejection	80 (70) dB	78 (67) dB	77 (67) dB	72 (63) dBPer TIA/ EIA-603 2.1.6
P25 Adjacent Channel Rejectfon	60 dB	60 dB	60 dB	60 dB
	60 dB	60 dB <b>80 dB</b>	60 dB	60 dB
Rejectfon				60 dB 75 dB
Rejectfon Spur ious. and Images Intermodulation	80 dB	80 dB	Ι •	
Rejectfon Spur ious. and Images Intermodulation Rejection	<b>80 dB</b> 78 dB	80 dB 75 dB	75 dB	75 dB
Rejectfon Spur ious. and Images Intermodulation Rejection Audio Response Audio Distortion at	80 dB 78 dB +1dB / -3dB	80 dB 75 dB +1dB / -3dB	75 dB +1dB / -3dB	75 dB +1dB/-3dB
Rejection Spur ious. and Images Intermodulation Rejection Audio Response Audio Distortion at 500mW	80 dB 78 dB +1dB / -3dB 2 %	80 dB 75 dB +1dB / -3dB 2 %	75 dB +1dB / -3dB 2 %	75 dB +1dB / -3dB 2%
Rejection Spur ious. and Images Intermodulation Rejection Audio Response Audio Distortion at 500mW RX Current Draw	80 dB 78 dB +1dB / -3dB 2 %	80 dB 75 dB +1dB / -3dB 2 %	75 dB +1dB / -3dB 2 %	75 dB +1dB / -3dB 2%
Rejection Spur ious. and Images Intermodulation Rejection Audio Response Audio Distortion at 500mW RX Current Draw  Transmitter	80 dB 78 dB +1dB / -3dB 2 % 150 mA	80 dB 75 dB +1dB / -3dB 2 % 160 mA	75 dB +1dB / -3dB 2 % 160 mA	75 dB +1dB / -3dB 2% 255 mA
Rejection Spur ious. and Images Intermodulation Rejection Audio Response Audio Distortion at 500mW RX Current Draw Transmitter RF Power	80 dB  78 dB  +1dB / -3dB  2 %  150 mA	80 dB 75 dB +1dB / -3dB 2 % 160 mA	75 dB +1dB / -3dB 2 % 160 mA	75 dB +1dB / -3dB 2% 255 mA 3 / 1 Watts
Rejection Spur ious. and Images Intermodulation Rejection Audio Response Audio Distortion at 500mW RX Current Draw Transmitter RF Power Frequency Stability	80 dB  78 dB  +1dB / -3dB  2 %  150 mA  6 / 5 / 1 Watts  1.5 ppm	80 dB 75 dB +1dB / -3dB 2 % 160 mA 5 / 4 / 1 Watts 1.5 ppm	75 dB +1dB / -3dB 2 % 160 mA 5 / 4 / 1 Watts 1.5 ppm	75 dB +1dB / -3dB 2% 255 mA 3 / 1 Watts 1.5 ppm
Rejection Spur ious. and Images Intermodulation Rejection Audio Response Audio Distortion at 500mW RX Current Draw Transmitter RF Power Frequency Stability Modulation Deviation	80 dB  78 dB  +1dB / -3dB  2 %  150 mA  6 / 5 / 1 Watts  1.5 ppm  5 (2.5) kHz	80 dB 75 dB +1dB / -3dB 2 % 160 mA 5 / 4 / 1 Watts 1.5 ppm 5 (2.5) kHz	75 dB +1dB / -3dB 2 % 160 mA 5 / 4 / 1 Watts 1.5 ppm 5 (2.5) kHz	75 dB +1dB / -3dB 2% 255 mA 3 / 1 Watts 1.5 ppm 5 (2.5) kHz
Rejection Spur ious. and Images Intermodulation Rejection Audio Response Audio Distortion at 500mW RX Current Draw Transmitter RF Power Frequency Stability Modulation Deviation Audio Distortion FM Hum & Noise Spurious and Harmonics	80 dB  78 dB  +1dB / -3dB  2 %  150 mA  6 / 5 / 1 Watts  1.5 ppm  5 (2.5) kHz  3 %	80 dB 75 dB +1dB /-3dB 2 % 160 mA 5 / 4 / 1 Watts 1.5 ppm 5 (2.5) kHz 3 %	75 dB +1dB / -3dB 2 % 160 mA 5 / 4 / 1 Watts 1.5 ppm 5 (2.5) kHz 3 %	75 dB +1dB / -3dB 2% 255 mA 3 / 1 Watts 1.5 ppm 5 (2.5) kHz 3 %
Rejection Spur ious and Images Intermodulation Rejection Audio Response Audio Distortion at 500mW RX Current Draw Transmitter RF Power Frequency Stability Modulation Deviation Audio Distortion FM Hum & Noise	80 dB  78 dB  +1dB / -3dB  2 %  150 mA  6 / 5 / 1 Watts  1.5 ppm  5 (2.5) kHz  3 %  50 (44) dB	80 dB 75 dB +1dB / -3dB 2 % 160 mA 5 / 4 / 1 Watts 1.5 ppm 5 (2.5) kHz 3 % 50 (45) dB	75 dB +1dB / -3dB 2 % 160 mA 5 / 4 / 1 Watts 1.5 ppm 5 (2.5) kHz 3 % 50 (44) dB	75 dB +1dB / -3dB 2% 255 mA 3 / 1 Watts 1.5 ppm 5 (2.5) kHz 3 % 50 (45) dB

!Narrowband spec-fications are deno ed In parethesis.

