

KENWOOD

TK-2160/3160

Compact VHF/UHF FM Portable Radios



- COMPACT DESIGN
- CONVENTIONAL FORMAT
- PRIORITY SCAN & TALK BACK
- FleetSync® PTT ID & SELCALL
- FleetSync® EMERGENCY
- VOICE SCRAMBLER
- INTERNAL VOX/HANDS FREE READY
- QT/DQT/DTMF/2-TONE
- PROGRAMMABLE CALL ALERTS
- PROGRAMMABLE FUNCTION KEYS
- HIGH-QUALITY AUDIO
- 8, 9 & 12 HOUR BATTERY PACKS
- IP54/55 WATERPROOFING
- MIL-STD 810 C, D, E & F



Setting the pace with a compact, simple and reliable design, Kenwood's TK-2160/3160 portables are the new benchmark of performance. With such features as priority scan, VOX, and MIL-STD 810 & IP54/55 weatherproofing, these units are all set to work rain or shine.

COMPACT DESIGN

Compact enough to carry anywhere with ease, this smart new radio has a distinctively ergonomic form that's handy to hold and operate.

INTERNAL VOX / HANDS FREE READY

Enjoy the convenience of hands-free operation using any audio accessory. By simply talking, the internal VOX (voice-operated transmission) with 10-level sensitivity adjustment provides PTT action. VOX is also ideal for specialized job tasks and events where hands-free, constant and/or repetitive communications is necessary.

PRiority SCAN & TALK BACK

Scanning is a simple way to monitor multiple channels (16-channel capacity) and the TK-2160/3160 model offers both standard and priority scan modes. Talk Back allows immediate response to a received call without having to manually search or change channels.

Voice SCRAMBLER

The TK-2160/3160 includes a voice inversion-scrambling feature that provides basic communications security against casual eaves-dropping.





OUTSTANDING FEATURES

OPERATING EASE

The rotary and key controls on the TK-2160/3160 have been designed to provide the user with positive detent feedback even if carried and operated under-cover or in a pocket.

FleetSync® PTT ID, SELCALL & EMERGENCY

Utilizing Kenwood's FleetSync® digital signalling protocol, the TK-2160/3160 has PTT ID (ANI; automatic number identification) and Selective Calling capabilities for managed dispatch operations. For hazardous / hostile duty environments, the orange key can also be programmed for Emergency status to alert the dispatcher and/or fleet of a unit in distress.



QT/DQT/DTMF/ 2-TONE

The industry standard tone/code squelching formats QT (CTCSS) and DQT (digital) provide system access and group segregation on shared frequencies. DTMF PTT ID is included for dispatch operations or for a simple remote control application. The DTMF decode capabilities include a selective call ID, transpond with ID, "wild card" group calling and radio stun. The TK-2160/3160 is also equipped with 2-Tone encode and decode capability for legacy paging systems and selective call use (three tone pairs, A, B, C & D tones; 288.5–3000 Hz). All selective calling formats (FleetSync®, DTMF & 2-Tone) have call alert tones and LED indications.

PROGRAMMABLE CALL ALERT TONES

The programmable call alert pattern, duration, tone and volume provide personalized and distinctive selective calling alerts.

PROGRAMMABLE FUNCTION KEYS

The three side PF Keys are programmable to any of the many functions available on the TK-2160/3160, permitting a customized fit for specific users (including the orange key).

HIGH-QUALITY AUDIO

Clear audio means confident communications. The TK-2160/3160 large speaker, full half-watt of audio output and tailored response characteristics provide optimum audio in even noisy environments.

8- TO 12-HOUR BATTERY PACKS

The KNB-25A NiCd 8-hour* pack is the economical standard for the TK-2160/3160 portables. The optional KNB-24L Lithium Ion 9-hour* pack offers the ultimate in compact, lightweight carrying comfort. For super high-capacity talk and standby time, the KNB-26N NiMH 12-hour pack is the powerhouse of choice.

*Battery life is based on 5% transmit-5% receive-90% standby duty cycles.

TOUGH & WATERPROOF

Built tough to take rough treatment in stride, these portables have passed the advanced IP54/55 and MIL-STD 810 "blowing rain" waterproof tests and meet/exceed eleven other stringent MIL-STD 810 C/D/E/F environmental standards. This proves that whatever conditions may be, the TK-2160/3160 is ready to answer the call.



Options

<p>KNB-24L Li-Ion Battery Pack (1,400mAh)</p> 	<p>KMB-16 Six Unit Charger Adapter</p> 	<p>KMC-21 Speaker Microphone</p> 	<p>KHS-7A Lightweight Single Muff Headset</p> 
<p>KNB-25A Ni-Cd Battery Pack (1,200mAh)</p> 	<p>KRA-22 VHF Low Profile Helical Antenna</p> 	<p>KHS-1 Head Set with VOX/PTT</p> 	<p>KHS-8BL 2-wire Palm Mic with Earphone (Black)</p> 
<p>KNB-26N Ni-MH Battery Pack (2,000mAh)</p> 	<p>KRA-23 UHF Low Profile Helical Antenna</p> 	<p>KHS-22 Head Set</p> 	<p>KHS-8BE 2-wire Palm Mic with Earphone (Beige)</p> 
<p>KBP-5 Battery Case</p> 	<p>KRA-26 VHF Helical Antenna</p> 	<p>KVC-3 Regular Rate Vehicular Charger Adapter (for KSC-30)</p> 	<p>KHS-8BL 3-wire Lapel Mic with Earphone (Black)</p> 
<p>KSC-25 Rapid Charger</p> 	<p>KRA-27 UHF Whip Antenna</p> 	<p>KVC-4 Rapid Rate Vehicular Charger Adapter (for KSC-25)</p> 	<p>KHS-8BE 3-wire Lapel Mic with Earphone (Beige)</p> 
<p>KSC-30 Charger for KNB-25A and KNB-26N</p> 	<p>KMC-17 Speaker Microphone</p> 	<p>KEP-2 Earphone Cord Kit for KMC-17/21</p> 	<p>KLH-117 Leather Case</p> 

All accessories and options may not be available in all markets. Contact an authorized Kenwood dealer for details and complete list of all accessories and options.

Specifications

Model	TK-2160	TK-3160
GENERAL		
Frequency Range		
Type 1	136-174 MHz	450-490 MHz
Number of Channels		Max. 16
Channel Spacing		
Wide/Narrow	25, 30kHz/12.5, 15kHz	25kHz/12.5kHz
Channel Step	2.5, 5, 6.25, 7.5kHz	5, 6.25kHz
Operating Voltage	7.5V DC±20%	
Battery Life (5-5-90 duty cycle)		
with KNB-24L (1400mAh)	Approx. 9 hours	
with KNB-25A (1200mAh)	Approx. 8 hours	
with KNB-26N (2000mAh)	Approx. 12 hours	
Operating Temperature Range	-22°F ~ +140°F (-30°C ~ +60°C) [-14°F ~ +140°F (-10°C ~ +60°C) when KNB-24L/26N in use]	
Frequency Stability	±2.5ppm (-22°F ~ +140°F)	
Antenna Impedance	50Ω	
Channel Frequency Spread		
Type 1	38MHz	40MHz
Dimensions (W x H x D), Projections not included		
Radio Only	2.2" x 4.3" x 0.72" (56 x 109.3 x 18.4mm)	
with KNB-24L	2.2" x 4.3" x 1.35" (56 x 109.3 x 34.5mm)	
with KNB-25A	2.2" x 4.3" x 1.6" (56 x 109.3 x 40.7mm)	
with KNB-26N	2.2" x 4.3" x 1.6" (56 x 109.3 x 40.7mm)	
Weight		
Radio Only	5.8oz (165g)	
with KNB-24L	10.2oz (290g) without antenna	
with KNB-25A	12.5oz (355g) without antenna	
with KNB-26N	14.1oz (400g) without antenna	
FCC ID		
Type 1	ALH36413110	ALH36423110
FCC Compliance		
Type 1	Parts 22/74/80/90	Part 90
IC Certification	282D-36413110	282D-36423110

Model	TK-2160	TK-3160
RECEIVER (Measurements made per TIA/EIA-603)		
Sensitivity (12dB SINAD)		
Wide/Narrow		0.25µV/0.28µV
Selectivity		
Wide/Narrow		70dB/62dB
Intermodulation Distortion		
Wide/Narrow		65dB/60dB
Spurious Response		65dB
Audio Output	500mW with less than 10% distortion	
TRANSMITTER (Measurements made per TIA/EIA-603)		
RF Power Output		
High/Low	5W/1W	4W/1W
Spurious Response		70dB
Modulation		
Wide/Narrow	16K0F3E/11K0F3E	
FM Noise		
Wide/Narrow	45/43dB	45/40dB
Audio Distortion	Less than 5%	

Kenwood follows a policy of continuous advancement in development. For this reason specifications may be changed without notice. FleetSync® is a registered trademark of KENWOOD Corporation in the United States and/or other countries.

Applicable MIL-STD

Military Standards	Methods/Procedures MIL-STD 810C	Methods/Procedures MIL-STD 810D	Methods/Procedures MIL-STD 810E	Methods/Procedures MIL-STD 810F
Low Pressure	500.1/Procedure I	500.2/Procedure I, II	500.3/Procedure I, II	500.4/Procedure I, II
High Temperature	501.1/Procedure I, II	501.2/Procedure I, II	501.3/Procedure I, II	501.4/Procedure I, II
Low Temperature	502.1/Procedure I	502.2/Procedure I, II	502.3/Procedure I, II	502.4/Procedure I, II
Temperature Shock	503.1/Procedure I	503.2/Procedure I	503.3/Procedure I	503.4/Procedure I, II
Solar Radiation	505.1/Procedure I	505.2/Procedure I	505.3/Procedure I	505.4/Procedure I
Rain	506.1/Procedure I, II	506.2/Procedure I, II	506.3/Procedure I, II	506.4/Procedure I, III
Humidity	507.1/Procedure I, II	507.2/Procedure II, III	507.3/Procedure II, III	507.4
Salt Fog	509.1/Procedure I	509.2/Procedure I	509.3/Procedure I	509.4
Dust	510.1/Procedure I	510.2/Procedure I	510.3/Procedure I	510.4/Procedure I, III
Vibration	514.2/Procedure VIII, X	514.3/Procedure I	514.4/Procedure I	514.5/Procedure I
Shock	516.2/Procedure I, II, V	516.3/Procedure I, IV	516.4/Procedure I, IV	516.5/Procedure I, IV

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