



TK-2160/3160

Compact VHF/UHF FM Portable Radios

Setting the pace with a compact, simple and reliable design, Kenwood's TK-21 60/3160 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.



5-tone



Actual size

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.

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.

INTERNAL VOX/HANDS FREE READY

Enjoy the convenience of hands-free operation using an optional headset like the KHS-21. 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.

BUILT-IN VOICE SCRAMBLER

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

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 operator in distress.

DMS (Digital Message System) function has been renamed to FleetSync.

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).

QT/DQT/DTMF/5-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 5-Tone encode and decode capability for legacy paging systems and selective call use. All selective calling formats (FleetSync™, DTMF & 5-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.

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 even in noisy environments.

8- TO 12-HOUR BATTERY PACKS

The KNB-25A Ni-Cd 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 Ni-MH 12-hour pack is the powerhouse of choice.

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

TOUGH & WATER RESISTANT

Built tough to take rough treatment in its stride, these portables have passed the advanced IP54/55 and MIL-STD 810 "blowing rain" water-proof 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.



OPTION BOARD

Despite its compact design, the TK-2160/3160 can be fitted with option boards for advanced security, etc.



KENWOOD MEANS BUSINESS

Options

<p>■ KNB-24L Li-Ion Battery Pack (1,400mAh)</p>	<p>■ KSC-30 Charger for KNB-25A and KNB-26N</p>	<p>■ KMC-17 Speaker Microphone</p>
<p>■ KNB-25A Ni-Cd Battery Pack (1,200mAh)</p>	<p>■ KRA-22 VHF Low Profile Helical Antenna</p>	<p>■ KMC-21 Speaker Microphone</p>
<p>■ KNB-26N Ni-MH Battery Pack (2,000mAh)</p>	<p>■ KRA-23 UHF Low Profile Helical Antenna</p>	<p>■ KHS-1 Head Set with VOX/PTT</p>
<p>■ KBP-5 Battery Case</p>	<p>■ KRA-26 VHF Helical Antenna</p>	<p>■ KHS-21 Head Set</p>
<p>■ KSC-25 Rapid Charger</p>	<p>■ KRA-27 UHF Whip Antenna</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

	TK-2160	TK-3160		TK-2160	TK-3160
GENERAL			RECEIVER		
Frequency Range			Sensitivity		
Type 1	136-174MHz	440-470MHz	EIA 12dB SINAD	0.25µV/0.25µV/0.32µV	
Type 3	—	400-430MHz	EN 20dB SINAD	0.63µV/0.63µV/0.7µV	
Number of Channels	Max. 16		25kHz/20kHz/12.5kHz		
Channel Spacing			Adjacent Channel Selectivity		
Type 1	25kHz/20kHz/12.5kHz	25kHz/20kHz/12.5kHz	25kHz/20kHz/12.5kHz	70dB/70dB/62dB	
Type 3	—	25kHz/12.5kHz	Intermodulation	65dB	
PLL Channel Stepping	5, 6.25kHz		Spurious Response Rejection	70dB	
Antenna Impedance	50 Ω		Audio Output	500mW with less than 10% distortion	
Operating Voltage	7.5V DC±20%		Measurement	EN standard	
Battery Life (5-5-90 duty cycle with battery saver off)			TRANSMITTER		
with KNB-24L (1400mAh)	Approx. 9 hours		RF Power Output		
with KNB-25A (1200mAh)	Approx. 8 hours		Hi/Low	5W/1W	4W/1W
with KNB-26N (2000mAh)	Approx. 12 hours		Modulation Limiting		
Operating Temperature Range*	-30°C ~ +60°C		±5.0kHz at 25kHz		
Frequency Stability	±2.5ppm (-30°C ~ +60°C)		±4.0kHz at 20kHz		
Channel Frequency Spread			±2.5kHz at 12.5kHz		
Type 1	38MHz	30MHz	Spurious Emission		
Type 3	—	30MHz	-36dBm (≤1GHz)		
Dimensions (W x H x D), Projections not included			-30dBm (>1GHz)		
Radio Only	56 x 109.3 x 18.4mm		FM Noise (EIA)		
with KNB-24L	56 x 109.3 x 34.5mm		25kHz/20kHz/12.5kHz	45dB/43dB/40dB	
with KNB-25A	56 x 109.3 x 40.7mm		Microphone Impedance	2kΩ	
with KNB-26N	56 x 109.3 x 40.7mm		Modulation Distortion	Less than 5%	
Weight (net)			Measurement	EN standard	
Radio Only	165g		Kenwood reserves the right to change specifications and features without prior notice.		
with KNB-24L	290g (without antenna)		FleetSync™ is a trademark of Kenwood Corporation.		
with KNB-25A	355g (without antenna)				
with KNB-26N	400g (without antenna)				
Applicable Standards	EN300 086, EN300 113, EN301 489, EN300 279				
	IP54, IP55				

*-10°C ~ +60°C when KNB-24L/26N in use

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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