

KENWOOD

TK-2160/3160

Compact VHF/UHF FM Portable Radios

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.

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).

Actual size

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.

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.



K E N W O O D M E A N S B U S I N E S S

Options

<ul style="list-style-type: none"> ■ KNB-24L Li-ion Battery Pack (1,400mAh) ■ KNB-25A Ni-Cd Battery Pack (1,200mAh) ■ KNB-26N Ni-MH Battery Pack (2,000mAh) ■ KBP-5 Battery Case ■ KSC-25 Rapid Charger 	<ul style="list-style-type: none"> ■ KSC-30 Charger for KNB-25A and KNB-26N ■ KRA-22 VHF Low Profile Helical Antenna ■ KRA-23 UHF Low Profile Helical Antenna ■ KRA-26 VHF Helical Antenna ■ KRA-27 UHF Whip Antenna 	<ul style="list-style-type: none"> ■ KMC-17 Speaker Microphone ■ KMC-21 Speaker Microphone ■ KHS-1 Head Set with VOX/PTT ■ KHS-21 Head Set
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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
GENERAL		
Frequency Range		
Type 1	136-174MHz	450-490MHz
Type 3	—	400-430MHz
Number of Channels		Max. 16
Channel Spacing		
Wide/Narrow	25, 30kHz/12.5, 15kHz	25kHz/12.5kHz
Channel Step		5, 6.25kHz
Operating Voltage		7.5V DC±20%
Battery Life (5-5-90 duty cycle with battery saver off)		
with KNB-24L (1400mAh)		Approx. 9 hours
with KNB-25A (1200mAh)		Approx. 8 hours
with KNB-26N (2000mAh)		Approx. 12 hours
Operating Temperature Range		-30°C ~ +60°C
	-10°C ~ +60°C when KNB-24L/26N in use	
Frequency Stability		±2.5ppm (-30°C ~ +60°C)
Antenna Impedance		50Ω
Channel Frequency Spread		
Type 1	38MHz	40MHz
Type 3	—	30MHz
Dimensions (W x H x D), Projections not Included		
Radio Only	56 x 109.3 x 18.4mm	
with KNB-24L	56 x 109.3 x 34.5mm	
with KNB-25A	56 x 109.3 x 40.7mm	
with KNB-26N	56 x 109.3 x 40.7mm	
Weight (net)		
Radio Only	165g	
with KNB-24L	290g (without antenna)	
with KNB-25A	355g (without antenna)	
with KNB-26N	400g (without antenna)	

	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		
Hi/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 reserves the right to change specifications and features without prior notice. FleetSync™ is a trademark of Kenwood Corporation.

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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