

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 & EMERGENCY

Utilizing Kenwood's FleetSync™ digital signalling protocol, the TK-2160/3160 has PTT ID (ANI: automatic number identification) 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

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. Selective calling formats (FleetSync™ & DTMF) 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.

9- TO 12-HOUR BATTERY PACKS

The standard 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 resistance 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.

Options

■ 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 PKG

Rapid Charger



■ KSC-30 PKG

Regular 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



■ KMC-17

Speaker Microphone



■ KMC-21

Speaker Microphone



■ KHS-1

Head Set with VOX/PTT



■ KHS-21

Head Set



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		
Type1	136-174MHz	450-490MHz
Type2	—	470-520MHz
Type3	—	400-430MHz
Number of Channels	Max. 16	
Channel Spacing		
Type1	25kHz /12.5kHz	25kHz/12.5kHz
Type2	—	25kHz/12.5kHz
Type3	—	25kHz/12.5kHz
PLL Channel Stepping	5,6,25kHz	
Antenna Impedance	50 Ohms	
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	
Frequency Stability	±2.5ppm (-30°C ~ +60°C)	
Channel Frequency Spread		
Type1	38MHz	40MHz
Type2	—	50MHz
Type3	—	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)	
Applicable Standards	EN300 086, EN300 113, EN301 489, EN300 279 AS4295, IP54, IP55	

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

	TK-2160	TK-3160
RECEIVER (Measurements made per TIA/EIA-603)		
Sensitivity		
EIA 12dB SINAD		0.25µV/0.32µV
EN 20dB SINAD		0.63µV/0.7µV
25kHz /12.5kHz		
Adjacent Channel Selectivity		70dB/62dB
25kHz/12.5kHz		
Intermodulation		65dB
Spurious Response Rejection		70dB
Audio Output	500mW with less than 10% distortion	
TRANSMITTER (Measurements made per TIA/EIA-603)		
RF Power Output		
Hi/Low	5W/1W	4W/1W
Modulation Limiting		±5.0kHz at 25kHz ±2.5kHz at 12.5kHz
Spurious Emission		-36dBm (*1GHz) -30dBm (>1GHz)
FM Noise (EIA)		
25kHz /12.5kHz		45dB/40dB
Microphone Impedance	2 kOhms	
Modulation Distortion	Less than 5%	
Measurement	EN standard	

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

KENWOOD CORPORATION

2967-3, Ishikawa-machi, Hachioji-shi, Tokyo, 192-8525 Japan

KENWOOD ELECTRONICS AUSTRALIA PTY. LTD.

16 Giffnock Avenue, Centrecourt Estate, North Ryde, N.S.W. 2113, Australia



ISO9001 Registered
Kenwood Corporation
ISO9001 certification