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 undercover 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 inversionscrambling 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 cycle

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.

Actual size



Options



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/0.32µ	V
Type 3	_	400-430MHz	EN 20dB SINAD	0.63µV/0.63µV/0.7µ\	/
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			Audio Output	500mW with less than 10% distortion	
Operating Voltage	7.5V DC±20%		Measurement	EN standard	
Battery Life (5-5-90 duty cy	cle with battery saver off)		TRANSMITTER		
with KNB-24L (1400mAh) Approx. 9 hours		RF Power Output			
with KNB-25A (1200mA	11		Hi/Low	5W/1W	4W/1W
with KNB-26N (2000mAh) Approx. 12 hours			Modulation Limiting	+5.0kHz at 25kHz	
Operating Temperature Range* -30°C ~ +60°C		9	±4.0kHz at 20kHz		
Frequency Stability ±2.5ppm (-30°C ~ +60°C)			±2.5kHz at 12.5kHz		
Channel Frequency Spread			Spurious Emission	-36dBm (≤1GHz)	
Type 1	38MHz	30MHz		-30dBm (>1GHz)	
Type 3	_	30MHz	FM Noise (EIA)		
Dimensions (W x H x D), Projections not Included		25kHz/20kHz/12.5kHz	45dB/43dB/40dB		
Radio Only	56 x 109.3 x	18.4mm	Microphone Impedance	2kΩ	
with KNB-24L	56 x 109.3 x 34.5mm		Modulation Distortion	Less than 5%	
with KNB-25A	56 x 109.3 x 40.7mm		Measurement	EN standard	
with KNB-26N	56 x 109.3 x	56 x 109.3 x 40.7mm		specifications and features without pri	ior notice
Weight (net)			FleetSync™ is a trademark of Kenwool		or notice.
Radio Only	1650				
with KNB-24L	290g (without	antenna)			
with KNB-25A	355g (without	antenna)			
with KNB-26N	400g (without	: antenna)			
Applicable Standards	EN300 086, EN300 113, E IP54. IF		***		

Applicable MIL-STD

Military Standards	Methods/Procedures	Methods/Procedures	Methods/Procedures	Methods/Procedures	
	MIL-STD 810C	MIL-STD 810D	MIL-STD 810E	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	

C€0168①



Kenwood House, Dwight Road, Watford, Herts, WD18 9EB, United Kingdom www.kenwood-electronics.co.uk comms@kenwood-electronics.co.uk