# 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 DUST/WATER INTRUSION
- 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 for performance. With such features as priority scan, VOX and MIL-STD 810/IP54/IP55 environmental specifications, these units are ready 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.

### NTERNAL VOX / HANDS FREE

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 eavesdropping.



#### **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.



#### OT/DOT/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 & WATER RESISTANT**

Built tough to take rough treatment in stride, these portables have passed the advanced IP54/55 and MIL-STD 810 "blowing rain" water intrusion tests and meet or 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





KRA-26

KRA-27

KMC-17

VHF Helical Antenna

UHF Whip Antenna





KMC-21

KVC-3

KEP-2

Speaker Microphone

Regular Rate Vehicular Charger Adapter (for KSC-30)

KVC-4 Rapid Rate Vehicula Charger Adapter (for KSC-25)

Earphone Cord Kit for KMC-17/21











KHS-8BE 2-wire Palm Mic with Earphone (Beige)



KHS-9BL 3-wire Lanel Mic



KHS-9BF 3-wire Lapel Mic with Earphone (Beige)



KLH-117 Leather Case



**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	7.5V DC±20%		
Battery Life (5-5-90 duty c	ycle)			
with KNB-24L (1400m)	Ah) Approx.	Approx. 9 hours		
with KNB-25A (1200m	Ah) Approx.	8 hours		
with KNB-26N (2000m	Ah) Approx.	12 hours		
Operating Temperature Ra	nge -22°F ~ +140°	-22°F ~ +140°F (-30°C ~ +60°C)		
	[-14°F ~ +140°	°F (-10°C ~ +60°C)		
	when KNB-24	L/26N in use]		
Frequency Stability	±2.5ppm (-22	°F ~ +140°F)		
Antenna Impedance	50	Ω		
Channel Frequency Spread	d			
Type 1	38MHz	40MHz		
Dimensions (W x H x D), F	Projections not included			
Radio Only	2.2" x 4.3" x 0	0.72" (56 x 109.3 x 18.4mm)		
with KNB-24L	2.2" x 4.3" x 1	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	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	2.2" x 4.3" x 1.6" (56 x 109.3 x 40.7mm)		
Weight				
Radio Only	5.8oz (	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)	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		

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.

Model	TK-2160	TK-3160	
RECEIVER (Measurements made p	er TIA/EIA-603)		
Sensitivity (12dB SINAD)			
Wide/Narrow	0.25μ	ιV/0.28μV	
Selectivity			
Wide/Narrow	70c	IB/62dB	
ntermodulation Distortion			
Wide/Narrow	65dB/60dB		
Snurious Resnonse	65dB		
Audio Output	500mW with less than 10% distortion		
<b>TRANSMITTER</b> (Measurements r	made per TIA/EIA-603)		
RF Power Output			
High/Low	5W/1W	4W/1W	
Spurious Response	70dB		
√lodulation			
Wide/Narrow	16KØF3E/11KØF3E		
M 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.
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#### **■** 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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