

# KENWOOD

Listen to the Future



## TK-2307/3307

Compact VHF/UHF FM Portable Radios

For clear, reliable communications indoors or out, rain or shine, there's no beating Kenwood's compact TK-2307/3307 transceiver. Based on a proven design, but refined and updated with enhanced features, it has the power and performance to satisfy even the toughest job requirements, due in part to the MIL-STD 810 & IP54/55 weather-proofing. A model of ergonomic excellence on the outside, inside it's packed with such features as priority scan, built-in VOX and a voice scrambler. No wonder the smart new TK-2307/3307 is attracting such attention.

### COMPACT DESIGN

The rounded ergonomic contours of the TK-2307/3307 naturally provide a superbly comfortable hold, while the non-slip elastomer channel knob with improved torque characteristics and enlarged PTT button ensure a positive tactile response during operation.

### TOUGH & WATERPROOF

Built tough to take rough treatment in stride, the TK-2307/3307 has passed the demanding IP54/55 dust and water intrusion tests, both with and without the KMC-45 optional speaker microphone. It also meets or exceeds 11 stringent MIL-STD 810 C/D/E/F environmental standards, including "driven rain". So whatever the weather, the TK-2307/3307 is ever ready for action.

### ENHANCED AUDIO QUALITY

Clear audio means confident communications, but power output is not the only factor that determines how easy it is to use a radio in varying noisy environments. As an experienced audio specialist, Kenwood can draw on decades of expertise at every step: component selection, construction, optimization, evaluation and analysis. The resulting audio performance, specially engineered for transceivers, is undeniably clearer and crisper. Just listen to the difference.

### MULTIPLE SIGNALING

**QT/DQT/DTMF:** The radio's encoder/decoder function uses QT/DQT to segregate talk groups so you only hear calls from your own group. DTMF PTT ID is included for dispatch operations or for simple remote control applications. The DTMF decode capabilities include selective call ID, transpond with ID, "wild card" group calling, and radio stun.

**FleetSync® PTT ID, SELCALL & EMERGENCY:** Utilizing Kenwood's FleetSync® digital signaling protocol, the TK-2307/3307 features PTT ID (ANI: automatic number identification) and Selective Calling capabilities for managed dispatch operations. For hazardous/hostile duty environments, a PF key can be programmed for Emergency status to alert the dispatcher and/or operator in distress.

**BUILT-IN MDC-1200 SIGNALING:** The TK-2307/3307 is also equipped with an MDC-1200 signaling protocol encoder/decoder for use with MDC-1200 dispatch operations. Features include PTT ID encode, emergency encode, stun/revive decode, and radio check decode.

### PROGRAMMABLE FUNCTION KEYS

The two PF Keys can be programmed for any of the many functions available on the TK-2307/3307, permitting a customized fit for your requirements. Either key can also be programmed for an Emergency function – transmitting a help signal to a predetermined person or group using DTMF, FleetSync® or MDC-1200 signaling.

### LONE WORKER

This ingenious feature provides an extra layer of security for individuals who work in remote or hazardous areas. As long as the buttons are pressed regularly, the radio operates normally. However, if there is a long lapse (programmable), it will sound an alert. And if the user does not respond to the alert, the TK-2307/3307 will place an emergency call to a predetermined person or group.

### RADIO STUN

This function disables a lost or stolen radio over the air, eliminating security risks.

### VOICE ANNUNCIATION

The rotary and key controls on the radio can provide voice confirmation of radio status or operating mode, which is convenient when you are not able to look at the TK-2307/3307 – for example, if it's in your pocket. English is the default language, but you can switch to Russian, French, Spanish or Chinese.

### INDEPENDENT SETTINGS PER CHANNEL (VOX, COMPANDER, SCRAMBLER)

Radio channels can be programmed\* independently for VOX, scrambler and compander functions. This means you can switch a function on or off simply by changing channels (on the same frequency).

\*By the dealer

### 16 CHANNELS

The TK-2307/3307 provides ample capacity for operating with multiple channels or radio systems.

### BUILT-IN VOICE-INVERSION SCRAMBLER

The voice-inversion scrambler provides basic protection against casual eavesdropping.

### VOX READY

Enjoy the convenience of hands-free operation using any optional headset. Offering a 10-level sensitivity adjustment, the internal VOX (voice-operated transmission) function automatically activates PTT when you start talking. This is great for specialized tasks or events that require hands-free, constant or repetitive communications.

### OTHER FEATURES

- Read/Write Password Protection
- Wide/Narrow per Channel
- Companded Audio per Channel
- Talk Around
- B.C.L. (Busy Channel Lockout)
- Key Lock
- 3-color LEDs (red, orange, green)
- Scan Del/Add
- KENWOOD ESN (Electronic Serial Number)
- Adjustable Microphone Gain (by FPU): High or Normal
- Microsoft Windows® PC Programming & Tuning



## Options

■ **KNB-45L**  
Li-Ion Battery Pack  
(2,000 mAh)



■ **KSC-35**  
Rapid Charger  
for KNB-45L



■ **KMC-21**  
Compact Speaker  
Microphone



■ **KHS-26**  
Clip Microphone  
with Earphone



■ **KNB-29N**  
Ni-MH Battery Pack  
(1,500mAh)



■ **KSC-356**  
6 Pocket Multiple Charger  
for KNB-45L



■ **KHS-1**  
Headset with VOX/PTT



■ **KHS-27**  
Headset with Ear Hanger



■ **KNB-30A**  
Ni-Cd Battery Pack  
(1,100mAh)



■ **KRA-22/23**  
VHF/UHF Low Profile  
Helical Antenna



■ **KHS-21**  
Headset



■ **KWR-1**  
Water Resistant Bag



■ **KSC-31**  
Rapid Charger  
for KNB-29N/30A



■ **KRA-26/27**  
VHF/UHF Whip Antenna



■ **KHS-25**  
Headset with D-Ring Ear  
Hanger & Boom Mic./PTT



■ **KBH-10**  
Belt Clip



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-2307	TK-3307
<b>GENERAL</b>		
Frequency Range		
Type 1	136 - 174 MHz	450 - 490 MHz
Type 2	—	440 - 480 MHz
Number of Channels		Max.16
Channel Spacing		
Wide / Narrow	25 kHz / 12.5 kHz	
Battery Voltage	7.5 V DC ±20 %	
Battery Life (5-5-90 duty cycle, during hi-power battery saver: OFF/ON)		
with KNB-45L (2000 mAh)	Approx. 12 hours / 18 hours	
with KNB-29N (1500 mAh)	Approx. 10 hours / 14 hours	
with KNB-30A (1100 mAh)	Approx. 9 hours / 11 hours	
Operating Temperature Range*	-30°C ~ +60°C	
Frequency Stability	±2.5 ppm (-30°C ~ +60°C)	
Antenna Impedance	50 Ω	
Dimensions (W x H x D), Projections not Included		
with KNB-45L / 29N / 30A	54 x 122 x 33.8 mm	
Weight (net)		
Radio only	160 g	
with KNB-45L	280 g	
with KNB-29N	360 g	
with KNB-30A	340 g	

\*-10°C ~ +60°C when KNB-29N or KNB-45L in use.

	TK-2307	TK-3307
<b>RECEIVER</b>		
Sensitivity	EIA 12 dB SINAD	
	0.25 μV / 0.28 μV	
	Wide / Narrow	
Adjacent Channel Selectivity		
Wide / Narrow	70 dB / 60 dB	
Intermodulation		
Wide / Narrow	65 dB / 60 dB	
Spurious Response Rejection	65 dB	60 dB
Audio Output (8 Ω impedance)	500 mW with less than 10 % distortion	
Measurement	TIA/EIA-603	
<b>TRANSMITTER</b>		
RF Power Output (High/Low)	5 W / 1 W	4 W / 1 W
Modulation Limiting	±5.0 kHz at 25 kHz	
	±2.5 kHz at 12.5 kHz	
Spurious Emission	65 dB	
Modulation	16K0F3E / 11K0F3E	
Wide / Narrow		
FM Noise (EIA)		
Wide / Narrow	45 dB / 40 dB	
Modulation Distortion	Less than 5 %	
Microphone Impedance	2 kΩ	
Measurement	TIA/EIA-603	

Kenwood follows a policy of continuous advancement in development.

For this reason specifications may be changed without notice.

FleetSync® is a registered trademark of Kenwood Corporation.

Windows® is a registered trademark of Microsoft Corporation in the United States and other countries.

## Applicable MIL-STD & IP

Standard	MIL 810C Methods/Procedures	MIL 810D Methods/Procedures	MIL 810E Methods/Procedures	MIL 810F Methods/Procedures
<b>Low Pressure</b>	500.1/Procedure I	500.2/Procedure I, II	500.3/Procedure I, II	500.4/Procedure I, II
<b>High Temperature</b>	501.1/Procedure I, II	501.2/Procedure I, II	501.3 I, II	501.4/Procedure I, II
<b>Low Temperature</b>	502.1/Procedure I, II	502.2/Procedure I, II	502.3/Procedure I, II	502.4/Procedure I, II
<b>Temperature Shock</b>	503.1/Procedure I	503.2/Procedure I	503.3/Procedure I	503.4/Procedure I, II
<b>Solar Radiation</b>	505.1/Procedure I	505.2/Procedure I	505.3/Procedure I	505.4/Procedure I, II
<b>Rain</b>	506.1/Procedure I, II	506.2/Procedure I, II	506.3/Procedure I, II	506.4/Procedure I, III
<b>Humidity</b>	507.1/Procedure I, II	507.2/Procedure II, III	507.3/Procedure II, III	507.4
<b>Salt Fog</b>	509.1/Procedure I	509.2/Procedure I	509.3/Procedure I	509.4
<b>Dust</b>	510.1/Procedure I	510.2/Procedure I	510.3/Procedure I	510.4/Procedure I, III
<b>Vibration</b>	514.2/Procedure VIII, X	514.3/Procedure I Cat. 8	514.4/Procedure I Cat. 8	514.5/Procedure I Cat. 20
<b>Shock</b>	516.2/Procedure I, II, V	516.3/Procedure I, IV	516.4/Procedure I, IV	516.5/Procedure I, IV
<b>International Protection Standard</b>				
<b>Dust &amp; Water Protection*</b>	IP54/55			

\*To meet IP54/55, the 2-pin connector cover has to be connected on the radio; the locking bracket has to be attached to the KMC-45 external speaker microphone.