KENWOOD

Listen to the Future

TK-7302/8302

VHF/UHF Compact FM Mobile Radios

FleetSync® by KENWOOD 5-tone THE INTERNATIONAL STANDARD COMPLIANT IP54 US MILITARY COMPLIANT MIL-810C/D/E/F

Kenwood's new TK-7302/8302 delivers reliable mobile performance with extra wideband coverage (UHF: 70MHz) and such features as QT/DQT signalling, multiple scan functions and a voice inversion scrambler. Yet this tough IP54/MIL-STD-compliant radio is decidedly user-friendly, providing high-quality audio, voice announcement, and a large display with adjustable brightness for simple operation, day and night.

16 CHANNELS, 2 ZONES

The TK-7302/8302 offers ample capacity for multiple channels and radio systems: 16 channels and 2 zones. And once it is programmed, users can select specific channels within a set range.

ENHANCED KENWOOD AUDIO

As an 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 and with frequency response optimized for the human voice – is undeniably clearer and crisper.

EXTERNAL D-SUB 15-PIN INTERFACE

A D-sub 15-pin terminal enables the simple connection of various types of external equipment. It can be used for Ignition sense, External Switch, Horn Alert, and External Mic, among others.
A Molex interface is also available with the optional KCT-60M cable.

MULTIPLE SIGNALLING

QT/DQT/DTMF

Encoder/decoder function uses QT/DQT to segregate talk groups, so users only hear calls from their own group. DTMF PTT ID is included for dispatch operations or for a simple remote control application.

FleetSync® PTT ID, SelCall & Status

Utilizing Kenwood's FleetSync® signalling protocol, the TK-7302/8302 has PTT ID (ANI: automatic number identification) and Selective Calling capabilities for managed dispatch operations. Programmed Status (by FPU) can also be sent.

5-Tone

The TK-7302/8302 includes 5-Tone selective calls in 6-different formats, EIA, EEA, CCIR, ZVEI, ZVEI2 and the Kenwood format, and it also can include GPS position data.

Emergency alert

For hazardous/hostile duty environments, a PF key can be programmed for emergency use to alert the dispatcher or other group members via DTMF, FleetSync®.

PROGRAMMABLE VOICE INVERSION SCRAMBLER*1

The built-in programmable voice inversion scrambler provides basic protection against casual eavesdropping. It is possible to have a unique scrambler setting for each channel by picking the voice inversion frequency from one of 16 tables.

GPS FEATURE

Connected to an external GPS receiver, the TK-7302/8302 can transmit accurate vehicle location data to the central base station for fleet management purposes. Designated scrambler and GPS modules can be installed internally.

PROGRAMMABLE BLUE LED

The blue LED indicator can be customized to provide useful status information. For example, it can be used in combination with the orange LED for Selective Call differentiation.

LONE WORKER

This ingenious feature provides an extra layer of security for individuals who work in remote or hazardous areas. If there is a long lapse (programmable), it will sound an alert. And if the user does not respond to the alert, the TK-7302/8302 will place an emergency call to a predetermined person or group.

OTHER FEATURES

• Multiple Scan Functions, including Priority Scan • Voting (automatic repeater search & selection) • Independent Setting Per Channel (compander, scrambler) • BCL (Busy Channel Lockout) • 9 Programmable Function Keys • Talk Around • Horn Alert Function • Companded Audio (narrow/wide) • 3-colour LED (red, orange, green) • MDC-1200 Option*1 • Voice Announcement (choice of language between English, Spanish, French, German, Italian, Dutch, Russian and Chinese) • Password Protection • Time-out Timer • Minimum Volume Setting (by FPU) • Operator Selectable Tone Settings • Embedded Message • 8 Programmable Accessory Ports (for external control) • Scan Del/Add Function • Kenwood ESN (Electronic Serial Number) • Radio Stun • Adjustable Microphone Gain (FPU only): High/Normal • Microsoft Windows® PC Programming & Tuning

*1 This function cannot be used in certain countries.
Please contact your Kenwood dealer for further information.

Options

KMC-35
Microphone

KMC-9C
Desktop Microphone

KLF-2
Line Filter

KMC-36
Keypad Microphone

KES-3
External Speaker

KCT-18
Ignition Sense Cable
(requires KCT-60 option)

KMC-30
Microphone

KES-5
External Speaker

KCT-36
3m Extension Cable
(for KCT-60)

KMC-32
16-key Keypad
Microphone

KMB-10
Key Lock Adapter

KCT-60
Connection Cable

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-7302	TK-8302
GENERAL		
Frequency Range		
Type 1	136~174 MHz	–
Type 2	–	400~470 MHz
Number of Channels		
Zone	2	
Channel	Max.16	
Channel Spacing	12.5 / 20 / 25 kHz	
Operating Voltage	13.6 V DC±15 %	
Current Drain		
Standby	0.3 A	
Receive	1.0 A	
Transmit	8.0 A	
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	160 mm x 43 mm x 122.6 mm	
Weight (net)	1.18 kg	
Applicable Standards		
ETSI R & TTE	EN 300 086, EN 300 113, EN 300 219, EN 301 489	
ETSI Safety	EN 60065, EN60950-1, EN 60215	

	TK-7302	TK-8302
RECEIVER		
Sensitivity		
EIA 12 dB SINAD	0.28 µV / 0.28 µV / 0.35 µV	
EN 20 dB SINAD	-3 dB µV (0.35 µV) / -3 dB µV (0.35 µV) / -2 dB µV (0.40 µV)	
Selectivity		
Wide / 4K / Narrow	70 dB / 70 dB / 60 dB	
Intermodulation Distortion	65 dB	
Spurious Response	70 dB	
Audio Output (4 Ω impedance)	4 W with less than 5 % distortion	
TRANSMITTER		
RF Output Power	5 W ~ 25 W	
Spurious Response	-36 dBm ≤ 1 GHz -30 dBm > 1 GHz	
FM Hum & Noise		
Wide / 4K / Narrow	45 dB / 43 dB / 40 dB	
Audio Distortion (EIA)	Less than 3 %	
Modulation	16K0F3E,14K0F3E,8K50F3E 14K0F2D,12K0F2D,7K50F2D	

Measurements made per EN Standards. Specifications shown are typical. Radios meet applicable regulatory requirements.

Kenwood reserves the right to change specifications and features without prior notice.
FleetSync® is a 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
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*2	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*2	509.1 / Procedure I	509.2 / Procedure I	509.3 / Procedure I	509.4
Dust*2	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, III, V	516.3 / Procedure I, IV, V	516.4 / Procedure I, IV, V	516.5 / Procedure I, IV, V
International Protection Standard				
Dust & Water Protection	IP54*2			

*2: Necessary conditions are: (1) KMC-35/36 microphone is connected; (2) cap is installed on speaker connector; (3) cover is installed on D-sub 15-pin connector; and (4) neither KCT cable nor SP cable is connected.

Listen to the Future

Kenwood has always connected with people through sound. Now we want to expand the world of sound in ways that only Kenwood can, listening to our customers and to the pulse of the coming age as we head toward a future of shared discovery, inspiration and enjoyment.

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