

# KENWOOD

Listen to the Future

## TK-7102/8102

VHF/UHF FM Portable Radios

**Simple operation and solid performance in a compact package — Kenwood's new TK-7102/8102 VHF/UHF FM transceivers offer clear, reliable mobile communications with 25W RF output and such features as QT/DQT signalling, phone/repeater access, and PC programming.**

### BUILT-IN QT/DQT SIGNALLING

Continuous QT (Quiet Talk) and DQT (Digital QT) tone-coded squelch circuits eliminate unwanted signals from others using the same channel. Once a technician has programmed the radio, the user hears only calls with the specified talk group tone (39 for QT) or code (104 for DQT).

### BUSY CHANNEL LOCKOUT

If another talk group is already on the air, this feature enhances channel management by preventing transmission.

### SELECTABLE WIDE/NARROW CHANNEL BANDWIDTH

The TK-7102/8102 can handle both existing wide-band systems and emerging narrow band applications, making it possible to future-proof your investment.

### DTMF

Code Squelch mode provides a 3- to 10-digit ID for basic DTMF paging operations, while DTMF encode allows access to phone patches. A standard PTT ID (max. 16-digit DTMF code) is sent automatically at the start (leading edge) and finish (trailing edge) of a transmission.

### EASY OPERATION

Simplicity characterizes all operations. The front panel features just 4 channel keys, 2 function keys and 2 volume keys. All keys except for the power switch are backlit to facilitate nighttime operation.



### SCAN

Channel scanning provides the user with a simple way to monitor multiple channels for activity, with extra flexibility offered by adjustable scan resume.

### HIGH-QUALITY SPEAKER

Assuring not only powerful output but also excellent clarity is the large-diameter oval (58mm x 35mm) speaker mounted in the front panel.

### TOUGH, COMPACT CONSTRUCTION

Built to take rough treatment in stride, the TK-7102/8102 meets the stringent MIL-STD 810 C/D/E standards for resistance to dust, vibration and shock. The "bathtub" construction of the chassis assures excellent heat dissipation characteristics, and installation is simplified thanks to the compact external dimensions — 160mm (W) x 43mm (H) x 107mm (D).



### PC PROGRAMMING & CLONING CAPABILITY

Using the optional interface cable, the TK-7102/8102 can be connected to a PC for programming. One-to-one wired cloning is also possible. And password protection (1 to 10 digits) prevents unauthorized data access.

### EMERGENCY MODE

One of the security features of these mobile radios is the emergency mode — useful, say, if a taxi driver is held up. This engages automatic transmission, alerting other stations and enabling them to monitor the situation as it develops.

### EMBEDDED MESSAGE & KENWOOD ESN

The radio's EEPROM can store an embedded message containing ID number, user and department names, etc. Additionally, a unique electronic serial number (ESN) helps to protect against theft: it cannot be removed or altered. A unit can thus be identified even if the external labels, marking or factory serial numbers have been removed.

### TIME OUT TIMER

TOT terminates transmission after a set time, returning the unit to receive mode. There is also an alarm to alert the user to imminent TOT activation.



## Options



■ **KMC-30**  
Microphone



■ **KMC-32**  
16-keypad Microphone

Not all accessories may be available. Please contact your dealer for details.

## Specifications

	TK-7102	TK-8102
<b>GENERAL</b>		
Frequency range		
Type 1	146–174 MHz	450–490 MHz
Type 2	136–162 MHz	485–520 MHz
Type 3		400–430 MHz
Channels	4 CH	4 CH
Channel spacing (Wide/Narrow)	25 kHz / 12.5 kHz	25 kHz / 12.5 kHz
PLL channel stepping	2.5 kHz, 5 kHz, 6.25 kHz, 7.5 kHz	5 kHz, 6.25 kHz
Operating voltage	13.6 V DC ±15%	13.6 V DC ±15%
Current drain		
Standby	0.4A	0.4A
Receive	1.0A	1.0A
Transmit	8.0A	8.0A
Operating temperature range	-30° ~ +60°C	-30° ~ +60°C
Frequency stability (-30° ~ +60°C)	±2.5 ppm	±2.5 ppm
Dimensions (WxHxD)	160 x 43 x 107 mm	160 x 43 x 107 mm
Weight (body only)	Approx. 1.0 kg	Approx. 1.0 kg
Antenna impedance	50	50
Channel frequency spread		
Type 1	28 MHz	40 MHz
Type 2	26 MHz	35 MHz
Type 3	-	30 MHz
<b>RECEIVER (TIA/EIA-603)</b>		
Sensitivity (Wide/Narrow)		
(12 dB SINAD)	0.28 µV / 0.35 µV	0.28 µV / 0.35 µV
Selectivity (Wide/Narrow)	75 dB / 65 dB	75 dB / 65 dB
Intermodulation distortion (Wide/Narrow)	70 dB / 60 dB	70 dB / 60 dB
Spurious response	75 dB	75 dB
Audio output (4 % distortion)	4.0 W	4.0 W
<b>TRANSMITTER (TIA/EIA-603)</b>		
RF power output	25 W	25 W
Spurious & harmonics (High)	70 dB	70 dB
Modulation (Wide/Narrow)	16K0F3E / 11K0F3E	16K0F3E / 11K0F3E
FM noise (Wide/Narrow)	45 dB / 40 dB	45 dB / 40 dB
Audio distortion (Wide/Narrow)	Less than 3%	Less than 3%
Microphone impedance	600	600

Kenwood reserves the right to change specifications and features without prior notice.

## Applicable MIL-STD

Standard	MIL 810C Methods/Procedures	MIL 810D Methods/Procedures	MIL 810E Methods/Procedures
Dust	510.1/Procedure I	510.2/Procedure I	510.3/Procedure I
Vibration	514.2/Procedure VII, X	514.3/Procedure I	514.4/Procedure I
Shock	516.2/Procedure I, II, V	516.3/Procedure I, IV	516.4/Procedure I, IV