

# KENWOOD

## TK-780/880

VHF/UHF FM Mobile Radios

**5-tone**

Highly versatile, Kenwood's TK-780/880 mobile operates on multiple systems types: conventional, selcall, and wide/narrow with built-in DMS alphanumeric two-way paging system. The software driven modes, features sets and other technologies are built into a tough, compact package that meets dust resistance environmental specifications.



The microphone shown is available as an option.

### LARGE CHANNEL CAPACITY (MAX. 250)

Synthesized channel frequency generation provides a maximum of 250 channels. Furthermore, frequencies and various configuration settings can be programmed independently in each channel.

### WIDE/NARROW CHANNEL

The TK-780/880 can be programmed for 25 kHz, 20 kHz or 12.5 kHz spacing operation per channel.

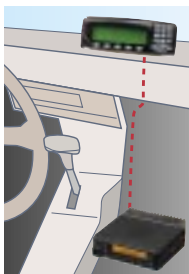
### LARGE DOT MATRIX LCD DISPLAY

The large, 12 + 3 digit dot matrix LCD display provides clear legibility under all lighting conditions from bright sunshine to total darkness (with back light on). The LCD also offers multi-language capability.



### ALPHANUMERIC TWO-WAY PAGING

This function provides a built-in capability to send and receive both pre-stored status messages and custom alphanumeric text messages. The received pages are stored in memory so they can be reviewed.



### DMS: DIGITAL MESSAGE SYSTEM

DMS (Digital Message System) prepares various functions such as PTT ID, CAD (computer-aided dispatch), selective call, status messages, short messages, long messages and emergency.

### 5-TONE SIGNALING

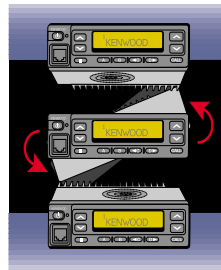
Built-in 5tone encoder/decoder provides no fewer than 12 formats including the Kenwood format. It is also possible to set not only 5-tone but also 6-tone, 7-tone, 2-by-5 tone, 3-by-5 tone signaling.

### DIGITAL ANI/EMERGENCY ANI

Digital ANI modules can be added for PTT Unit ID and Emergency ANI operations on computer-aided dispatch and/or voice-recorder logged communications systems. A separate Emergency ANI flags dispatchers of units in distress and is triggered by a discrete "panic" switch connected to the accessory port foot switch input.

### COMPACT VERSATILE MOUNTING

The lightweight and compact size of the TK-780/880 facilitates easy mounting even in the tight or awkward positions found in today's automobiles. The front panel can be inverted for correct viewing while leaving the built-in speaker facing away from the mounting surface.



### COMPANDED AUDIO

The compander noise-reduction feature enhances audio clarity on narrow bandwidth systems and is programmable per channel.

### FLASH MEMORY ADVANTAGE

Flash memory permits updates, advanced feature sets and system architectural changes to be made electronically without ever opening the unit. This means fast changes for the system operator and less down-time for users.

### PUBLIC ADDRESS & HORN ALERT

Public Address (PA) and Horn Alert (HA) capabilities are available with the optional KAP-1 unit. The PA function outputs mic audio through the radios external speaker or can feed a more powerful external public address amplifier. The Horn Alert output can be used to trigger a vehicle horn/light when a valid DTMF, 2-tone, 5-tone selective call or DMS emergency status call is received.

### ENCRYPTION CONTROL

Encryption control provides secure voice communications for law enforcement or private security. An internal port permits addition of optional modules to provide voice scrambling high-level encryption types.

### OTHER FEATURES

- MILT-STD 810 C/D/E
- BUILT-IN QT/DQT
- DTMF SIGNALING
- MULTIPLE SCANNING
- TALK AROUND
- MINIMUM VOLUME
- PROGRAMMABLE FUNCTION KEYS
- EMBEDDED MESSAGE
- REMOTE STUN, REVIVE AND KILL
- PC PROGRAMMING AND TUNING
- PASSWORD-PROTECTED PROGRAMMING /CLONING
- RADIO LOCK
- PASSWORD
- ANNUNCIATION TONE CONTROL
- PROGRAMMABLE ALERT TONE
- QT/DQT OPERATOR SELECTABLE TONE
- HIGH QUALITY AUDIO OUTPUT (4W)

# Options



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

# Specifications

	TK-780	TK-880
<b>GENERAL</b>		
Frequency Range Type 1: Type 3:	146 - 174 MHz(RX), 146 - 174 MHz(TX)	440 - 470 MHz(RX), 440 - 470 MHz(TX) 406 - 450 MHz(RX), 406 - 432 MHz(TX)
Number of Channels	Max. 250	Max. 250
Channel Spacing Type 1: Type 3:	25 kHz / 20 kHz / 12.5 kHz	25 kHz / 20 kHz / 12.5 kHz 25 kHz / 12.5 kHz
PLL channel stepping	5,6,25 KHz	5,6,25 KHz
Antenna Impedance	50 Ω	50 Ω
Operating Voltage	13.2 V DC ±15%	13.2 V DC ±15%
Current Drain Standby Receive Transmit	0.4 A 1.0 A 8.0 A	0.4 A 1.0 A 8.0 A
Operating Temperature Range	-30° C ~ +60° C	-30° C ~ +60° C
Frequency Stability (-30° C ~ +60° C)	±2.5 ppm	±2.5 ppm
Frequency spread Type 1: Type 3:	28 MHz	30 MHz 44 MHz(RX), 26 MHz(TX)
Dimensions (W x H x D)	140 x 40 x 145 mm	140 x 40 x 145 mm
Weight (net)	940 g	940 g
Applicable standards	ETS300 086, ETS300 113, ETS300 219, ETS300 279 EU directive 95 / 54 / EC	ETS300 086, ETS300 113 ETS300 219, ETS300 279 EU directive 95 / 54 / EC

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<b>RECEIVER</b>		
Sensitivity (EIA 12 dB SINAD)	0.25 μV/0.25 μV/0.32 μV	0.28 μV/0.28 μV/0.35 μV
Sensitivity (ETS 20 dB SINAD)	-4 dBμV/-4dBμV/-2 dBμV	-3 dBμV/-3dBμV/-2 dBμV
Adjacent Channel Selectivity 25 kHz / 20 kHz / 12.5 kHz	80 dB / 80 dB / 70 dB	70 dB / 70 dB / 60 dB
Intermodulation	70 dB	70 dB
Spurious & Image Rejection	80 dB	80 dB
Audio Output	4 W at 4 Ω, with less than 10% distortion	4 W at 4 Ω, with less than 10% distortion
Measurement	ETS standard	ETS standard
<b>TRANSMITTER</b>		
RF power output	5 - 25 W	5 - 25 W
Modulation Limiting	±5.0 kHz at 25 kHz ±4.0 kHz at 20 kHz ±2.5 kHz at 12.5 kHz	±5.0 kHz at 25 kHz ±4.0 kHz at 20 kHz ±2.5 kHz at 12.5 kHz
Spurious Emission	-36 dBm ≤ 1 GHz -30 dBm > 1 GHz	-36 dBm ≤ 1 GHz -30 dBm > 1 GHz
FM Noise (EIA) 25 kHz / 20 kHz / 12.5 kHz	50 dB / 50 dB / 45 dB	50 dB / 50 dB / 45 dB
Modulation Distortion	Less than 3% at 1 kHz	Less than 3% at 1 kHz
Microphone Impedance	600 Ω	600 Ω
Measurement	ETS standard	ETS standard

Kenwood follows a policy of continuous advancement in development.  
For this reason specifications may be changed without notice.

# Applicable MIL-STD

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

# KENWOOD CORPORATION

14-6, 1-chome, Dogenzaka, Shibuya-ku, Tokyo 150-8501, Japan

## KENWOOD ELECTRONICS UK LIMITED

Kenwood House, Dwight Road, Watford, Herts, WD1 8EB, United Kingdom

## KENWOOD ELECTRONICS DEUTSCHLAND GMBH

Rembrücker Str. 15, 63150 Heusenstamm, Germany

## KENWOOD ELECTRONICS ITALIA S.p.A.

Via G. Sirtori 7/9, 20129 Milano, Italy

## KENWOOD ELECTRONICS BELGIUM N.V.

Leuvensesteenweg 248 J, 1800 Vilvoorde Belgium

## KENWOOD ELECTRONICS FRANCE S.A.

13 Boulevard Ney, 75018 Paris, France

## KENWOOD IBÉRICA, S.A.

Bolivia, 239-08020 Barcelona, Spain

# CE0168D



**JQA-1205 ISO 9001**  
Communications Equipment Division  
Kenwood Corporation  
ISO9001 certification