Versatility

Trunked and Conventional Modes

The Kenwood TK-780/880 Conventional Mode offers traditional two-way conventional repeater and simplex operations with priority channel scanning. The Trunked Mode allows operation on both Conventional and LTR trunking systems in one unit.
LTR is a registered trademark of E. F. Johnson Co.

Large Channel Capacity

In Trunked Mode, the 600-channel capacity can handle all your trunked system requirements now and in the furture should the network expand. Each programmed system can be either set for either conventional or trunked operation. The unit dynamically allocates the 32 system and 250-group memory capacity as system parameters are programmed in Conventional Mode, the 250-channel capcity provides more than enough room for company-wide, departmental, divisional requirement plus room for auxiliary or special-use channels

FleetSync Alphanumeric Two-Way Paging

Kenwood takes voice communications and adds a new dimension with FleetSync Alphanumeric Two-Way Messaging which provides the built-in capability to send and receive both pre-stored status messages and custom alphanumeric text messages. Much like an alphanumeric pager, the received pages are stored in memory so they can be reviewed.

Data-Ready Connection Port

The TK-780/880 mobiles have a data connection port for versatile use with external mobile data terminals, PC-modems (requires KCT-19 option), or AVL units.

Programmable Function Keys (PF Keys)

Each key is programmable for virtually any radio feature allowing the unit to be customized to fit user needs. Simple feature sets meet basic needs and reduce training time. Sophisticated feature sets are available for special applications and supervisory personnel.

Flash Memory Advantage

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

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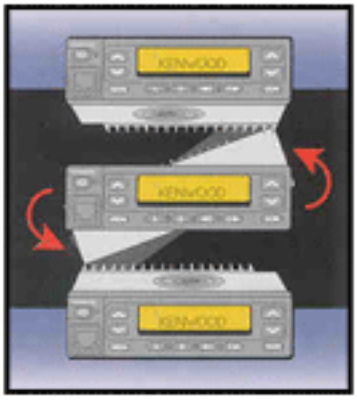
Performance

High-Quality Audio Output

The TK-780/880 is equiped with an extra-large 2.25-inch speaker element and delivers four watts of audio power for robust calrity in noisy crowds and industrial environments.



Compact Versatile Mounting

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

Companded Audio

The compandor noise-reduction feature increases the audio clarity of narrow bandwidth systems and is programmable per channel. Voice intelligence components are amplified and compressed at the transmit end then re-expanded on the receive end to reproduce the original audio signal.

Wide/Narrow Channel Bandwidth

The TK-780/880 can be programmed for wide or narrow bandwidth operation per channel to accommodate all channel allocations now and in the future.

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Strength & Durability

MIL-STD 810C/D/E Environmental Tests

In addition to Kenwood's own technical and industrial standards, the TK-780/880 also meets or exceeds a full range of tough U.S. Department of Defense MIL-STD 810 C, D & E environmental standards in several categories.

Die-Cast Chassis

The lightweight aluminum die-cast chassis contributes to the TK-780/880 unit's exceptional strength while providing natural transmit heat dissipation. Inter-locking metal covers and seals lockout moister and dust.

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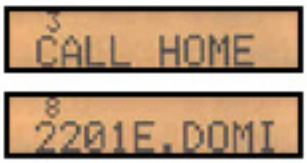
Intuitive User Interface



Dot Matrix LCD Display

The high-resolution dot matrix liquid crystal display furnishes the user with a simple and easy-to-read interface and is recessed for protection. The main display line has ten alphanumeric characters for system/group/channel name aliases, and two characters for operational/status indications. A three-character subline can be programmed for channel or group number. The seven icons provide easy-to-remember feature and status indications in all modes of operation.

Multiple Scanning Functions

System scan and group scan permit monitoring multiple systems and talk groups for calls. Priority scanning is available within programmed conventional systems. Talk Back scan permits users to respond immediately to calls regardless of the pre-programmed or selected scan revert channels. Scan lists can be altered with the Add/Delete features.

DTMF Signaling & Dialing Features

DTMF PTT ID provides a built-in ANI for business and industrial applications (operates with KMC-27A/B or optional KMC-28A keypad microphone). The optional KMC-28A keypad microphone adds manual DTMF for service calling, system access, remote control applications and access to automatic dialing features such as the auto-dial memory for telephone interconnect and/or integrated Radio-PABX systems.

Public Address & Horn Alert

Public Address (PA) and Horn Alert (HA) capability is available with the optional KAP-1 unit. The PA function outputs mic audio through the radio's 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 valid DTMF or Two-tone selective call is received.

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Security

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 from low-level-inversion to high-level encryption types. The radio's programming also provides both automatic and manual control for clear and coded modes.

Digital ANI/Emergency ANI/Emergency Calling

Digital ANI option modules can be added for PTT Unit ID and Energency ANI operations on computer aided dispatch and/or voice-recorder logged communications systems. Unit ID instantly identifies transmitting units and can be programmed to on per channel basis with the option of begging or end-of-transmission. A separate Emergency ANI flags dispatchers of untis in distress and can be triggered by a programmable front panel key and by a discrete "panic" switch connected to the accessory port foot switch input. The Emergency Call feature automatically switches the radio to a pre-designated channel during emergency ANI sequences for dispatcher alert.

Password-Protected Programming and Cloning

Cloning enables duplicating of radios in the field via a simple interface cable without the use of a PC or special test jigs. For users who do not require cloning cpapbility, a secure password can be programmed to prevent cloning of a lost or stolen portable. Additionally, all radios can have the programming password(s) protected to prevent unauthorized program information extraction and duplication.

Radio Lock Password

Preventing unauthorized use of stolen radios, this feature requires an access code to be entered everytime the radio is powered up. This password - with a maximum of six digits - can be easily field progammed or jkodified by an authorized user (requires optional KNC-28A keypad microphone).

Embedded Message

The radio's flash memory can store an electronic message conatining owner identification, property I.D. numbers, user and department names, service records, etc. A radio can be electronically identified even if external labels, markings or factory serial numbers have been removed.

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Other Features

- BUILT-IN QT, DQT
- DTMF AND 2-TONE (CONVENTIONAL MODE ONLY)
- BUSY CHANNEL LOCKOUT
- TIME OUT TIMER
- MINIMUM VOLUME

Specifications

	TK-780	TK-880
GENERAL		
Frequency range **Type 1** **Type 2** **Type3**	 146 ~ 174 MHz 136 ~ 162 MHz	 450 ~ 490 MHz 485 ~ 512 MHz 400 ~ 430 MHz
Systems (Trunked Mode)	Max. 32	
Groups (Trunked Mode)	Max. 600 / Max. 250	
Channel spacing **Wide** **Narrow**	 25, 30 kHz 12.5, 15 kHz	 25 kHz 12.5 kHz
PLL step	1.25, 2.5, 5, 6.25, 7.5 kHz	5, 6.25 kHz
Operating Voltage	13.6 V DC ± 15%	
Current drain **Standby** **Receive** **Transmit**	 Less than 0.4 A Less than 1.0 A Less than 8.0 A	
Duty Cycle	Transmit: 20%	
Operating temperature range	-22°F ~ +140°F (-30°C ~ +60°C)	
Frequency Stability	±0.00025% (-22° F ~ +140° F)	
Antenna Impedance	50 Ω	
Channel Frequency Spread **Type 1** **Type 2** **Type 3**	 28 MHz 26 MHz	 40 MHz 27 MHz 30 MHz

Dimensions (W x H x D)	5-1/2 x 5-3/4 x 1-1/2 in. (140 x 145 x 40 mm)	
Weight (net)	2.07 lbs. (940 g)	
FCC ID **Type 1** **Type 2** **Type 3**	ALH24583110 ALH24583120	ALH24593110 ALH24593120 ALH24593130
FCC compliance **Type1** **Type 2** **Type 3**	FCC parts 22, 74, 80, 90, 90.210 FCC parts 22, 74, 80, 90	FCC parts 22, 74, 90, 95 FCC parts 22, 74, 90, 90.210 FCC part 90, 90.210
IC Certification **Type1** **Type 2** **Type 3**	282195512A 282195531A	282195511A 282195521A

	TK-780	**TK-880**
RECEIVER (Measurements made per EIA/TIA-204D)		
Sensitivity **(12dB SINAD)**	0.25 µV	
Selectivity* **Wide** **Narrow**	80 dB 70 dB	80 dB 67 dB
Intermodulation distortion* **Wide** **Narrow**	75 dB 65 dB	75 dB 65 dB
Spurious response*	90 dB	85 dB
Audio output	4 W with less than 5% distortion	
TRANSMITTER (Measurements made per EIA/TIA-152C)		
RF power output	25 W	
Spurious response	70 dB	
Modulation **Wide** **Narrow**	16KØF3E 11KØF3E	
FM noise **Wide** **Narrow**	50 dB 45 dB	

Audio distortion **Wide** **Narrow**	 Less than 3% Less than 5%
Microphone impedance	600 Ω

*Typical specifications

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

These devices have not been approved by the Federal Communications Commision
These devices are not, and may not be, offered for sale or lease until
the approval of the FCC has been obtained.

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 VIII, 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

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