KENWOOD

Compact Synthesized FM Mobile Radios

TK-762G/862G

The microphone shown is available as an option.

- ■ MAX. 8-CHANNEL CAPACITY

- ■ PC PROGRAMMABLE AND CLONING CAPABILITY

- ■ COMPACT, LIGHTWEIGHT AND RUGGED (MIL-STD 810 C/D/E)

- ■ INSTALLATION-READY DESIGN

- ■ 1-CHARACTER/7-SEGMENT LCD

- ■ BUILT-IN QT, DQT AND TWO-TONE SIGNALING

- ■ DTMF ENCODE AND DECODE

- ■ FLASH MEMORY ADVANTAGE

- ■ COMPANDED AUDIO

- ■ PTT ID PER CHANNEL

Move Your Operations into High

Built-in quality + a full range of advanced features = streamlined efficiency. This is the formula for success that the TK-762G/862G mobile has to offer. Compact yet extremely rugged, the TK-762G/862G is fully equipped with 8-channel capacity and an optional public address function (PA/HA) for more operating convenience. For the best in mobile communications, get the TK-762G/862G mobile — its performance will move you.

The microphone shown is available as an option.

STRENGTH & DURABILITY

Kenwood's facilities are proud to be internationally recognized as ISO-9001 certified and this means that our radio products follow a strict adherence to high standards in design, manufacturing and quality assurance. Whatever the requirement, the excellent performance and reliability of our communications equipment — exemplified by the TK-762G/862G mobile radios — make Kenwood the premier choice.

MIL-STD 810 C/D/E
The TK-762G and TK-862G are manufactured along Kenwood's demanding technical and industrial standards. These units meet or exceed the tough environmental MIL-STD 810 C/D/E standards used by the U.S. Department of Defense, covering shock, vibration, and dust for excellent long-term durability in the roughest of vehicle environments. With their heavy-duty construction, the TK-762G/862G will provide long-lasting field life.

EASY USER INTERFACE

A premium radio product must be easy to setup, use and maintain. The TK-762G/862G is a perfect example of this philosophy as it combines user-friendly ergonomics in a lightweight and well-balanced package.

NUMERIC LCD DISPLAY
Radio operating status and settings are displayed in the 1-digit, 7-segment LCD panel. The LCD lamp feature enhances nighttime viewing.

BUILT-IN QT AND DQT SIGNALING
Encoder/decoder function segregates talk groups so users only hear calls from their own group.

BUSY CHANNEL LOCKOUT
Lockout further improves channel management by preventing transmission if another talk group is already on the air.

DTMF TRANSPOND
Upon a valid DTMF paging decode, DTMF Transpond can transmit an acknowledgement code (auto dial memory No. 1) as a receipt of page. Transpond can be enabled to transmit a long beep tone as recognition that a page has been received.

SIGNALING AND/OR LOGIC
Depending on the application, DTMF or 2-tone paging decode can be set to one of two squelch types. "OR" is set for receiving all voice traffic with audio muted only by the programmed QT/DQT tone/codes (radio will alert when a valid decode of a page is received). "AND" is set for muting the radio until both the programmed QT/DQT and a valid DTMF page is decoded.

BUILT-IN 2-TONE ENCODER
The TK-762G/862G mobile units are equipped with 2-tone encoding/decoding capability. When encoding or decoding transceiver communications, a specificcode is available for each function.

HIGH-VISIBILITY FRONT PANEL KEYS
The back lighting and laser-etched embossed front panel keys provide excellent nighttime visibility and peripheral vision operation.

Gear!

PERFORMANCE

A premium radio design like the TK-762G/862G mobile radios use state-of-the art surface mount technology, multiple layer epoxy PC boards, high-level integrated circuits and hybrid components to create a symphony of compact, rugged and power-efficient performance.

### RUGGED, EASY-TO-USE MICROPHONE
The microphone unit incorporates an easy to use telephone style plug and heavy-duty cable to protect against failure.

COMPANDED AUDIO
The compandor noise-reduction feature enhances audio clarity on 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.

COMPACT VERSATILE MOUNTING
Lightweight and compact in size, these units facilitate easy mounting even in the tight or awkward positions of today's vehicles. The front panel can be inverted for correct viewing while leaving the built-in speaker positioned facing away from the mounting surface. An optional external mounted speaker is also available.
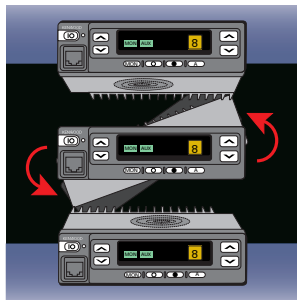
VERSATILITY

A premium radio like the TK-762G/862G must be flexible enough to answer diverse applications and offer the room to expand as system or user needs grow.

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.

WIDEBAND DESIGN
Coverage is provided across the most common VHF & UHF bands (see specifications). VHF: 146 ~ 174 MHz; UHF: 440 ~ 470 MHz.

MAXIMUM 8-CHANNEL CAPACITY
On-board memory stores frequency and configuration settings that can be programmed using a personal computer.

DTMF ANI FUNCTION
A DTMF code can be encoded by two methods: "PTT ID" or "DIAL ID" operation. "PTT ID" — the traditional DTMF ANI unit ID — is programmable per channel and sends ANI automatically on every PTT (begin of transmit leading edge code and EOT trailing edge code are both independently programmable). Additionally, each channel can have its own unique DTMF ANI number to suit a variety of custom applications. Dial ID permits sending the DTMF ANI codes (BOT or EOT codes) manually via the front keypad for remote control or system-access applications.

BUILT-IN DTMF DECODER
The TK-762G/862G DTMF decode feature adds another dimension to paging with either one of two operational modes. Code Squelch mode provides a 3- to 10-digit ID for basic DTMF paging operations. The Selective Call mode adds selective calling plus status capability by utilizing a 3-digit ID plus 1-digit intermediate (group) code plus a 5-digit status code. The ID and status codes are displayed in the radio's LCD. DTMF decode can be used to call individual mobiles or groups of mobiles within a fleet and also provides an alert output to trigger a vehicle horn, headlights, or strobe bar to allow a dispatcher a way to hail drivers away from the vehicle.

PC PROGRAMMING AND TUNING
Radio parameter programming and tuning can be accomplished via the microphone connector from a PC-compatible computer without ever having to open the radio to save both time and expense (programming software and cable options required). Function settings and frequencies can be rapidly and accurately programmed thanks to easy-to-use drop-down menus and help screens.

UNIT CLONING
Cloning enables duplication of radios in the field via a simple interface cable without the use of a PC or special equipment.

PUBLIC ADDRESS CAPABILITY
Available with the plug-in KAP-1 PA switching option, this furnishes a simple PA audio output for internal vehicular use (school buses, airport shuttles, tour buses, etc.) or external horn speakers.

SECURITY

In today's world, flexible mobile communications is as important as any other trade tool. Compromised communications can put life, property and business at risk.

SECURITY DEAD BEAT DISABLE (DBD)
DTMF Dead Beat Disable permits over-the-air immobilization of both transmit and transmit/receive audio to prevent the unauthorized use of lost, stolen or compromised mobile units. Both DBD types can be independently programmed with a separate code and does not require the use of the other DTMF paging features.
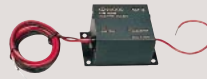
EMBEDDED MESSAGE
The radio's flash memory can store an electronic message containing owner identification, property I.D. numbers, user and department names, service records, etc. Making a unit electronically identifiable even if external labels, markings or factory serial numbers have been removed.

OTHER FEATURES:
▌ TIME-OUT TIMER ▌ HORN ALERT ▌ IGNITION SENSE FUNCTION (option) ▌ OFF-HOOK DECODE

Options

KAP-1
PA/HA Switching Unit

KCT-18
Ignition Sense Cable

KCT-19
Accessories
Connection Cable

KES-3
External Compact Speaker
(fits 3.5 mm ext. speaker jack)

KES-4
External Premium Speaker
(requires KCT-19 option)

KLF-2
Line Noise Filter
(in-line install with DC
power cable)

KMB-8
Mounting Bracket

KMB-10
Key Lock Adapter
(for mobile mounting
bracket)

KMC-27A
Microphone
(MIL-SPEC, Noise canceling)

KMC-27B
Microphone

KMC-28A
Keypad Microphone
(12 keys, MIL-SPEC,
Noise canceling)

KMC-30
Microphone

KMC-32
Keypad Microphone
(16 keys)

Specifications

	TK-762G	TK-862G
GENERAL		
Frequency range	146 ~ 174 MHz	440 ~ 470 MHz
Number of channels	8	8
Channel spacing Wide / Semi-Wide / Narrow	25 kHz / 20 kHz / 12.5 kHz	25 kHz / 20 kHz / 12.5 kHz
Modulation Wide Semi-Wide Narrow	±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
Operating voltage	13.2 V DC	13.2 V DC
PLL channel stepping	2.5, 5, 6.25, 7.5 kHz	5, 6.25 kHz
Antenna impedance	50 Ω	50 Ω
Current Drain Standby Receive Transmit	0.4 A 1.0 A 8.0 A	0.4 A 1.0 A 8.0 A
Duty cycle	RX: 100% TX: 20%	RX: 100% TX: 20%
Operating temperature range	-30° C ~ +60° C	-30° C ~ +60° C
Frequency stability	±2.5 ppm (-30° C ~ +60° C)	±2.5 ppm (-30° C ~ +60° C)
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	ETS300-086,219,279	ETS300-086,219,279

	TK-762G	TK-862G
RECEIVER (Measurements made per ETS standard)		
Sensitivity (EIA) 12 dB SINAD Wide / Semi-Wide / Narrow	0.25 μV /0.25 μV / 0.32 μV	0.25 μV /0.25 μV / 0.32 μV
Adjacent channel selectivity Wide / Semi-Wide / Narrow	70 dB / 70 dB / 60 dB	70 dB / 70 dB / 60 dB
Intermodulation	65 dB	65 dB
Spurious response rejection	70 dB	70 dB
Audio output	4 W at 4 Ω with less than 5% distortion	4 W at 4 Ω with less than 5% distortion
Channel frequency spread	28 MHz	30 MHz
TRANSMITTER (Measurements made per ETS standard)		
RF power output	25 W adjustable to 5 W	25 W adjustable to 5 W
Spurious response	70 dB	70 dB
FM noise (EIA) Wide / Semi-Wide / Narrow	50 dB / 48 dB / 45 dB	50 dB / 48 dB / 45 dB
Microphone impedance	600 Ω	600 Ω
Modulation distortion	3% at 1 kHz	3% at 1 kHz
Channel frequency spread	28 MHz	30 MHz

*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
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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