KENWOOD

TK-863G
Trunked & Conventional Compact Mobile Radio

■ UHF LTR®

■ 32 SYSTEMS

■ TRUNKED FORMAT (LTR TRUNKED & CONVENTIONAL SYSTEMS)

■ LIGHTED LCD DISPLAY

■ 8-CHARACTER ALPHANUMERIC ALIAS

■ COMPACT DESIGN

■ MULTIPLE SCAN FUNCTIONS

■ DIE-CAST CHASSIS

■ MIL-STD 810C/D/E

■ DATA READY CONNECTION PORT

■ FLASH MEMORY

■ PC PROGRAMMING AND TUNING

LTR is a registered trademark of E.F. Johnson Co., USA.

Kenwood's TK-863G — Move Your Operations into High Gear!

The challenging commercial applications of today demand a high-quality radio that delivers reliable performance along with user-friendly operation. And the TK-863G stands ready to answer the call as Kenwood has packed a host of features into this rugged, compact unit like UHF trunking. A large lighted LCD display and the capacity to program up to 32 systems in either trunked or conventional modes are just some the advantages designed to handle your communications needs and make your work day productive.

HEAVY-DUTY MICROPHONE

The supplied heavy-duty microphone has the weight and feel that experienced mobile users prefer. Its durable coil cord cable and modular connectors provide long-term reliability. An optional KMC-28A DTMF microphone is available for radiotelephone and DTMF selective call/control applications.

CALL INDICATOR AND HORN ALERT

The Call Indicator provides a visual alert that a call was received. The Horn Alert provides a trigger signal for activating a vehicle horn or light circuit that notifies a user of a call while away from the vehicle (additional devices required).

32 SYSTEMS

The TK-863G uses Kenwood's Trunked Format that permits up to 32 systems, each of which can be programmed for either LTR® Trunked Mode or Conventional Mode of operation.

MINIMUM VOLUME LEVEL

The preset minimum volume level is automatic upon power up to help reduce missed call events due to a low volume setting of a previous user.

TALK AROUND

Talk Around bypasses a radio repeater system and permits direct radio-to-radio simplex communications. Ideal for close-proximity job-site use or when out of system range conditions exist (operates in both Trunked and Conventional modes).
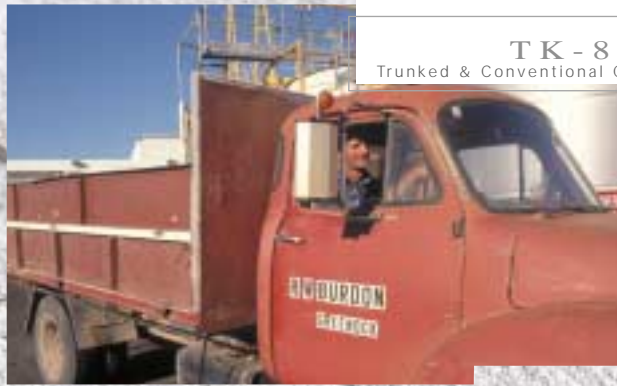
LIGHTED LCD / 8-CHARACTER ALPHANUMERIC ALIAS DISPLAY

The LCD display is clearly visible under any lighting condition from bright sunshine to total darkness. The high resolution 13-segment / 8-character alphanumeric display provides full operational and status information for multi-system/multi-group applications.

MULTIPLE SCAN FUNCTIONS

Systems Scan sequentially monitors multiple systems for calls. Group Scan monitors for LTR GID calls on the Trunked Systems and for QT/DQT/carrier calls with priority scanning capability within Conventional Systems. Talk back scan eliminates user confusion and errors by automatically switching the radio to the calling channel. Other scanning features that help to make scan operations easy to use and organize include off-hook scan, off-hook revert and system add/delete.
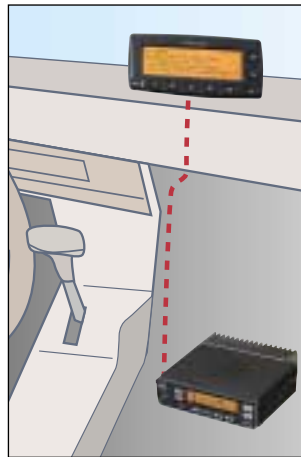
PC Programming and Tuning

Computer programming and alignment through the front panel microphone jack facilitates fast setup and adjustments even in the field.

Data-ready Connection Port

The TK-863G can be integrated as the RF link for mobile data devices such as data/status terminals, PC-modems or AVL units (requires optional KCT-19 cable).

Programmable Auxiliary Switch

The auxiliary switch can be programmed for functions including Horn Alert, Del/Add, Home System/Group, Option Signaling Reset and Manual Relay.

Programmable Time-out Timer

This convenient feature can be set to limit transmit time in 15-second steps, between a range of 15 seconds and 10 minutes. Airtime usage can be restricted separately for both dispatch and radiotelephone users.
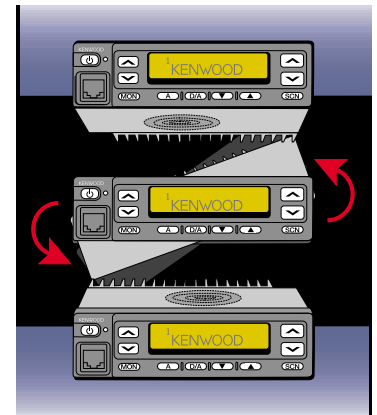
25 Watts RF Power Output

The TK-863G delivers a full urbanized 25 watts and operates in all UHF bands.

Rugged Construction

Elements such as the die-cast chassis, heat-sink, and rigid glass epoxy circuit boards, are key factors for meeting the MIL-STD 810 C/D/E environmental specifications for shock, vibration and dust resistance and providing years of reliable service.

Adaptable Front Panel

The front panel can be inverted by installers to position the internal speaker and orient the display for any type of vehicle.

Trunked System Features

The TK-863G includes all the "industry-traditional" trunked radio features permitting system technicians to integrate these units into existing fleets. These features include fixed priority/block decode ID codes, free system ring back for telephone interconnect operation, transmit inhibit, and transpond function.

QT / DQT Signaling

QT/DQT tone/code signaling permits users to be segregated into their own "talk groups" for repeater access and to reduce listening to other groups unnecessarily (conventional mode).

■ Options

KAP-1
PA/HA Switching Unit

KCT-18
Ignition Sense Cable

KCT-19
Accessories
Connection Cable

KCT-35
Extension Cable
for KGP-2A/2B

KCT-36
Extension Cable

KDS-100
FleetSync™ Data Terminal

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

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

KGP-2A
Modem GPS Receiver
(requires KCT-35 option)

KGP-2B
Modem GPS Controller
(requires KCT-35 option)

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

KMB-2B
Mounting Case
(for KPS-10A
power supply mounting)

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

KMB-20
Mounting Case for KPS-14

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

KMC-27B
Microphone
(same as supplied)

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

KMC-9C
Control Station
Desktop Microphone

KPS-10A
DC Power Supply

KPS-14
DC Power Supply

*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-863G	
GENERAL	
Frequency range	450 ~ 490 MHz
Number of systems	Max. 32
Number of groups	Max. 250
Number of channels (Conventional mode)	Max. 600
Channel spacing Wide/Narrow	25kHz/12.5kHz
Channel step	5kHz, 6.25kHz
Channel spread	40 MHz

Current drain
    Standby
    Receive
    Transmit
	Less than 0.4A
	Less than 1.0A
	Less than 8.0A

RF input impedance	50 Ω
Operating voltage	13.6 V DC±20%
Operating temperature range	-22°F~ +140°F (-30°C ~ +60°C)
Frequency stability	±2.5 ppm (-22°F ~ +140°F)
Dimensions (W x H x D)	5.51 x 1.57 x 5.70 in (140 x 40 x 145 mm)
Weight (net)	2.07 lb (940 g)
FCC ID	ALH29383110
FCC compliance	FCC parts 22, 74, 90, 95

TK-863G	
RECEIVER (Measurements made per EIA/TIA-603)	
Sensitivity (12 dB SINAD) Wide/Narrow	0.28 μV/0.35 μV
Selectivity Wide/Narrow	80 dB/65 dB
Intermodulation distortion Wide/Narrow	75 dB/63 dB
Spurious response	85 dB
Audio output	4 W at less than 5% distortion
TRANSMITTER (Measurements made per EIA/TIA-603)	
RF power output	25 W
Spurious	65 dB
FM noise Wide/Narrow	50 dB/45 dB
Modulation Wide/Narrow	16K0F3E/11K0F3E
Audio distortion	Less than 3%

*Kenwood follows a policy of continuous advancement in development.
For this reason specifications may be changed without notice.
FleetSync™ is a trademark of Kenwood Corporation.*

■ 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 cat. 8	514.4/Procedure I cat. 8
Shock	516.2/Procedure I, II, V	516.3/Procedure I, IV	516.4/Procedure I, IV

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