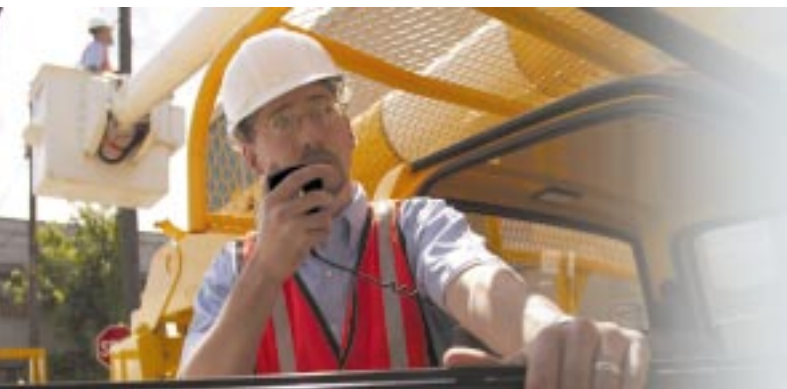


# KENWOOD

Listen to the Future



## TK-7162/8162

VHF/UHF FM Mobile Radios

**5-tone**

**FleetSync®**  
by KENWOOD

Kenwood's TK-7162/8162 mobiles provide the performance, power and quality for reliable communications in a wide range of mobile applications and environments. User-friendly features include a 16-channel capacity, FleetSync® and easy-to-see 7-segment/2-character backlit LCD.

### NEW CONCEPT DESIGN

Kenwood employed premium industrial design concepts to make the TK-7162/8162 functionally practical, rugged and an attractive piece of equipment to carry.

### MEETS/EXCEEDS MIL-STD DRIP RAIN

The TK-7162/8162 is built to survive the hard knocks and harsh weather environments of many type mobile installations. These mobiles meet or exceed the MIL-STD 810 C, D, E, & F environmental standards including the "drip rain" test.\*

\* MIL-STD compatibility requires the KMC-35 or KMC-36 microphone.

### ENHANCED KENWOOD AUDIO & FRONT MOUNTED SPEAKERS

Equipped with front mounted speakers and renowned Kenwood audio technology, the TK-7162/8162 provides loud clear audio even in noisy environments.

### 16 CHANNELS

The TK-7162/8162 has a 16-channel capacity for single or multiple site radio systems.

### 2-CHARACTER LCD DISPLAY

The backlit LCD with 2-character, 7-segment aliases with and icons provides an easy-to-read channel, function and FleetSync® messaging display day or night.

### LONE WORKER

This ingenious feature provides an extra layer of security and safety for individuals who work remotely as well as for those who work in hazardous areas. As long as the buttons are pressed regularly, the radio operates normally; however, if there is a long lapse (programmable), it will sound an alert. In the absence of further response from the user, the TK-7162/8162 will place an emergency call to a predetermined person or group of people.

### QT/DQT, DTMF & 5-TONE SIGNALING

In addition to FleetSync®, the TK-7162/8162 includes industry standard signaling formats, QT/DQT and 5-Tone, which has been significantly enhanced for greater flexibility.

### FleetSync®

Kenwood's FleetSync® digital signaling system includes PTT ID digital ANI for instant radio call identification and Emergency status for personnel safety.

### SCAN

Multi-channel call monitoring can be customized with delete/add scan. Priority Scan automatically checks a primary channel for activity while receiving a call on a non-priority channel. Convenience features such as Priority-channel Stop Tone, Temporary Delete and Revert Channel Display facilitate user-friendly operation and eliminate confusion.

### OTHER FEATURES

- Voice Inversion Scrambler
- Programmable Function Keys
- Wide 5K/Wide 4K\*/Narrow per Channel (\*Wide 4K available only for E-type models)
- Embedded Messages
- Ignition Sense Input & Cable Option
- Horn Alert Option (External relay unit required)
- Microsoft Windows® PC Programming & Tuning
- Encryption & ANI Control Capability
- Operator Selectable Tone



## Options

|                                      |                                                                     |                                     |                                                                      |
|--------------------------------------|---------------------------------------------------------------------|-------------------------------------|----------------------------------------------------------------------|
| ■ <b>KMC-35</b><br>Microphone        | ■ <b>KMC-9C</b><br>Control Station<br>Desktop Microphone            | ■ <b>KES-3</b><br>External Speaker  | ■ <b>KDS-100</b><br>Mobile Data Terminal<br>(requires KCT-39 option) |
| ■ <b>KMC-36</b><br>Keypad Microphone | ■ <b>KCT-18</b><br>Ignition Sense Cable<br>(requires KCT-39 option) | ■ <b>KMB-10</b><br>Key Lock Adapter | ■ <b>KGP-2A</b><br>GPS Receiver Modem<br>(requires KCT-39 option)    |
| ■ <b>KMC-30</b><br>Microphone        | ■ <b>KCT-36</b><br>3m Extension Cable<br>(for KCT-39)               | ■ <b>KLF-2</b><br>Line Noise Filter | ■ <b>KGP-2B</b><br>GPS Controller Modem<br>(requires KCT-39 option)  |
| ■ <b>KMC-32</b><br>Keypad Microphone | ■ <b>KCT-39</b><br>Connection Cable<br>(16-pin)                     |                                     |                                                                      |

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-7162                                                          | TK-8162                                                          |
|-----------------------------------------------------|------------------------------------------------------------------|------------------------------------------------------------------|
| <b>GENERAL</b>                                      |                                                                  |                                                                  |
| Frequency Range                                     | 136~174 MHz                                                      | 440~470 MHz                                                      |
| E type                                              | —                                                                | 400~430 MHz                                                      |
| E3 type                                             | —                                                                | —                                                                |
| Number of Channels                                  | Max.16 channels                                                  | Max.16 channels                                                  |
| Channel Spacing                                     | 25 kHz / 20 kHz / 12.5 kHz                                       | 25 kHz / 20 kHz / 12.5 kHz                                       |
| Operating Voltage                                   | 13.6 V DC±15 %                                                   | 13.6 V DC±15 %                                                   |
| Current Drain                                       |                                                                  |                                                                  |
| Standby                                             | 0.4 A                                                            | 0.4 A                                                            |
| Receive                                             | 1.0 A                                                            | 1.0 A                                                            |
| Transmit                                            | 8.0 A                                                            | 8.0 A                                                            |
| 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)                                       |
| Antenna Impedance                                   | 50 Ω                                                             | 50 Ω                                                             |
| Channel Frequency Spread                            |                                                                  |                                                                  |
| E type                                              | 38 MHz                                                           | 30 MHz                                                           |
| E3 type                                             | —                                                                | 30 MHz                                                           |
| Dimensions (W x H x D),<br>Projections not included | 160 mm x 43 mm x 107 mm                                          | 160 mm x 43 mm x 107 mm                                          |
| Weight (net)                                        | 1.00 kg                                                          | 1.00 kg                                                          |
| Applicable Standards (E, E3)                        | EN 300 086, EN 300 113,<br>EN 300 219, EN 301 489                | EN 300 086, EN 300 113,<br>EN 300 219, EN 301 489                |
| <b>RECEIVER</b>                                     |                                                                  |                                                                  |
| Sensitivity (EIA 12dB SINAD)                        | 0.28 μV / 0.28 μV / 0.35 μV                                      | 0.28 μV / 0.28 μV / 0.35 μV                                      |
| Sensitivity (EN 20dB SINAD)                         | -3dB μV / -3dB μV / -2dB μV                                      | -3dB μV / -3dB μV / -2dB μV                                      |
| 25kHz/20kHz*/12.5kHz                                |                                                                  |                                                                  |
| Adjacent Channel Selectivity                        | 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 with less than 5 % distortion                                | 4 W with less than 5 % distortion                                |
| (4 Ω impedance)                                     |                                                                  |                                                                  |
| Measurement                                         | EN Standard                                                      | EN Standard                                                      |
| <b>TRANSMITTER</b>                                  |                                                                  |                                                                  |
| RF Output Power                                     | 5 – 25 W                                                         | 5 – 25 W                                                         |
| Modulation Limiting                                 | ±5.0 kHz at 25 kHz<br>±4.0 kHz at 20 kHz<br>±2.5 kHz at 12.5 kHz | ±5.0 kHz at 25 kHz<br>±4.0 kHz at 20 kHz<br>±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)                                      | 45 dB / 40 dB                                                    | 45 dB / 40 dB                                                    |
| Modulation Distortion                               | 3 % / 5 %                                                        | 3 % / 5 %                                                        |
| Microphone Impedance                                | 600 Ω                                                            | 600 Ω                                                            |
| Measurement                                         | EN Standard                                                      | EN Standard                                                      |

\* 20kHz: E type only

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

FleetSync® is a registered trademark of Kenwood Corporation.

Windows® is a registered trademark of Microsoft Corporation in the United States and other countries.

All other trademarks are property of their respective owners.

## Applicable MIL-STD

| Standard          | MIL 810C<br>Methods/Procedures | MIL 810D<br>Methods/Procedures | MIL 810E<br>Methods/Procedures | MIL 810F<br>Methods/Procedures |
|-------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Low Pressure      | 500.1/Procedure I              | 500.2/Procedure I, II          | 500.3/Procedure I, II          | 500.4/Procedure I, II          |
| High Temperature  | 501.1/Procedure I, II          | 501.2/Procedure I, II          | 501.3/Procedure I, II          | 501.4/Procedure I, II          |
| Low Temperature   | 502.1/Procedure I              | 502.2/Procedure I, II          | 502.3/Procedure I, II          | 502.4/Procedure I, II          |
| Temperature Shock | 503.1/Procedure I              | 503.2/Procedure I              | 503.3/Procedure I              | 503.4/Procedure I, II          |
| Solar Radiation   | 505.1/Procedure I              | 505.2/Procedure I              | 505.3/Procedure I              | 505.4/Procedure I              |
| Rain*             | 506.1/Procedure II             | 506.2/Procedure II             | 506.3/Procedure II             | 506.4/Procedure III            |
| Humidity          | 507.1/Procedure I, II          | 507.2/Procedure II, III        | 507.3/Procedure II, III        | 507.4                          |
| Salt Fog          | 509.1/Procedure I              | 509.2/Procedure I              | 509.3/Procedure I              | 509.4                          |
| Dust              | 510.1/Procedure I              | 510.2/Procedure I              | 510.3/Procedure I              | 510.4/Procedure I, III         |
| Vibration         | 514.2/Procedure VIII, X        | 514.3/Procedure I              | 514.4/Procedure I              | 514.5/Procedure I              |
| Shock             | 516.2/Procedure I, II, III, V  | 516.3/Procedure I, IV, V       | 516.4/Procedure I, IV, V       | 516.5/Procedure I, IV, V       |

\* Required condition for Drip-Rain: KCT cable and/or SP cable are not connected; KMC-35/36 Microphone is connected.

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