TK-7180(H)/8180(H)

VHF/UHF FM Mobile Radios

KENWOOD

GENERAL FEATURES
- 30/50 W (136-174 MHz)
- 30/45 W (450-520, 400-470 MHz)
- Conventional & LTR® Zones
- MPT1327 Trunking Option
- Remote Control Head Option
- 12 Character Alphanumeric Aliases
- Backlit Dot Matrix LCD
- 3-Digit Sub-Display
- Function / Status LCD Icons
- RSSI Indicator
- Date & 12/24 Hour Time Clock
- Transmit / Busy / Call Alert / Warn LED
- 6 Backlit PF Keys
- Emergency / AUX Key
- Enhanced Kenwood Audio
- Front Panel Speaker
- Companded Audio
- Voice Inversion Scrambler Built-in
- Easy Option Port
- Encryption / ANI Board Control
- VGS-1 Voice Guide / Storage Option
- Emergency Call Features
- DTMF Encode / Decode
- Special Alert Tone Patterns
- Call Key
- Time Out Timer
- Busy Channel Lockout
- Timed Power Off
- DB-25 Accessory Connector
- 9 Programmable AUX I/Os
- 2 Programmable AUX Outputs
- Ignition Sense
- Public Address / Horn Alert Option
- MIL-Spec Standard Mic
- MIL-Spec 12-Key DTMF Mic Option
- Windows® Programming & Tuning
- Windows® Firmware Uploading
- Front Panel Test / Tune
- Cloning
- MIL-STD-810 C/D/E/F
- MIL-STD "Driven-Rain"
- IP-54/55 Water & Dust Intrusion

CONVENTIONAL ZONES
- 512 Channels / 128 Zones
- QT / DQT
- Two-Tone Decode
- Single / Two-Tone Encode
- Operator Selectable Tone
- Dual Priority Scan
- Single & Multi-Zone Scan
- List Scan

TRUNKED ZONES
- 512 GID / 128 Zones
- Kenwood LTR® Features

FleetSync®
- FleetSync® or FleetSync® II
- PTT ID Digital ANI
- Selective Call & Group Call
- Status Messaging
- Emergency Status
- Caller ID Display
- Short & Long Text Messages
- Power On/Off Status Messages
- Input / Output Status Messages
- FleetSync® GPS Ready
- Send GPS PF Key
- PTT ID & Emergency GPS Reporting
- Status Message Block GPS Reporting
- Ignition On/Off GPS Reporting
- VGS-1 GPS Data Storage
- PC Serial Interface

MDC-1200
- PTT ID Digital ANI
- Caller ID Display
- Emergency Status
- Radio Check
- Radio Inhibit
Specifications

General

Model | TK-7180 | TK-7180H | TK-8180 | TK-8180H
--- | --- | --- | --- | ---
Frequency Range
Type 1 | 136-174 MHz | 450-520 MHz | 450-512 MHz | 400-470 MHz
Type 2 | - | - | - | -
Number of Channels* Zone
CVGD | Max. 128 per Radio | Max. 250 per Zones | (Max.512 [Conv.Chs]+GDS) total per Radio | -
Channel Spacing Wide | 25 kHz, 30 kHz | 12.5 kHz, 15 kHz | 25 kHz | 12.5 kHz
Narrow | - | - | - | -
Operating Voltage | 13.6 V DC ±15 % | - | - | -
Current Draw
Standby | 0.4 A | 0.4 A | 0.4 A | 0.4 A
Receive | 1.0 A | 1.0 A | 1.0 A | 1.0 A
Transmit | 9.0 A | 13.0 A | 9.0 A | 13.0 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 | 38 MHz | 70 MHz | - | -
Type 2 | - | - | - | -
Dimensions (W x H x D), not included | 6-5/16” x 1-3/4” x 6-3/16” | - | - | -
Weight (net) | 3.3 lbs. (1.5 kg) | - | - | -
FCC ID
Type 1 | K4A73740110 | K4A737313110 | K4A737313120 | K4A737313130
Type 2 | - | - | - | -
IC Certification
Type 1 | 282F-37303110 | - | - | -
Type 2 | - | - | - | -

*Maximum capability depends on the number of programmed zone and repeater channels.

Model | TK-7180 | TK-7180H | TK-8180 | TK-8180H
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RECEIVER (Measurements made per EIA/TIA-603)
Sensitivity (12dB SINAD)
Wide | - | - | - | -
Narrow | 0.25 µV | 0.28 µV | - | -
Selectivity**
Wide | 80 dB | 80 dB | - | -
Narrow | 70 dB | 67 dB | - | -
Intermodulation Distortion
Wide/Narrow | 75 dB (450-100 kHz) | - | - | -
Sporadic Response** | 90 dB | 85 dB | - | -
Audio Output (4 Ω Impedance) | 4 W with less than 5 % distortion | - | - | -
TRANSMITTER (Measurements made per EIA/TIA-603)
RF Output Power
Type 1 | 30 to 1 W | 50 to 10 W | 30 to 1 W | 45 to 10 W
Type 2 | - | - | - | -
Sporadic Response | - | - | - | -
Type of Emission
Wide | 16K0F3E | 11K0F3E | - | -
Narrow | - | - | - | -
FM Hum & Noise
Wide | 50 dB | 45 dB | - | -
Narrow | - | - | - | -
Microphone Impedance | 600 Ω | - | - | -
Audio Distortion
Wide/Narrow | - | - | - | -

*Typical specifications
**Specifications are subject to change without notice, due to advancements in technology.

Applicable MIL-STD & IP

Standard | MIL-810C Methods/Procedures | MIL-810D Methods/Procedures | MIL-810E Methods/Procedures | MIL-810F Methods/Procedures
--- | --- | --- | --- | ---
Low Pressure | S00.1/Fixed Procedure I | S00.2/Fixed Procedure I, II | S00.3/Fixed Procedure I, II | S00.4/Fixed Procedure I, II
High Temperature | S01.1/Fixed Procedure I, II | S01.2/Fixed Procedure I, II | S01.3/Fixed Procedure I, II | S01.4/Fixed Procedure I, II
Low Temperature | S02.1/Fixed Procedure I, II | S02.2/Fixed Procedure I, II | S02.3/Fixed Procedure I, II | S02.4/Fixed Procedure I, II
Solar Radiation | S03.1/Fixed Procedure I, II | S03.2/Fixed Procedure I, II | S03.3/Fixed Procedure I, II | S03.4/Fixed Procedure I, II
Rain | S06.1/Fixed Procedure I, II | S06.2/Fixed Procedure I, II | S06.3/Fixed Procedure I, II | S06.4/Fixed Procedure I, II
Humidity | S07.1/Fixed Procedure I, II | S07.2/Fixed Procedure I, II | S07.3/Fixed Procedure I, II | S07.4
Salt Fog | S09.1/Fixed Procedure I, II | S09.2/Fixed Procedure I, II | S09.3/Fixed Procedure I, II | S09.4

International Protection Standard

Dust & Water Protection
PS4: Radio itself
PS4SS: Remote Head with KKK-10

*To meet above MIL 810D and IP grade, weather proof microphone KMC-35 or KMC-36 has to be connected.

Specifications

Options

- KMC-35 Microphone (supplied microphone)
- KMC-36 Keypad Microphone
- KMC-9C Control Station Desktop Microphone
- KRK-10 Control Head Remote Kit (23bt/73m)
- KCT-46 Ignition Sense Cable
- KCT-40 Radio Interface Cable (for KDS-100, KGP-2A/2B)
- KCT-23M DC Cable (Dash mount / 10 feet)
- KCT-23M3 DC Cable (Remote mount / 23 feet)
- KAP-2 Horn Alert/Public Address Relay Unit
- VG5-1 Voice Guide & Storage Unit
- KES-3 External Speaker
- KES-5 External Speaker (requires KAP-2)
- KMB-10 Key Lock Adapter
- KLF-2 Line Noise Filter
- KPS-10A DC Power Supply
- KPS-15 DC Power Supply
- KDS-100 Mobile Data Terminal
- KGP-2A/2B GPS Receiver / Modem Unit (requires KCT-39 option)
- ADS-2A Intercom
- GPS-2A Intercom

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.

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