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
- 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

<table>
<thead>
<tr>
<th>Model</th>
<th>TK-7180</th>
<th>TK-7180H</th>
<th>TK-8180</th>
<th>TK-8180H</th>
</tr>
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<tbody>
<tr>
<td><strong>GENERAL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency Range</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type 1</td>
<td>136–174 MHz</td>
<td>450–520 MHz</td>
<td>450–512 MHz</td>
<td>400–470 MHz</td>
</tr>
<tr>
<td>Number of Channels*</td>
<td>Zone CIVGD: Max. 128 per Radio</td>
<td>Max. 250 per Zones</td>
<td>Max. 512 (Conc. CH + GID)</td>
<td>total per Radio</td>
</tr>
<tr>
<td>Channel Spacing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wide</td>
<td>25 kHz, 30 kHz</td>
<td>12.5 kHz, 15 kHz</td>
<td>25 kHz</td>
<td>12.5 kHz</td>
</tr>
<tr>
<td>Operating Voltage</td>
<td>13.6 V DC ±15 %</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current Drain</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standby</td>
<td>0.4 A</td>
<td>0.4 A</td>
<td>0.4 A</td>
<td>0.4 A</td>
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<tr>
<td>Receive</td>
<td>1.0 A</td>
<td>1.0 A</td>
<td>1.0 A</td>
<td>1.0 A</td>
</tr>
<tr>
<td>Transmit</td>
<td>9.0 A</td>
<td>13.0 A</td>
<td>9.0 A</td>
<td>13.0 A</td>
</tr>
<tr>
<td>Duty Cycle</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transmit:</td>
<td>20 %</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating Temperature Range</td>
<td>-22 °F + 140 °F</td>
<td>-30 °C + 60 °C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency Stability</td>
<td>±0.00025 %</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Antenna Impedance</td>
<td>50 Ω</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Channel Frequency Spread</td>
<td>38 Mhz</td>
<td>70 Mhz</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type 2</td>
<td>–</td>
<td>–</td>
<td>70 MHz</td>
<td></td>
</tr>
<tr>
<td>Dimensions (W x H x D), Projections not included</td>
<td>6-5/16” x 1-3/4” x 6-3/16”</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight (net)</td>
<td>3.3 lbs. (1.5 kg)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>FCC ID</td>
<td>K4437303110</td>
<td>K4437303210</td>
<td>K4437313110</td>
<td>K4437333210</td>
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<tr>
<td>IC Certification Type 1</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
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<tr>
<td>Type 2</td>
<td>282F-37303110</td>
<td>–</td>
<td>–</td>
<td>282F-37333120</td>
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</table>

**Typical specifications**

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

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**Applicable MIL-STD & IP**

<table>
<thead>
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<th>Standard</th>
<th>MIL 810C Methods/Procedures</th>
<th>MIL 810D Methods/Procedures</th>
<th>MIL 810E Methods/Procedures</th>
<th>MIL 810F Methods/Procedures</th>
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</thead>
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<td>500.1/Procedure I, II</td>
<td>500.2/Procedure I, II</td>
<td>500.3/Procedure I, II</td>
<td>500.4/Procedure I, II</td>
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<tr>
<td>High Temperature</td>
<td>501.1/Procedure I, II</td>
<td>501.2/Procedure I, II</td>
<td>501.3/Procedure I, II</td>
<td>501.4/Procedure I, II</td>
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<tr>
<td>Low Temperature</td>
<td>502.1/Procedure I, II</td>
<td>502.2/Procedure I, II</td>
<td>502.3/Procedure I, II</td>
<td>502.4/Procedure I, II</td>
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<tr>
<td>Solar Radiation</td>
<td>503.1/Procedure I, II</td>
<td>503.2/Procedure I, II</td>
<td>503.3/Procedure I, II</td>
<td>503.4/Procedure I, II</td>
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<tr>
<td>Rain</td>
<td>506.1/Procedure I, II</td>
<td>506.2/Procedure I, II</td>
<td>506.3/Procedure I, II</td>
<td>506.4/Procedure I, II</td>
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<tr>
<td>Humidity</td>
<td>507.1/Procedure I, II</td>
<td>507.2/Procedure I, II</td>
<td>507.3/Procedure I, II</td>
<td>507.4</td>
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<tr>
<td>Salt Fog</td>
<td>509.1/Procedure I, II</td>
<td>509.2/Procedure I, II</td>
<td>509.3/Procedure I, II</td>
<td>509.4</td>
</tr>
<tr>
<td>Dust</td>
<td>510.1/Procedure I, II</td>
<td>510.2/Procedure I, II</td>
<td>510.3/Procedure I, II</td>
<td>510.4/Procedure I, II</td>
</tr>
<tr>
<td>Vibration</td>
<td>514.2/Procedure V, VIII</td>
<td>514.3/Procedure V, VIII</td>
<td>514.4/Procedure V, VIII</td>
<td>514.5/Procedure V, VIII</td>
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<tr>
<td>Shock</td>
<td>516.2/Procedure I, II, V</td>
<td>516.3/Procedure I, II, V</td>
<td>516.4/Procedure I, II, V</td>
<td>516.5/Procedure I, II, V</td>
</tr>
</tbody>
</table>

**International Protection Standard**

- **Dust & Water Protection**: PS4: Radio itself
- **PS4SS**: Radio Head with KRK-10

**Notes**: 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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**Options**

- **KMC-35**: Microphone (supplied microphone)
- **KMC-36**: Keypad Microphone
- **KMC-9C**: Control Station Desktop Microphone
- **KRK-10**: Control Head Remote Kit (23bt7m)
- **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
- **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)

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**Specifications**

*IP & MIL-STD Options* - *Maximum capability depends on the number of programmed Zone and repeater channels.*

**Dust & Water Protection**

- Shock
- Vibration
- Salt Fog
- Humidity
- Rain
- Solar Radiation
- Temperature Shock
- High Temperature
- Low Temperature
- Low Pressure
- Solar Radiation
- Rain
- Humidity
- Salt Fog
- Dust
- Vibration
- Shock

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Canadian Headquarters and Distribution
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ISO9001 Registered

Contact an authorized Kenwood dealer for details and complete list of all accessories and options.

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**Footnotes**

- **KRC-10** remote control kit required.
- **DTMF** includes PTT ID, Emergency AMI, Manual Encode (KMC-36), Auto-Dial (9 numbers) & 800.
- **Special Alert Tone Pattern** operates for 2-Tone, DTMF, FleetSync® selectivity call decode.
- **Call Key**: 6 keys max., operates for 2-Tone, DTMF and FleetSync® status encode.
- **DB-25 ACC supports 15 Remote Zones/CHG selections, KGP-2A/B(ACT) required.**
- **KAP-2** required. Horn alert operates for FleetSync®, 2-Tone or DTMF selectivity call decode.
- **KPG-80D required. Windows® XP/ Me/ 2000 compatible; English/Spanish screen languages.**
- **ML-STD “Driven-Rain” and IP-55 Water/Dust Intrusion apply to remote control head only; IP54 applies to radio chassis.**
- **Conventional Zones**: 512 Channels / 128 Zones max. per radio; 250 CH max. per Zone Trunked Zones: 512 GID / 128 Zones max. per radio; 750 GID max. per Zone.
- **Two-Tone Decode (4 sets x 4 pairs each): Single / Two-Tone mode (32 tone), Operator Selectable Tone on/off (DTGCT code pair).**
- **FleetSync® Features include: GPS, Datacoms, DTMF, FleetSync status encode.**
- **MDT, Interconnect.**
- **FleetSync® Gps features require an internal GPS board or externally wired GPS receiver with NMEA 0183 level serial data output to the internal COM 1 or 2 to “GPS.”**
- **Either MDC-1200 or FleetSync® can be activated per radio.**