

# KENWOOD

Listen to the Future



## TK-480/481

800/900 MHz FM Portable Radios

**FleetSync**<sup>®</sup>  
by KENWOOD

### GENERAL FEATURES

- 2.5 W 800 MHz Models
- 2.5 W 900 MHz Models
- Trunked Format <sup>1</sup>
- LTR<sup>®</sup> Trunked Systems
- Conventional Systems
- 32 Systems / 250 Groups
- System Scan
- List Type System Scan
- 10 Character Alphanumeric Aliases
- Lighted Dot Matrix LCD
- 3-Digit Sub-Display
- Function / Status LCD Icons
- Transmit / Busy / Call Alert / Warn LED
- 4 Front Panel PF keys
- 2 Side PF Keys
- Orange Emergency / AUX Key
- 12-Key DTMF/PF Keypad <sup>2</sup>
- 500 mW Speaker Audio
- Companded Audio
- Encryption / ANI Board Control
- Emergency Call Features
- Emergency Man-Down Option
- DTMF Encode / Decode <sup>3</sup>
- Time Out Timer
- Low Battery Alert
- Weather-sealed ACC Connector

- MIL-Spec Speaker Mic Option
- Windows<sup>®</sup> Programming & Tuning <sup>4</sup>
- Windows<sup>®</sup> Firmware Uploading <sup>4</sup>
- Front Panel Test
- Cloning
- MIL-STD-810 C/D/E/F
- MIL-STD "Driven-Rain"
- Intrinsically Safe Option
- NPSPAC Option

### CONVENTIONAL SYSTEMS

- QT / DQT
- Single Priority Group Scan
- Busy Channel Lockout

### TRUNKED SYSTEMS

- Kenwood LTR<sup>®</sup> Features <sup>5</sup>

### FleetSync<sup>®</sup> <sup>6</sup>

- PTT ID Digital ANI
- Selective Call & Group Call
- Status Messaging
- Emergency Status
- Caller ID Display
- Short Text Messages (Option) <sup>7</sup>
- PC Serial Interface (Option)



*Keypad model also available.  
(Not actual size proportion)*

# Options

- **KNB-16A**  
Ni-Cd Battery Pack  
(1100 mAh)
- **KNB-17A**  
Ni-Cd Battery Pack  
(1500 mAh)
- **KNB-17B**  
Ni-Cd I.S. Battery Pack  
(1500 mAh)
- **KNB-21N**  
Ni-MH Battery Pack  
(1600 mAh)
- **KNB-22N**  
Ni-MH Battery Pack  
(2100 mAh)
- **KNB-22NC**  
Ni-MH I.S. Battery Pack  
(2100 mAh)



- **KBP-4**  
AA Refillable Battery Pack  
(Holds 12 AA-Size Cells)
- **KSC-19**  
Regular Rate  
Ni-Cd Charger
- **KSC-24**  
Rapid Rate Dual-Chemistry  
Ni-Cd/Ni-MH Charger
- **KMB-16**  
Multi-Charger Adapter
- **KVC-5A**  
Heavy-Duty D.C. Vehicular  
Drop-In Charger



- **KVC-3**  
Regular Rate Vehicular  
Charger Adapter for (KSC-19)
- **KVC-4**  
Rapid Rate Vehicular  
Charger Adapter for (KSC-24)
- **KMC-25**  
MIL-SPEC Speaker Mic
- **KEP-1**  
Heavy Duty Earphone
- **KHS-11**  
2-Wire Palm Mic  
with Earphone



- **KHS-12**  
3-Wire Palm Mic  
with Earphone
- **KHS-14**  
Lightweight Single  
Muff Headset
- **KHS-15-BH**  
Heavy Duty  
Behind-the-Head Headset
- **KHS-15-OH**  
Heavy Duty  
Over-the-Head Headset
- **KBH-10**  
Low Profile Belt Clip



# Specifications

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.

Model	TK-480	TK-481
<b>GENERAL</b>		
Frequency Range	RX: 851 ~ 870 MHz TX: 806 ~ 825 MHz, 851 ~ 870 MHz (Talk Around)	RX: 935 ~ 941 MHz TX: 896 ~ 902 MHz, 935 ~ 941 MHz (Talk Around)
System		Max. 32
Group		Max. 250 per system
Channel Capacity (Conventional)		Max. 600
PLL Channel Spacing (PLL step: 12.5 kHz)	25 kHz	12.5 kHz
Battery Voltage		7.5 V DC ± 20 %
Battery Life (5-5-90 Duty Cycle)		
KNB-16A Battery		8 hours
KNB-17A Battery		10 hours
KNB-21N Battery		10.5 hours
KNB-22N Battery		13 hours
Operating Temperature Range		-22° F ~ +140° F (-30° C ~ +60° C)
Frequency Stability (-22° F ~ +140° F)	±0.00025%	±0.00015%
Dimensions (W x H x D) [projections not included]		2-5/16 x 5-5/16 x 1-5/16 in. (58 x 135 x 34 mm) with KNB-21N battery
Weight (net)		17.3 oz. (490 g) with KNB-21N battery, antenna and belt hook
FCC ID	ALH22961110	ALH22992110
IC Certification	282195282	282195286

Model	TK-480	TK-481
<b>RECEIVER (Measurements made per TIA/EIA-603)</b>		
RF Input Impedance		50 Ω
Sensitivity (12 dB SINAD)		0.30 μV
Selectivity	70 dB: ±25 kHz	63 dB: ±12.5 kHz
Intermodulation Distortion	65 dB: ±25/50 kHz	60 dB: ±12.5/25 kHz
Spurious Response		70 dB (except 1/2 IF)
Audio Output		500 mW at 16Ω, with less than 5% distortion
Channel frequency spread	19 MHz	6 MHz
<b>TRANSMITTER (Measurements made per TIA/EIA-603)</b>		
RF Power Output		HI: 2.5 W, LO: 1 W
RF Output Impedance		50 Ω
Spurious & Harmonics		60 dB
Modulation	16KØF3E	11KØF3E
FM Noise	45 dB	40 dB
Audio Distortion		Less than 5%
Channel Frequency Spread	64 MHz	45 MHz

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.  
LTR® is a registered trademark of Transcript International.

# Applicable MIL-STD & IP

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

footnotes from Front:

<sup>1</sup> Trunked Format: 32 Systems max. (prog. for LTR® or Conventional), 250 Groups per system max (limited per repeater channels programmed).

<sup>2</sup> Keypad models only.

<sup>3</sup> DTMF Encode includes PTT ID, Emergency ANI, Manual Encode (keypad models), Auto-Dial (32 numbers); DTMF Decode includes Stun (dead beat disable), primary/secondary selective call with call alert and transpond.

<sup>4</sup> KPG-49D required: Windows®98/ NT/ 2000/ Me/XP compatible.

<sup>5</sup> Kenwood LTR® Features: KPG-49D Group Delete/Add, LTR® Talk Around, Scan Revert Group Display, System Scan, Group Scan, Auto Search.

<sup>6</sup> FleetSync® (not FleetSync® II capable).

<sup>7</sup> Short Text Messages are radio stored & LCD displayed.

# KENWOOD

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