

# KENWOOD



## TK-5710G/5810G

VHF/UHF FM & Project 25 Digital Mobile Radio



FleetSync®

### GENERAL FEATURES

- 50W & 110W (136-174 MHz)
- 45W & 100 W (450-520, 400-470 MHz)
- 100 Zones / 1024 Channels
- Personality Lists
- Enhanced Kenwood Audio
- Zone/CH Voice Announce
- Emergency Features
- Tactical Group
- Intercom<sup>1</sup>
- Public Address
- Time Out Timer
- Busy Channel Lockout
- Ignition Sense<sup>2</sup>
- Timed Power Off
- DB-25 & 9-Pin Accessory Connectors<sup>3</sup>
- Transceiver Password
- Date & 12/24 Hour Time Clock
- Windows® Programming & Tuning<sup>4</sup>
- Windows® Firmware Uploading<sup>4</sup>
- Field-Programming & Tuning
- Cloning
- Easy Option Ports (26-pin)<sup>5</sup>
- Voice Guide & Storage (Option)
- DB-25 & 9-Pin Accessory Connectors
- MIL-STD 810 C/D/E/F, IP-54
- MIL-STD Noise-Cancel Mic
- MIL-STD 12-Key DTMF Mic Option

### MOUNTING CONFIGURATIONS

- Dash Mount
- Single Control Head Remote Mount
- Handheld Control Remote Mount
- Dual Control Head Remote Mount

### FRONT PANELS/CONTROL HEADS

- Backlit Dot Matrix LCD
- 3-Digit Sub-Display
- Function / Status LCD Icons
- Transmit LED
- Busy/Call Alert/Warn LED
- LCD Brightness Control
- Power On/Off Switch
- Rotary Volume Knob
- Rotary Selector Knob
- Backlit Keys
- PF Key Label Inserts
- Microphone Jack
- MIL-STD 810 512.X Driven Rain

#### KCH-14 Front Panel

- 12-Character Alphanumeric Aliases
- 5 PF Keys
- UP/DOWN Keys
- Built-in Front Speaker

#### KCH-15 Front Panel

- 14-Character Alphanumeric Aliases
- 11 PF Keys
- UP/DOWN Keys
- External Speaker Required

#### KCH-16 Handheld Control Head

- 14-Character Alphanumeric Aliases
- 5 PF Keys & UP/DOWN/LEFT/RIGHT Keys
- Front PF Keys Name Display
- 12-Key DTMF/Function Keypad
- External Speaker Required

### SCAN TYPES (FM & P25)

- Single Zone/Multi-Zone Scan<sup>12</sup>
- Scan Lists
- Conventional Scan
- Limited Talk Group Scan<sup>6</sup>
- Priority Monitor Scan<sup>6</sup>
- Dual Priority Scan

### FM

- QT / DQT
- Operator Selectable Tone
- Two-Tone Decode / Encode<sup>7</sup>
- DTMF Encode / Decode / Stun<sup>8</sup>
- Special Alert Tone Patterns<sup>9</sup>
- Horn Alert Output
- Encryption / ANI Board Control
- Companded Audio
- FleetSync®/II PTT ID / Caller ID Display / Emergency<sup>10</sup>
- MDC-1200 PTT ID / Caller ID Display / Emergency<sup>10</sup>

### P25 DIGITAL

- P25 Digital Conventional
- P25 Digital Trunking Option
- AMBE+2™ Enhanced VOCODER
- Talk Group ID Lists
- Individual ID Lists
- Caller ID Display
- RSSI Indicator
- Remote Monitor / Remote Check
- Radio Inhibit
- Encryption Key Delete
- Encryption Key Zeroize (SCM required)
- Encryption Key Retention (SCM required)
- DES 16-Key SCM Option
- AES FIPS 140-2 & DES 16-Key SCM Option
- KPG-94 KVL Key Loader Interface Cable<sup>11</sup>
- P25 GPS Location
- P25 OTAR Option



# Options

- KMC-9B**  
Desktop Microphone 
- KMC-27**  
Microphone (MIL-SPEC noise-canceling) 
- KMC-28**  
Keypad Microphone (MIL-SPEC noise-canceling) 
- KCT-18**  
Ignition Sense Cable 
- KES-5**  
External Speaker (20W) 
- KCH-14**  
Basic Remote Control Head 
- KCH-15**  
Full-Featured Remote Control Head 
- KCH-16**  
Handheld Control Head 
- KRK-5**  
Single Control Head Remote Kit 
- KRK-6DH**  
Dual Control Head Remote Kit 
- KRK-11**  
Handheld Control Head Interface Kit 
- KPG-94**  
Keyloader Interface Cable 
- VGS-1**  
Voice Guide & Storage Unit 

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

Model	TK-5710G	TK-5710HG	TK-5810G	TK-5810HG
<b>GENERAL</b>				
Frequency Range	136-174 MHz		450-520 MHz	
Type 1			400-470 MHz	
Type 2				
Number of Channels			1024	
Zones			100	
Max. Channels per Zone			512	
Channel Spacing	12.5 / 15 / 20 / 25 / 30 kHz		12.5 / 25 kHz	
Analog				
Digital			12.5 kHz	
Operating Voltage	13.6V DC ± 15%	13.4V DC ± 15%	13.6V DC ± 15%	13.4V DC ± 15%
Current Drain			Less than 0.6A	
Standby			Less than 2.3A	
Receive				
Transmit	Less than 12A	Less than 25A	Less than 14A	Less than 28A
Duty Cycle			Transmit: 20%	
Operating Temperature Range	-22 °F to +140 °F (-30 °C to +60 °C)			
Frequency Stability	± 2.0 ppm (-22 °F to +140 °F)			
Antenna Impedance	50 Ω			
Dimensions (W x H x D)				
RF Deck only	7.01 x 2.36 x 7.68 in. (178 x 60 x 195 mm)	7.01 x 2.36 x 12.87 in. (178 x 60 x 327 mm)	7.01 x 2.36 x 7.68 in. (178 x 60 x 195 mm)	7.01 x 2.36 x 12.87 in. (178 x 60 x 327 mm)
with KCH-14 or15	7.05 x 2.36 x 9.09 in. (179 x 60 x 231 mm)	7.05 x 2.36 x 14.29 in. (179 x 60 x 363 mm)	7.05 x 2.36 x 9.09 in. (179 x 60 x 231 mm)	7.05 x 2.36 x 14.29 in. (179 x 60 x 363 mm)
Weight				
RF Deck only	5.3 lbs. (2.4 kg)	8.6 lbs. (3.9 kg)	5.5 lbs. (2.5 kg)	9.2 lbs. (4.2 kg)
with KCH-14	5.9 lbs. (2.7 kg)	9.2 lbs. (4.2 kg)	6.2 lbs. (2.8 kg)	9.9 lbs. (4.5 kg)
with KCH-15	5.9 lbs. (2.7 kg)	9.2 lbs. (4.2 kg)	6.2 lbs. (2.8 kg)	9.9 lbs. (4.5 kg)
FCC ID				
Type 1	K4435753110	K4435753210	K4439923110	K4439923210
Type 2			K4439923120	K4439923220
IC Certification				
Type 1	282F-35753110			
Type 2			282F-39923120	
<b>RECEIVER</b>				
Sensitivity			0.25 µV	
Digital (5% BER)			0.40 µV	
Digital (1% BER)			0.25 µV	
Analog 12 dB SINAD				
Selectivity				
Digital			-63 dB	
Analog @ 25/30 kHz	-83 dB / -85 dB			
Analog @12.5/15 kHz	-76 dB / -80 dB			
Intermodulation Distortion (Digital & Analog)			-80 dB	
Spurious Response (Digital & Analog)			-90 dB	
Audio Distortion			Less than 1.0%	
Digital			Less than 2.0%	
Analog				
Audio Output				
Internal (KCH-14)	@3%		1.5 W at 8 Ω	
	@5%		1.625 W at 8 Ω	
External	@3%		12 W at 4 Ω	
	@5%		13 W at 4 Ω	
<b>TRANSMITTER</b>				
RF Output Power	50 W to 5 W	110 W to 50 W	45 W to 5 W	100 W to 50 W <sup>12</sup>
Spurious & Harmonics			80 dB	
FM Hum & Noise				
Analog @ 25 kHz	50 (53) <sup>11</sup> dB		50 dB	
Analog @12.5 kHz	45 (47) <sup>11</sup> dB		45 dB	
Microphone Impedance			600 Ω	
Audio Distortion			Less than 2%	
Modulation	16K0F3E, 11K0F3E, 8K10F1E, 8K10F1D 20K0F7D, 11K2F7D, 14K4F1D, 7K20F1D			

Analog measurements made per TIA/EIA 603  
Digital measurements made per TIA/EIA 102CAAA

(\*1) 148MHz - 168MHz  
(\*2) Type 1: 100W to 50W for 450-500MHz. More than 60W to 50W for 500-520MHz.  
Type 2: 100W to 50W for 400-470MHz.

FleetSync® is a registered trademark of JVC KENWOOD Corporation in the United States and/or other countries.

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

AMBE+2™ is a trademark of Digital Voice Systems Inc.

The P25 Logo is used under license and is a registered trademark of the Project 25 Technology Interest Group.

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	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 Cat.A1	501.3/Procedure I, II Cat.A1	501.4/Procedure I, II
Low Temperature	502.1/Procedure I	502.2/Procedure I, II Cat.C1	502.3/Procedure I, II Cat.C1	502.4/Procedure I, II
Temperature Shock	503.1/Procedure I	503.2/Procedure I Cat.A1, C1	503.3/Procedure I Cat.A1, C1	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 I, II	506.2/Procedure I, II	506.3/Procedure I, II	506.4/Procedure I, III
Humidity	507.1/Procedure II	507.2/Procedure II	507.3/Procedure II	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, II	510.3/Procedure I	510.4/Procedure I, III
Vibration	514.2/Procedure VIII, X	514.3/Procedure I Cat.8, II Cat.3	514.4/Procedure I Cat.8, II Cat.3	514.5/Procedure I Cat.20, II Cat.5
Shock	516.2/Procedure I, II, III, V	516.3/Procedure I, IV, V, VI	516.4/Procedure I, IV, V, VI	516.5/Procedure I, IV, V, VI

## International Protection Standard

Dust & Water Protection IP54

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A528312 Printed in USA