

KENWOOD



P25 Mission Critical

VM8000

Multi-Band · Multi-Protocol · Mission Critical Mobile Radio

The KENWOOD Viking 8000 series Multi-Band, Multi-Protocol mobile is specifically designed for today's public safety agencies with advanced features to meet the first responder's mission critical operational needs.

Features

- Multi-Band operation (VHF, UHF, 700/800 MHz)
- Multi-Protocol:
 - P25 Phase 1 & 2 Trunking
 - P25 Conventional
 - DMR Tier II & Tier III
 - Viking16 (SmartNet/SmartZone™ Compatible)
 - FM Analog Conventional
- Mixed protocol zones (each channel in a zone can be from a different system)
- 1024 channels (2048 & 4096 options)
- P25 Authentication (Link Layer Authentication)
- P25 GPS data (built-in GPS)*
- MDC-1200 & GE-Star signaling
- Analog & P25 Conventional vote scan
- Mixed System Conventional Priority Scan (Analog, P25 Conventional, and DMR Tier II)
- Single or Dual Remote-Mount control heads (KCH-19VM, KCH-20RV, and KCH-21RVM) or Single Dash-Mount control head (KCH-19VM)
- Single-Deck Multi-Band operation or optional Multi-Deck operation (up to 4 RF Decks)
- Instant Recording Replay (IRR) and Voice Recording
- TrueVoice™ Noise Cancellation technology
- Wi-Fi® 2.4 & 5 GHz (802.11a/b/g/n/ac)
- Bluetooth® 5.0 & Bluetooth Low Energy
- 15-Watt audio output via external speaker
- High-speed programming using rear USB Type-C™ connector
- Encryption
 - ARC4™ (Motorola ADP™ compatible)
 - DES-OFB
 - AES-256 (FIPS 140-3) Single and Multi-Key
 - Over-the-Air-Rekeying (OTAR)

**Refer to the Viking VM8000 operating manual for detailed requirements & conditions for proper GPS operation.*



Enhanced Control Head

- Large display - 2.75" (36 x 60 mm)
- Resolution of 400 x 240 pixels
- Viewing angle of 140°
- Multi-color LCD + TX/RX (green/red/orange) LEDs
- D-Pad & more PF keys, dedicated emergency key and channel/volume control knobs
- Replaceable A/B/C button labels
- User selectable themes (8 themes available)
- Day & night display options
- Optionally, the KCH-21RVM Handheld Control Head (HHCH) or the KCH-19VM Control Head can be used with the VM8000.



Day - High Contrast



Night - High Contrast



KCH-19VM Control Head

Compatible With P25 Systems

- ATLAS® P25 Phase 1 and Phase 2 System
- Motorola Astro® 25 - P25 Phase 1 & Phase 2
- L3Harris VIDA® - P25 Phase 1 & Phase 2
- Airbus (formerly Cassidian) VESTA™ Radio

VM8000 Mobile Specifications

General		VHF	UHF	700/800 MHz
Frequency Ranges		136-174 MHz	380-520 MHz	RX: 763-776, 851-870 MHz TX: 763-776, 793-806, 806-825, 851-870 MHz
Max. Channels Per Radio		1024 (2048 and 4096 options)		
Number of Zones		255		
Max. Channels Per Zone		255		
Channel Spacing	Analog	12.5/15/20/25 ¹ /30 ¹ kHz	12.5/25 ¹ kHz	12.5/25 kHz
	Digital	12.5 kHz		
Power Supply		13.6 V DC ±15 %		
Current Drain @ 13.6 V	Standby	0.45 A		
	RX @ rated audio power	3.2 A		
	TX @ rated TX power	13 A		
Operating Temperature		-22 °F to +140 °F (-30 °C to +60 °C)		
Storage Temperature		-40 °F to +185 °F (-40 °C to +85 °C)		
Frequency Stability		±1.0 ppm [-22 °F to +140 °F (-30 °C to +60 °C); +77 °F Ref. (+25 °C)]		
Electrostatic Discharge		IEC 61000-4-2 Level 4		
Dimensions ² (W x H x D): (RF Deck + KCH-19VM Control Head)		6.69 x 1.89 x 10.81 in. (170 x 48 x 274.7 mm)		
Weight: (RF Deck + KCH-19VM Control Head)		7.5 lbs (3.4 kg)		

Receiver		VHF	UHF	700/800 MHz
Sensitivity	P25 Digital (5% BER)	-120.5 dBm (0.211 µV)		
	Analog (12 dB SINAD) @ 12.5 kHz	-120.5 dBm (0.211 µV)		
	Analog (12 dB SINAD) @ 25 kHz	-120.5 dBm (0.211 µV)		
Selectivity ³	P25 Digital	60 dB		
	Analog @ 12.5 kHz	76 dB	71 dB	70 dB
	Analog @ 25 kHz	84 dB	81 dB	78 dB
Intermodulation		83 dB	82 dB	83 dB
Spurious Rejection		85 dB	90 dB	87 dB
Audio Distortion ⁴		1.25% @ rated audio power (4W/15W)		
Audio Output Power ⁴				