KENWOOD

VIKING®

P25 Mission Critical

VM5000

VHF · UHF (High & Low) · 700/800 MHz
P25 Phase 1 & 2 · Viking16

With uncompromised quality and performance, the VM5000 has built-in speakers to take the complexities out of mission-critical communications.

Features

- Mixed protocol operation (P25 Phase 1 & 2 Trunking, P25 Conventional, Viking16, FM Analog)
- 1024 channels
- Mixed protocol zones
- P25 Authentication (Link Layer Authentication)
- P25 IP packet data
- GPS AVL data (built in GPS)[1]
- MDC-1200 & GE-Star signaling
- Analog & P25 Conventional vote scan
- Dash mount (KCH-19 control head only)
- Remote mount
- Dual control heads
- Internal or external speaker
- Fixed control station
- WiFi (remote mount configuration only)
- Bluetooth (Future)
- Instant Recording Replay (IRR)
- Voice Recording
- Encryption
  - · ARC4™ software encryption; compatible w/Motorola ADP™
  - · DES-OFB
  - · AES-256 (FIPS 140-2) Single and Multi-Key
  - · Over-the-Air-Rekeying (OTAR)
  - · VK5000 or Motorola KVL3000/KVL4000 Keyloader

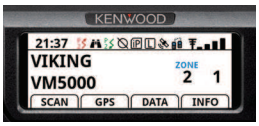
1Refer to the Viking VM5000 operating manual for detailed requirements & conditions for proper GPS operation.

Accessories

Complete line of accessories including microphones, speakers & antennas. Download the accesory catalog at **www.efjohnson.com/products/accessories.**

Basic Control Head

- Resolution of 422 x 154 pixel
- Viewing angle of 140°
- User selectable themes (8 themes available)
- Day & night display options



Day - High Contrast

Night - High Contrast

Compatible With P25 Systems

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

We combine P25 design expertise with recognized quality & reliability along with advanced technology to make KENWOOD Viking radios simple to use & maintain.

Perpetual Software Licensing

Adds greater value to your radios by extending the life of the software into your next hardware platform — you own the software option forever, and your licenses are simple to manage with our cloud-based tool — Vault™.

Armada® Fleet Management

Update your radios in a group rather than one at a time. One template programs both portables & mobiles. Supports direct computer connection, Over-the-Air Programming (OTAP), or Over-the-Internet Programming (OTIP).

TrueVoice™ Noise Cancellation

Software-based noise cancellation automatically filters out noise source frequencies and eliminates the need for extra configuration. Works in analog or digital mode and with any accessory.

VM5730/5830/5930 Mobile Specifications

General		VM5730	VM5830	VM5930
Frequency Range		136-174 MHz	Type 1: 450-520 MHz Type 2: 380-470 MHz	RX: 762-776, 851-870 MHz TX: 762-776, 792-806, 806-825, 851-870 MHz
Max. Channels Per Radio		1024		
Number of Zones		255		
Max. Channels Per Zone		255		
Channel Spacing	Analog	12.5/15/20/25*/30* kHz	12.5/25* kHz	12.5/25 kHz
	Digital	12.5 kHz	12.5 kHz	12.5 kHz
Power Supply		13.6 V DC ±15 %		
Current Drain	Standby	0.45 A		
	RX	2.3 A		
	TX	13 A		
Operating Temperature		-22 °F to +140 °F (-30 °C to +60 °C)		
Frequency Stability		±1.5 ppm		
Dimensions (W x H x D) Radio w/Control Head, Projections not Included		6.73 x 1.89 x 6.93 in. (171 x 48 x 176 mm)		6.73x1.89x7.72 in. (171.0 x 48.0 x 196 mm)
Weight (Radio w/Control Head)		3.53 lbs (1.6 kg)		3.75 lbs (1.7kg)

Receiver		VM5730	VM5830	VM5930
Sensitivity	P25 Digital (5% BER)	-119 dBm (0.25 µV)		
	Analog (12 dB SINAD)	-119 dBm (0.25 µV)		
Selectivity	P25 Digital	60 dB		
	Analog @ 12.5 kHz	60 dB		
	Analog @ 25 kHz	75 dB		75 dB
Intermodulation		80 dB		
Spurious Rejection		85 dB		87 dB
Audio Distortion		2%		
Audio Output Power		4 W/4 Ω (Remote Control Head: 3 W/4 Ω)		
Transmitter		**VM5730**	**VM5830**	**VM5930**
RF Output Power		5W/50W	5W/45W – (Type 1: 450-485 MHz) 5W/40W – (Type 1: 485-520 MHz) 5W/40W – (Type 2: 380-470 MHz)	2W/30W (700 MHz) 2W/35W (800 MHz)
Spurious Emission		-73 dB	-75 dB	-80 dB
FM Hum & Noise	Analog @ 12.5 kHz	45 dB		40 dB
	Analog @ 25 kHz	50 dB		45 dB
Audio Distortion		2%		
Emission Designator		VM5730/5830: 16K0F3E, 11K0F3E, 8K10F1E, 8K10F1D, 8K10F1W VM5930: 16K0F3E, 14K0F3E,11K0F3E, 8K10F1E, 8K10F1D, 8K10F1W		

Mil Standard	810C	810D	810E	810F	810G
Low Pressure	500.1/ I	500.2/ I, II	500.3/ I, II	500.4/ I, II	500.5/ I, II
High Temperature	501.1/ I, II	501.2/ I, II	501.3/ I, II	501.4/ I, II	501.5/ I, II
Low Temperature	502.1/ I	502.2/ I, II	502.3/ I, II	502.4/ I, II	502.5/ I, II
Temp. Shock	503.1/ I	503.2/ I	503.3/ I	503.4/ I, II	503.5/ I
Solar Radiation	505.1/ I	505.2/ I	505.3/ I	505.4/ I	505.5/ I
Rain	506.1/ I, II	506.2/ I, II	506.3/ I, II	506.4/ I, III	506.5/ I, III

Mil Standard	810C	810D	810E	810F	810G
Humidity	507.1/ I, II	507.2/ II, III	507.3/ II, III	507.4	507.5/ II
Salt Fog	509.1/ I	509.2/ I	509.3/ I	509.4	509.5
Dust	510.1/ I	510.2/ I	510.3/ I	510.4/ I, III	510.5/ I
Vibration	514.2/ VIII, X	514.3/ I	514.4/ I	514.5/ I	514.6/ I
Shock	516.2/ I, V	516.3/ I, V	516.4/ I, V	516.5/ I, V	516.6/ I, V

INTERNATIONAL PROTECTION STANDARD	
Dust & Water	IP54, IP55[1]

[1]IP54: RF Deck of the mobile radio; IP55: Remote Control Head for the mobile radio.

Encryption Options	
Supported Encryption	AES, DES-OFB, ARC4
Encryption Key/ Radio	126 Common Key Reference (CKR), 126 Physical Identifier, (PID), Compatible w/ Motorola Key Variable Loader
Encryption Frame Re-sync Interval	P25 CAI 360 MSEC
Encryption Keying	External Key Loader, OTAR
Mode	OFB-Output Feedback
Encryption Type	Digital
Key Erasure	Keyboard Command
Standards	FIPS 46-3, FIPS 81, FIPS 140-2, FIPS 197

*25/30 kHz in VHF/UHF Bands are not included in the models sold in the USA or US territories.
Analog measurements made per TIA 603 and specifications shown are typical. Digital measurements made per TIA 102CAAA and specifications shown are typical. All specifications are subject to change without notice. Please check the website for the latest version.

EF Johnson Technologies, Inc.
a JVCKENWOOD Company
1440 Corporate Drive, Irving, TX 75038-2401
Phone: 800.328.3911 · efjohnson.com