VX-160E SERIES

VHF/UHF Portable Radios

Rugged, Durable Portables Ideal for Factory or Fleet

- LIGHT WEIGHT AND COMPACT SIZE
- 16 CHANNEL CAPACITY
- 5 WATTS POWER OUTPUT (Selectable to 1 Watt)
- MIL-STD 810 C/D/E
- RUGGED CONSTRUCTION
- LOUD, CLEAR AUDIO OUTPUT
- 12.5/25 kHz BANDWIDTH PROGRAMMABLE BY CHANNEL
- CTCSS/DCS ENCODE + DECODE
- AUTOMATIC NUMBER IDENTIFIER(ANI)
- 5 TONE ENCODE/DECODE
- MULTI-MODE SCAN (incl. Dual Watch, Priority, Follow-Me)
- ARTS“ (Auto-Range Transponder System)
- BCLO, BTLO, AND TOT FUNCTIONS
- TX/RX BATTERY SAVER CIRCUIT
- PC PROGRAMMING
- RADIO-TO-RADIO CLONING

Actual Size

CE

Vertex Standard

VX-160E SERIES

SUPER RUGGED CONSTRUCTION
Housed inside a high-impact case, the diecast chassis of the VX-160E provides a solid, rugged foundation for the VX-160E's circuitry. Built to withstand the harse world of the factory floor, construction site or fleet user, the VX-160E will provide many years of reliable communications.

CTCSS / DCS ENCODE + DECODE
High performance Encoder and Decoder circuits for both CTCSS and DCS are provided for controlled access to Tone or Code controlled systems. DCS is ideal for crowded and busy RF environments, providing far superior immunity from false opening of the squelch.

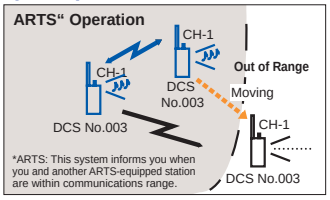
AUTOMATIC NUMBER IDENTIFIER (ANI)
The VX-160E includes an Automatic Number Identifier circuit, which will respond to an incoming ANI burst for selective paging of an individual portable.

5-TONE ENCODE/DECODE
The VX-160E also has a 5 Tone Encoder and Decoder built-in. The radio can respond to an individual or group call 5 tone sequence, and can generate 5 Tone calling sequences for individual or group call facilities.

VERSATILE SCANNING FEATURES
The high-speed scanning capability of the VX-160E includes "All-Channel" scanning, plus Dual Watch and Priority Channel capability. And with "Follow-Me" scanning, a designated channel may be watched during scanning of other channels.

BCLO, BTLO, AND TOT
To facilitate efficient channel management, the VX-160E provides Busy Channel Lock-Out (BCLO) and Busy Tone Lock-Out (BTLO) features. What's more, the transmitter's Time-Out Timer (TOT) function prevents a "stuck microphone" condition from jamming a channel for an extended period of time.

ARTS" (Auto Range Transponding System)
Included in the VX-160E is Vertex Standard's exclusive ARTS" feature, which can be critically important in search-and-rescue applications. ARTS" provides a "hand-shake" with other ARTS"-equipped transceivers, and the display indicates if an "Out of Range" condition exists. The base station can then alert the field unit to move to a better location.



TX/RX BATTERY SAVER CIRCUIT
To maximize battery life, the VX-160E includes both transmit- and receive-mode battery savers. On transmit, the portable will reduce power when the incoming signal is very strong. On receive, the radio will put itself into a pulsing "sleep" mode, periodically checking for channel activity.

PC PROGRAMMING
The channel and feature configurations are easily programmed in minutes by the dealer, using the optional CT-42A Programming Cable and CE44 Programming Software.

RADIO TO RADIO CLONE FEATURE
For quick programming of VX-160E radios for fleet use, the "Clone" feature allows copying of all channel and other configuration data from one VX-160E to another, using the optional CT-27 Cloning Cable.

500 mW AUDIO OUTPUT
Ideal for reception in noisy environments, the VX-160E's high—powered audio is coupled to a large internal speaker, assuring solid copy throughout difficult construction site or field operations.

MIL-STD 810 C/D/E
Built to meet or exceed the requirements of the U.S. MIL-STD 810 C/D/E standards, the VX-160E is designed to survive under difficult operating conditions of shock, vibration, and driving rain. Cost-performance begins with durability, and the Mil-Spec toughness of the VX-160E is your guarantee of its design quality.


●Water Resistant Construction

APPLICABLE MIL-STD

Standard	MIL 810C Methods/Procedures	MIL 810D Methods/Procedures	MIL 810E Methods/Procedures
Low Pressure		500.2/Procedure 1	500.3/Procedure 1
High Temperature		501.2/Procedure 1, 2	501.3/Procedure 1, 2
Low Temperature		502.2/Procedure 1, 2	502.3/Procedure 1, 2
Temperature Shock		503.2/Procedure 1	503.3/Procedure 1
Solar Radiation		505.2/Procedure 1	505.3/Procedure 1
Rain		506.2/Procedure 2	506.3/Procedure 2
Humidity		507.2/Procedure 2	507.3/Procedure 2
Salt Fog		509.2/Procedure 1	509.3/Procedure 1
Dust		510.2/Procedure 1	510.3/Procedure 1
Vibration	514.2/Procedure 8	514.3/Procedure 1 Cat. 10	514.4/Procedure 1 Cat. 10
Shock	516.2/Procedure 1	516.3/Procedure 1, 4	516.4/Procedure 1, 4

Specifications

	VX-160E(VHF)	VX-160E(UHF)
General Specifications		
Frequency Range	134-160 MHz (A) 146-174 MHz (C)	400-430 MHz (AS1) 440-470 MHz (CS) 450-490 MHz (D) 490-512 MHz (F)
Number of Channels	16 Channels	
Channel Spacing	12.5/25 kHz	
PLL Steps	5/6.25 kHz	
Power Supply Voltage	7.5 VDC ± 20 %	
Battery Life (5-5-90 duty)		
w/FNB-V57(1100 mAh)	8.2 hrs. (9.9 hrs. w/saver) @5 W	7.1 hrs. (8.5 hrs. w/saver) @5 W
w/FNB-64(700 mAh)	5.2 hrs. (6.3 hrs. w/saver) @5 W	4.5 hrs. (5.4 hrs. w/saver) @5 W
Temperature Range	-30… C to +60… C(EIA)	-25… C to +55… C(ETS)
Frequency Stability	± 2.5 ppm(EIA)	± 1.5 kHz(ETS)
Case size(WHD)	58 x120 x 31 mm w/FNB-64	
Weight (Approx)	365 grams w/FNB-64,antenna,belt clip	

(EIA):Measurements made per EIA Standard TIA/EIA-603 (ETS):Measurements per ETSI ETS 300 086

	VX-160E(VHF)	VX-160E(UHF)
Receiver Specifications		
Sensitivity		
EIA 12 dB SINAD	0.20 µV	0.25 µV
20 dB Quieting	0.30 µV	0.35 µV
ETS 20 dB SINAD	0.60 µV (emf)	0.70 µV(emf)
Adjacent Channel Selectivity	65 dB (25 kHz) / 60 dB (12.5 kHz) EIA	70 dB (25 kHz) / 60 dB (12.5 kHz) ETS
Intermodulation	65 dB	
Spurious Rejection	65 dB (EIA)	70 dB (ETS)
Hum & Noise	45 dB	
AF Output	500 mW @4 Ohm, 10 % THD	
Transmitter Specifications		
Power Output	5.0/1.0 W	
Modulation System	Direct FM 16K0F3E, 11K0F3E	
Conducted Spurious Emissions	60 dB Below Carrier(EIA) 0.25 µW(ETS)	
FM Noise	40 dB	
Audio Distortion (@1 kHz)	5 %	

Specification are subject to change without notice or obligation.

Accessories & Options


FNB-64
7.2 V 700 mAh Ni-Cd Battery Pack


FBA-25
Alkaline Battery Case(6 X AA)


VAC-6800
6-unit Multi Charger


VCM-1
Mobile Mounting Bracket for VAC-800


MH-37A4B
Earpiece/Microphone


LCC-180 / S
Leather Case(S for swivel belt clip)


CT-27
Radio to Radio Programming Cable


FNB-V57
7.2 V 1100 mAh Ni-Cd Battery Pack


VAC-800B/C/U*
Desktop Rapid Charger


NC-77BC/U*
Overnignt Desktop Charger


MH-45B4B
Speaker/Microphone (Noise Cancelling)


VC-25
VOX Headset


CE44
Programming Software


CT-42A
Radio Programming Cable

*B for 120 VAC/ C for 240 VAC/ U for 230 VAC

Vertex Standard

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