VX-160 SERIES

MIL-STD 810 C/D/E

Built to meet exceed requirements of the U.S. MIL-STD 810 C/D/E standards, the VX-160 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-160 is your



guarantee of its design quality.
SUPER RUGGED CONSTRUCTION

Housed inside a high-impact case, the diecast chassis of the VX-160 provides a solid, rugged foundation for the VX-160 s circuitry. Built to survive in the real world of factory, construction site, or fleet use, the VX-160 will provide many years of reliable communications.

CTCSS / DCS ENCODE + DECODE

High-performance Encoder/Decoder circuits for both CTCSS and Digital Code Squelch are provided, for access to tone/code controlled systems. DCS is ideal for crowded RF environments, providing superior immunity from false opening of squelch.

DTMF ANI DECODE

The VX-160 includes a DTMF Automatic Number Identifier (ANI) circuit. which will respond to an incoming ANI burst for selective paging of an individual portable.

VERSATILE SCANNING FEATURES

The high-speed scanning capability of the VX-160 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.

DUAL 2-TONE DECODE

This built in feature allows you to decode up to two, 2-tone pairs per These can be used for two individual pager calls, or one for channel Individual and one for Group call.

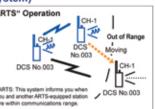
BCLO, BTLO, AND TOT

To facilitate efficient channel management, the VX-160 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-160 is Vertex exclusive feature, which can be critically important in search-and-rescue applications. ARTS" provides a

with other ARTS"hand-shake 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

To maximize battery life, the VX-160 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-160 radios for fleet use, the Clone feature allows copying of all channel and other configuration data from one VX-160 to another, using the optional CT-27 Cloning Cable.

500 mW AUDIO OUTPUT

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

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
5	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-160V	VX-160U
General Specifications	•	
Frequency Range	134-160 MHz (A)	400-430 MHz (AS1)
	148-174 MHz (C)	450-485 MHz (D)
		485-512 MHz (F)
Number of Channels	of Channels 16 Channels	
Channel Spacing	15/30 kHz	12.5/25 kHz
PLL Steps	2.5/6.25 kHz	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
Operating Temperature Range	-22° F to +140°	F (-30° C to +60° C)
Frequency Stability	±2.5	ppm
Dimensions	2.3°(W)X4.7°(H)X1.2°(D) (58X120X31 mm)
Weight (Approx)	0.81 lb. (365 g	g) w/FNB-64

African remarks not ETA etandands unless noted about	Specifications subject to change without notice or obligation.
measurements per EtA standards unless noted above.	opecinications subject to change without notice or obligation.

	VX-160V	VX-160U	
Receiver Specifications	Measurements made per EIA standard TIA/EIA-603		
Sensitivity			
EIA 12 dB SINAD	0.20 µV	0.25 V	
20 dB Quieting	0.30 V	0.35 V	
Adjacent Channel Selectivity	65 dB (25 kHz) / 60 dB (12.5 kHz)		
Intermodulation	65 dB		
Spurious and Image Rejection	65 dB		
Hum & Noise	45 dB		
Audio Output	500 mW @4 Ohms, 5 % THD		
Transmitter Specifications	Measurements made per	EIA standard TIA/EIA-603	
Power Output	5.0/1.0 W		
Modulation	16K0F3E, 11K0F3E		
Conducted Spurious Emissions	60 dB Below Carrier		
FM Hum & Noise	40 dB (25 kHz) / 35 dB (12.5 kHz)		
Audio Distortion(@1 kHz)	<5 %		

Accessories & Options





























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