

# VX-350 SERIES

## VHF/UHF Portable Radios



VX-354

VX-351

Actual Size

- 16 CHANNEL CAPACITY
- POWER OUTPUT : 5 W / 1 W (SELECTABLE)
- WIDE BAND COVERAGE
  - VHF 134-174 MHz
  - UHF 400-470 MHz / 450-512 MHz
- 8-CHARACTER ALPHANUMERIC DISPLAY (VX-354)
- 500 mW LOUD AUDIO WITH LARGE 1.4" SPEAKER
- LARGE CAPACITY 2000 mAh LI-ION BATTERY (FNB-V96LI)
- LONG BATTERY LIFE MORE THAN 15 HOURS\*  
WITH RX/TX BATTERY SAVER CIRCUIT
- COMPACT AND RUGGED CONSTRUCTION
- WIDE/NARROW BANDWIDTH PER CHANNEL
- CTCSS / DCS ENCODE AND DECODE
- DTMF ANI
- 2-TONE ENCODE AND DECODE
- 5-TONE SIGNALING BUILT-IN
- EMERGENCY FEATURE
  - VERSATILE SCAN  
(PRIORITY, DUAL WATCH,  
FOLLOW-ME AND TA SCAN)
  - LONE WORKER FEATURE  
BUILT IN
  - STUN, KILL, REVIVE AND  
REMOTE LISTEN (opt)
  - ARTS™ (AUTO-RANGE  
TRANSPOND SYSTEM)
  - DTMF PAGING ( OPTION )
  - ENCRYPTION ( OPTION )  
VOICE INVERSION  
ROLLING CODE
  - MDC 1200® / GE-STAR®  
ANI (OPTION)
  - PC PROGRAMMING
  - RADIO-TO-RADIO  
CLONING

\*FNB-V96LI/5-5-90 duty cycle w/saver

## VX-350 SERIES VHF/UHF Portable Radio

### LONG BATTERY LIFE MORE THAN 15 HOURS WITH 2000 mA LI-ION BATTERY FNB-V96LI

The VX-350 Portables may be equipped with advanced FNB-V96LI Lithium-Ion Battery Packs with 2000 mAh of capacity, for operating times of more than 15 hours, even when using 5 Watts (5-5-90 duty cycle, w/saver).

Battery	Saver ON (RX:STBY 1:4)	Saver OFF
FNB-V96LI 2000mAh	15.5 (15) hrs	13 (12.5) hrs
FNB-V95LI 1800 mAh	14 (13.5) hrs	11.7 (11.3) hrs

( ) : UHF version

### WIDE BANDWIDTH

For communicating with other agencies, companies, or even within your own communications system, the wide bandwidth of this radio will let you operate anywhere within the 40 MHz (VHF) or 62 MHz (UHF) band.

### 8-CHARACTER ALPHANUMERIC DISPLAY (VX-354)

Providing indication of either the channel number or an Alphanumeric Channel Label of up to 8 characters, the LCD display also provides convenient operation function icons to provide instant recognition of radio status. Including signal strength indicator and battery gauge.

### 500 mW LOUD AUDIO WITH LARGE 1.4" SPEAKER

Ideal for reception in noisy environments, the VX-350's high-powered audio is coupled to a large 1.4" internal speaker, assuring solid copy throughout difficult crowd control, fire, or sporting-event operations.

### COMPACT AND RUGGED CONSTRUCTION

Weighing just 11 oz and measuring just 2.3" x 4.1" x 1.3" (WHD) the VX-350 is ideal for business, industry, and public safety applications where light weight and compact size are important.

### WIDE/NARROW BANDWIDTH PER CHANNEL

When programming radios for use in different jurisdictions, the VX-350 Series portables may be set up, channel by channel, for use in 12.5 kHz, 20 kHz, or 25 kHz channel spacing environments. Deviation and bandwidth are automatically set according to the configuration you choose.

### BUILT-IN EMERGENCY FEATURE

With the built-in emergency feature, you are never alone. Any softkey can be programmed for Emergency operation. When activated, the radio will go to a designated channel, broadcast the unit ID and transmit live audio for pre-determined intervals.

### 2-TONE ENCODE AND DUAL 2-TONE DECODE

The VX-350 Series can transmit a 2-Tone paging call, and can receive 2-Tone calls using different tone combinations. For advanced network or fleet operations, a 5-Tone Encoder-Decoder circuit is included in the VX-350 Series.

### DTMF ANI

A DTMF Automatic Number Identification string may be programmed into the VX-350, providing the dispatcher with a multiple-digit confirmation of the transmitting portable's identity.

### DTMF PAGING ( OPTION )

The optional FVP-25 board adds a DTMF paging decoder. With DTMF you can Stun, Kill and Alert.

### ENCRYPTION ( OPTION ) VOICE INVERSION, ROLLING CODE

The FVP-35 and FVP-36 Encryption Units provide security for your important public safety and security communications. A DTMF Paging function is also included in the FVP-25 module, for selective calling.

### MDC-1200® / GE-STAR® ANI ENCODE ( OPTION )

Automatic Number Identification, triggered by the pressing of the PTT key, is available in the most popular industry-standard formats, via the optional VME-100.

### OTHER FEATURES

•VERSATILE SCAN (PRIORITY, DUAL WATCH, FOLLOW-ME AND TA SCAN)  
•CTCSS / DCS ENCODE AND DECODE •ARTS™ (AUTO-RANGE TRANSPOND SYSTEM) •PC PROGRAMMING •RADIO-TO-RADIO CLONING

### Applicable MIL-STD ( Pending )

Standard	MIL 810D Methods/Procedures	MIL 810E Methods/Procedures	MIL 810F Methods/Procedures
Low Pressure	500.2/Procedure I, II	500.2/Procedure I, II	500.3/Procedure I, II
High Temperature	501.2/Procedure I, II	501.3/Procedure I, II	501.4/Procedure I, II
Low Temperature	502.2/Procedure I, II	502.3/Procedure I, II	502.4/Procedure I, II
Temperature Shock	503.2/Procedure I	503.3/Procedure I	503.4/Procedure I, II
Rain	506.2/Procedure II	506.3/Procedure II	506.4/Procedure I, III
Humidity	507.2/Procedure II, III	507.3/Procedure II, III	507.4
Salt Fog	509.2	509.3	509.4
Dust	510.2/Procedure I	510.3/Procedure I	510.4/Procedure III
Vibration	514.3/Procedure Cat. 10	514.4/Procedure Cat. 10	514.5/Procedure Cat. 24
Shock	516.3/Procedure I	516.4/Procedure I	516.5/Procedure I






### Specifications

	VHF	UHF
<b>General Specification</b>		
Frequency Range	134 -174 MHz	400 - 470 MHz 450 - 512 MHz
Number of Channels	16	
Power Supply Voltage	7.4 V DC ±20 %	
Channel Spacing	12.5/20/25 kHz	
Battery Life (5-5-90 duty) w/FNB-V96LI (2000mAh)	15.5 hrs (13 hrs w/o saver)	15 hrs (12.5 hrs w/o saver)
Operating Temperature Range	-22° F to 140° F (-30° C to +60° C)	
Frequency Stability	±2.5 ppm	
RF Input-Output Impedance	50 Ohm	
Dimension (W x H x D)	2.3" x 4.1" x 1.3" (58 x 105 x 33 mm)	
Weight (Approx.)	10.9 oz ( 310 g ) w/FNB-V96LI, ANT	

	VHF	UHF
<b>Receiver Specification</b> measured by TIA/EIA-603		
Sensitivity (12dB SINAD)	0.25 μV	0.25 μV
Adjacent Channel Selectivity	65 / 60 dB	
Intermodulation	65 / 60 dB	
Spurious and Image Rejection	60 dB	
Audio Output	500mW @ 4 ohms 5% THD	
<b>Transmitter Specification</b> measured by TIA/EIA-603		
Output Power	5 / 1 W	5 / 1 W
Modulation	16K0F3E, 11K0F3E	
Conducted Spurious Emission	65 dB below carrier	
FM Hum & Noise	45 / 40 dB	
Audio Distortion	< 3 % @1kHz	

Specification may be changed without notification.

### Accessories & Options

 <b>MH-45B4B</b> Noise Canceling Speaker Microphone	 <b>MH-450S</b> Speaker Microphone	 <b>MH-360S</b> Compact Speaker Microphone	 <b>MH-37A4B</b> Earpiece Microphone	 <b>VC-25</b> VOX Headset	 <b>FVP-25</b> Encryption / DTMF Paging Unit	 <b>VME-100</b> MDC-1200®/GE-STAR® ANI Encode Unit	 <b>FVP-36</b> Voice Inversion Encryption Unit	 <b>FVP-35</b> Rolling Code Encryption Unit												
 <b>FNB-V96LI</b> 7.4 V 2000mAh Hi-Spec Li-Ion Battery Pack	 <b>FNB-V95LI</b> 7.4 V 1800mAh Standard Li-Ion Battery Pack	 <b>VAC-300B/C/F*</b> Desktop Rapid Charger (CD-34 + PA-42 B/C/F*)	 <b>VAC-6300</b> 6unit Multi Rapid Charger	 <b>VCM-2</b> Vehicle Charger Mount Adaptor	 <b>CT-27</b> Cloning Cable (Radio to Radio Cloning)	<table><tr><td colspan="2"><b>Programming Cable</b></td><td><b>USB</b></td><td><b>FIF-10/A + CT-106</b></td></tr><tr><td colspan="2"></td><td><b>RS-232C</b></td><td><b>CT-29 + CT-28</b></td></tr><tr><td colspan="2"><b>Programming Software</b></td><td colspan="2"><b>CE86</b></td></tr></table>			<b>Programming Cable</b>		<b>USB</b>	<b>FIF-10/A + CT-106</b>			<b>RS-232C</b>	<b>CT-29 + CT-28</b>	<b>Programming Software</b>		<b>CE86</b>	
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<b>■ ANTENNA LIST</b>																				
<b>UHF</b>	<b>ATU-6A</b>	<b>400-430 MHz</b>	<b>ATU-6DS</b>	<b>450-485 MHz/3.5"</b>																
	<b>ATU-6D</b>	<b>450-490 MHz</b>	<b>ATU-6F</b>	<b>490-512 MHz</b>																
<b>VHF</b>	<b>ATV-6A</b>	<b>134-151 MHz/3.5"</b>	<b>ATV-10A</b>	<b>145-155 MHz HIGH GAIN</b>																
	<b>ATV-6B</b>	<b>150-163 MHz/3.5"</b>	<b>ATV-10B</b>	<b>150-160 MHz HIGH GAIN</b>																
	<b>ATV-6C</b>	<b>161-174 MHz/3.5"</b>	<b>ATV-10C</b>	<b>155-165 MHz HIGH GAIN</b>																
	<b>ATV-6XL</b>	<b>VHF UNTUNED</b>	<b>ATV-10E</b>	<b>165-175 MHz HIGH GAIN</b>																
	<b>ATV-8A</b>	<b>134-151 MHz</b>																		
	<b>ATV-8B</b>	<b>150-163 MHz</b>																		
	<b>ATV-8C</b>	<b>161-174 MHz</b>																		

LCC-350 Leather Case \*B for 120 VAC, C for 230 VAC, F for 220 VAC Various accessories listed may not be available in some countries.



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