

# VX-350 SERIES

## VHF/UHF Portable Radios

- 15 CHANNEL CAPACITY
- POWER OUTPUT : 5 W / 1 W (SELECTABLE)
- WIDE BAND COVERAGE
  - VHF 134-174 MHz
  - UHF 400-470 MHz / 450-520 MHz
- 8-CHARACTER ALPHANUMERIC DISPLAY (VX-354)
- 500 mW LOUD AUDIO WITH LARGE 36 mm 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)
- LONG WORKER FEATURE BUILT IN
- STUN, KILL, REVIVE AND REMOTE LISTEN
- ARTS™ (AUTO-RANGE TRANSPOND SYSTEM)
- DTMF PAGING ( OPTION )
- ENCRYPTION ( OPTION )
- VOICE INVERSION
- ROLLING CODE
- IDIC 1200® / GE-STAR®
- ANI (OPTION)
- PC PROGRAMMING
- RADIO-TO-RADIO CLONING

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

●Top

●Side

VX-354      Actual Size      VX-351

# VX-350 SERIES VHF/UHF Portable Radio

## LONG BATTERY LIFE MORE THAN 15 HOURS WITH 2000 mAh 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 2000 mAh | 15.5 (15) hrs          | 13 (12.5) hrs   |
| FNB-V95LI 1800 mAh | 14 (13.5) hrs          | 11.7 (11.3) hrs |

## 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 70 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 36 mm SPEAKER

Ideal for reception in noisy environments, the VX-350's high-powered audio is coupled to a large 36 mm internal speaker, assuring solid copy throughout difficult crowd control, fire, or sporting-event operations.

## COMPACT AND RUGGED CONSTRUCTION

Weighing just 310 g and measuring just 58 x 105 x 33 mm (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<br>Methods/Procedures | MIL 810E<br>Methods/Procedures | MIL 810F<br>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

| General Specification                            | VHF                                     | UHF                         |
|--|---|-----------------------------|
|  | Frequency Range                         | 134 - 174 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                      | -30° C to +60° C                        |                             |
| Frequency Stability                              | ±2.5 ppm                                |                             |
| RF Input-Output Impedance                        | 50 Ohm                                  |                             |
| Dimension (W x H x D)                            | 58 x 105 x 33 mm                        |                             |
| Weight (Approx.)                                 | 310 g (w/FNB-V96LI, Antenna, Belt Clip) |                             |

| Receiver Specification       | VHF                          | UHF             |
|------------------------------|------------------------------|-----------------|
|                              | measured by TIA/EIA-603      |                 |
| Sensitivity (12dB SINAD)     | 0.25 $\alpha$ V              | 0.25 $\alpha$ V |
| Adjacent Channel Selectivity | 65 / 60 dB (25 kHz/12.5 kHz) |                 |
| Intermodulation              | 65 / 60 dB (25 kHz/12.5 kHz) |                 |
| Spurious and Image Rejection | 65 dB                        |                 |
| Audio Output                 | 500mW @ 4 ohms 5% THD        |                 |
| Transmitter Specification    |                              |                 |
| 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 (25 kHz/12.5 kHz) |                 |
| Audio Distortion             | < 3 % @ 1kHz                 |                 |

Specification may be changed without notification.

## Accessories & Options

|   |  |  |  |   |  |   |  |   |     |        |             |         |                  |  |        |             |        |             |     |        |                  |  |  |  |        |                  |  |  |  |        |                  |  |  |  |         |             |  |  |  |        |             |  |  |  |        |             |  |  |  |        |             |  |  |
|---|--|--|--|---|--|---|--|---|-----|--------|-------------|---------|------------------|--|--------|-------------|--------|-------------|-----|--------|------------------|--|--|--|--------|------------------|--|--|--|--------|------------------|--|--|--|---------|-------------|--|--|--|--------|-------------|--|--|--|--------|-------------|--|--|--|--------|-------------|--|--|
| <br>MH-45B4B<br>Noise Canceling Speaker Microphone         | <br>MH-450S<br>Speaker Microphone                           | <br>MH-360S<br>Compact Speaker Microphone                         | <br>MH-37A4B<br>Earpiece Microphone       | <br>VC-25<br>VOX Headset                   | <br>FVP-25<br>Encryption / DTMF Paging Unit         | <br>VME-100<br>MDC-1200®/GE-STAR® ANI Encode Unit   | <br>FVP-36<br>Voice Inversion Encryption Unit | <br>FVP-35<br>Rolling Code Encryption Unit |     |        |             |         |                  |  |        |             |        |             |     |        |                  |  |  |  |        |                  |  |  |  |        |                  |  |  |  |         |             |  |  |  |        |             |  |  |  |        |             |  |  |  |        |             |  |  |
| <br>FNB-V96LI<br>7.4 V 2000mAh Hi-Spec Li-Ion Battery Pack | <br>FNB-V95LI<br>7.4 V 1800mAh Standard Li-Ion Battery Pack | <br>VAC-300B/C/F*<br>Desktop Rapid Charger (CD-34 + PA-42 B/C/F*) | <br>VAC-6300<br>Gunit Multi Rapid Charger | <br>VCM-2<br>Vehicle Charger Mount Adaptor | <br>CT-27<br>Cloning Cable (Radio to Radio Cloning) | <b>ANTENNA LIST</b><br><table border="1"> <tbody> <tr> <td>UHF</td> <td>ATU-6A</td> <td>400-430 MHz</td> <td>ATU-6DS</td> <td>450-485 MHz/3.5"</td> </tr> <tr> <td></td> <td>ATU-6D</td> <td>450-490 MHz</td> <td>ATU-6F</td> <td>490-512 MHz</td> </tr> <tr> <td>VHF</td> <td>ATV-6A</td> <td>134-151 MHz/3.5"</td> <td></td> <td></td> </tr> <tr> <td></td> <td>ATV-6B</td> <td>150-163 MHz/3.5"</td> <td></td> <td></td> </tr> <tr> <td></td> <td>ATV-6C</td> <td>161-174 MHz/3.5"</td> <td></td> <td></td> </tr> <tr> <td></td> <td>ATV-6XL</td> <td>VHF UNTUNED</td> <td></td> <td></td> </tr> <tr> <td></td> <td>ATV-8A</td> <td>134-151 MHz</td> <td></td> <td></td> </tr> <tr> <td></td> <td>ATV-8B</td> <td>150-163 MHz</td> <td></td> <td></td> </tr> <tr> <td></td> <td>ATV-8C</td> <td>161-174 MHz</td> <td></td> <td></td> </tr> </tbody> </table> |  |   | UHF | ATU-6A | 400-430 MHz | ATU-6DS | 450-485 MHz/3.5" |  | ATU-6D | 450-490 MHz | ATU-6F | 490-512 MHz | VHF | ATV-6A | 134-151 MHz/3.5" |  |  |  | ATV-6B | 150-163 MHz/3.5" |  |  |  | ATV-6C | 161-174 MHz/3.5" |  |  |  | ATV-6XL | VHF UNTUNED |  |  |  | ATV-8A | 134-151 MHz |  |  |  | ATV-8B | 150-163 MHz |  |  |  | ATV-8C | 161-174 MHz |  |  |
| UHF   | ATU-6A   | 400-430 MHz  | ATU-6DS  | 450-485 MHz/3.5"  |  |   |  |   |     |        |             |         |                  |  |        |             |        |             |     |        |                  |  |  |  |        |                  |  |  |  |        |                  |  |  |  |         |             |  |  |  |        |             |  |  |  |        |             |  |  |  |        |             |  |  |
|   | ATU-6D   | 450-490 MHz  | ATU-6F   | 490-512 MHz   |  |   |  |   |     |        |             |         |                  |  |        |             |        |             |     |        |                  |  |  |  |        |                  |  |  |  |        |                  |  |  |  |         |             |  |  |  |        |             |  |  |  |        |             |  |  |  |        |             |  |  |
| VHF   | ATV-6A   | 134-151 MHz/3.5"   |  |   |  |   |  |   |     |        |             |         |                  |  |        |             |        |             |     |        |                  |  |  |  |        |                  |  |  |  |        |                  |  |  |  |         |             |  |  |  |        |             |  |  |  |        |             |  |  |  |        |             |  |  |
|   | ATV-6B   | 150-163 MHz/3.5"   |  |   |  |   |  |   |     |        |             |         |                  |  |        |             |        |             |     |        |                  |  |  |  |        |                  |  |  |  |        |                  |  |  |  |         |             |  |  |  |        |             |  |  |  |        |             |  |  |  |        |             |  |  |
|   | ATV-6C   | 161-174 MHz/3.5"   |  |   |  |   |  |   |     |        |             |         |                  |  |        |             |        |             |     |        |                  |  |  |  |        |                  |  |  |  |        |                  |  |  |  |         |             |  |  |  |        |             |  |  |  |        |             |  |  |  |        |             |  |  |
|   | ATV-6XL  | VHF UNTUNED  |  |   |  |   |  |   |     |        |             |         |                  |  |        |             |        |             |     |        |                  |  |  |  |        |                  |  |  |  |        |                  |  |  |  |         |             |  |  |  |        |             |  |  |  |        |             |  |  |  |        |             |  |  |
|   | ATV-8A   | 134-151 MHz  |  |   |  |   |  |   |     |        |             |         |                  |  |        |             |        |             |     |        |                  |  |  |  |        |                  |  |  |  |        |                  |  |  |  |         |             |  |  |  |        |             |  |  |  |        |             |  |  |  |        |             |  |  |
|   | ATV-8B   | 150-163 MHz  |  |   |  |   |  |   |     |        |             |         |                  |  |        |             |        |             |     |        |                  |  |  |  |        |                  |  |  |  |        |                  |  |  |  |         |             |  |  |  |        |             |  |  |  |        |             |  |  |  |        |             |  |  |
|   | ATV-8C   | 161-174 MHz  |  |   |  |   |  |   |     |        |             |         |                  |  |        |             |        |             |     |        |                  |  |  |  |        |                  |  |  |  |        |                  |  |  |  |         |             |  |  |  |        |             |  |  |  |        |             |  |  |  |        |             |  |  |
| LCC-350 Leather Case *B for 120 VAC, C for 230 VAC, F for 220-240 VAC Various accessories listed may not be available in some countries.      |  |  |  |   |  |   |  |   |     |        |             |         |                  |  |        |             |        |             |     |        |                  |  |  |  |        |                  |  |  |  |        |                  |  |  |  |         |             |  |  |  |        |             |  |  |  |        |             |  |  |  |        |             |  |  |
| Programming Cable   | USB  | FIF-10/A + CT-106  | RS-232C  | CT-29 + CT-28   | Programming Software   | CE86  |  |   |     |        |             |         |                  |  |        |             |        |             |     |        |                  |  |  |  |        |                  |  |  |  |        |                  |  |  |  |         |             |  |  |  |        |             |  |  |  |        |             |  |  |  |        |             |  |  |



VERTEX STANDARD CO., LTD.

4-8-8 Nakameguro, Meguro-ku, Tokyo 153-8644, Japan

For our latest product news, visit us on the Internet:  
<http://www.vxstd.com>

VIVA-TELECOM.RU

2007.0405NA(EXP)

B9200566 Printed in Japan

VERTEX STANDARD <http://www.vertexstandard.com>

US Headquarters

10900 Walker Street, Cypress, CA 90630, U.S.A.

Phone +1 714-827-7600

YAESU EUROPE B.V.

P.O. Box 75525, 1118 ZN Schiphol, The Netherlands

Phone +31 20-5005270

YAESU UK LTD.

Unit 12, Sun Valley Business Park, Winnall Close

Phone +44 196 286 6667

Winchester, Hampshire, SO23 0LB, U.K.

VERTEX STANDARD HK LTD. <http://www.vxstd.com.hk>

Unit 5, 20/F., Seaview Centre, 139-141 Hoi Bun Road,

Phone +852 2732 2288

Kwun Tong, Kowloon, Hong Kong

VERTEX STANDARD AUSTRALIA PTY. LTD.

Normanby Business Park, Unit 14/45 Normanby Road

Phone +61 3 95182100

Notting Hill 3168, Victoria, Australia