

# VX-424/427 SERIES

VHF/UHF Portable Radios



- 5 WATTS POWER OUTPUT (SELECTABLE TO 1 WATT)
- 32 CHANNEL CAPABILITY
- 256 CHANNEL
- 8-CHARACTER ALPHANUMERIC DISPLAY
- MULTI-MODE SCAN (DUAL WATCH, PRIORITY, FOLLOW-ME)
- 5-TONE ENCODE/DECODE
- 2-TONE ENC/DEC (DUAL 2-TONE DEC)
- CTCSS / DCS ENCODE AND DECODE
- DTMF ANI/DTMF PAGING (REQUIRES OPTIONAL FVP-25)
- 2 PROGRAMMABLE SIDE FUNCTION BUTTONS
- 4 PROGRAMMABLE FRONT-PANEL FUNCTION BUTTONS (VX-420/420A Series)
- FRONT PANEL KEYPAD ILLUMINATION
- 12.5/20/25 kHz BANDWIDTH (PROGRAMMABLE BY CHANNEL)
- COMPANDER INCLUDED (AVAILABLE ON WIDE AND NARROW CHANNELS)
- VOICE ENCRYPTION BUILT IN
- SmarTrunk II™ Operation Available
- VOICE STORAGE (OPTIONAL DVS-5 REQUIRED)
- ARTS™ (AUTO-RANGE TRANSPOND SYSTEM)
  - BCLO, BTLO AND TOT FUNCTIONS
  - RX POWER SAVE CIRCUIT
  - PC PROGRAMMABLE
  - RADIO-TO-RADIO CLONING
  - RUGGED CONSTRUCTION
  - LOUD, CLEAR AUDIO OUTPUT
  - MIL-STD 810 D/E/F
  - INTRINSICALLY SAFE (IS) OPTION
  - COMPACT CASE SIZE, LIGHT WEIGHT











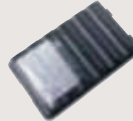








## Specifications

	VHF VX-424	UHF VX-427
<b>General</b>		
Frequency Range	134-160 MHz 146-174 MHz	400-440 MHz (AS2) 420-450 MHz (B) 440-470 MHz (CS)
Number of Channels	256 channel (group 2~16)	256 channel (group 2~16)
Channel Spacing	25/20/12.5 kHz	
Battery voltage	7.5 VDC	
Temperature Range	-30° C to +60° C	
Case size (W x H x D)	58 x 108.5 x 30 mm with FNB-V57	
Weight (approx.)	300 g with FNB-V67LI, Antenna and Belt clip	
<b>Receiver</b> <b>Measurements made per EIA standard TIA/EIA-603</b>		
Circuit Type	Double-conversion Super-heterodyne	
IFs	50.85 MHz & 450 kHz	
12-dB SINAD Sensitivity	< 0.25 μV	
Squelch Sensitivity	< 0.20 μV	
Adjacent Selectivity	> 70 dB (25/20 kHz) / > 65 dB (12.5 kHz)	
Intermodulation	> 70 dB	
Spurious Rejection	> 70 dB	
Image Rejection	> 70 dB	
FM Ham and Noise	> 45 dB	
AF Output	0.5 W @ 4 Ohms, 5% THD	
<b>Transmitter</b> <b>Measurements made per EIA standard TIA/EIA-603</b>		
Power Output	5.0/1.0 W (Selectable)	
Frequency Stability	Better than ±2.5 ppm	
Modulation System	16K0F3E, 11K0F3E	
Maximum Deviation	±5.0 kHz (25 kHz) / ±2.5 kHz (12.5 kHz)	
FM Noise	> 45 dB	
Spurious Emission	70 dB below carrier	
AF Distortion (@ 1 kHz)	< 3 %	
Microphone Type	2-k Ohms condenser	

Measurements per EIA standards unless noted above. Specifications are subject to change without notice or obligation.

## Accessories & Options

 Speaker/Microphone	 Earpiece/Microphone	 VOX Headset
 DTMF Pager Unit	 Rolling Code Encryption Unit	 Digital Voice Storage Unit
 MDC1200®/GE-STAR® ANI Encoder Unit	 MDC1200®/GE-STAR® ANI Encoder/Decoder Unit	 Digital ANI Encoder Unit
 7.2V 1800 mAh Ni-MH Battery Pack	 7.2V 1600 mAh Ni-MH Battery Pack	 7.2V 2000 mAh Ni-MH Battery Pack
 6-unit Multi Charger	 Desktop Charger	 Desktop Rapid Charger
 6-Unit Multi Charger	 Mobile Mounting Bracket	 Cloning Cable (Set-to-Set Cloning)

\*SmarTrunkII™ Logic Board is available by SmarTrunk System Inc.

## Applicable MIL-STD

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	516.5/Procedure I

## Intrinsically Safe Information

The Intrinsically Safe Version, equipped with any of optional units, meets the requirements of ANSI/UL913 6th Edition for Class I, Division 1, Groups A-D; Class II, Groups E-G; and Class III for hazardous locations.



**SURYA TELECOM PVT. LTD.**

**WIRELESS & TELECOM ENGINEERS**

SCO 36, Sector 3,  
Panchkula - 134 109 Haryana, INDIA  
E-mail : office@suryatel.com