Give your team members a compact, discreet, and lightweight radio that allows them to be comfortable in any situation.

Worn on a belt, tucked away in a pocket or clipped to a lapel, the water-submersible and dust-proof EVX-S24 is designed to survive demanding conditions. It operates in both analog and digital modes, so it’s ideal for use with mixed fleets. And in digital mode, enjoy noise cancellation for crisp audio and clear conversations.

**SPECIFICATIONS | EVX-S24**

**PORTABLE DIGITAL RADIO**

**GENERAL FEATURES**
- Water Submersible and Dust Proof (IP67)
- Channel Capacity:
  - 256 Channels/16 Groups
- 4 Programmable Keys
- 8 Character Alphanumeric Display
- Safety Features:
  - Lone Worker Alert
  - Emergency Alert
- Multiple Scan Options
- Better Radio Call Quality with AMBE+2® Vocoder
- Battery Status Indicator (Low Battery Alert)
- Battery Saver
- Busy Channel Lock Out (BCL0)
- Time Out Timer
- Key Lock
- AF Minimum Volume
- Auto Power Off
- Escalating Alerts
- Low Power
- Whisper Mode
- RSSI Indicator
- Internal VDX (VH-190 Required)

**SIGNALLING FEATURES**
- MDC-1200® ANI Encode
  - MDC-1200 Call Alert
  - MDC-1200 Sel Call
  - MDC-1200 Radio Check
  - MDC-1200 Stun/Revive
- FleetSync® ANI Encode
- CTSS/DCS Encode and Decode
- 2-Tone Encode/Decode
- 5-Tone Encode/Decode
- Stun/Kill/Revive (5-Tone and DTMF Pager)
- DTMF Encode/Decode
- DTMF ANI
- DTMF Paging
- DTMF Speed Dial

**ANALOG MODE FEATURES**
- Busy Tone Lock Out (BTLO)
- Auto Range Transponding System (ARTS™)
- Voice Inversion Encryption

**DIGITAL MODE FEATURES**
- Direct Mode
- Transmit Interrupt
- Site Search
- Message Control and Privacy
- Text Message
- All, Group and Private Call
- Basic and Enhanced Privacy
- Radio Check
- Radio STUN/REVIVE
- Remote Monitor (Decode)
- Call Alert
- Call History
- Simplex Only and Repeater Capable Encryption
- Emergency
- Radio Enable/Disable
- Scan Options:
  - Scan (Mixed Mode - Analog/Digital Channels)
  - Scan (Operator Selectable On/Off)
GENERAL SPECIFICATIONS

Frequency Range
UHF: 403 – 470 MHz

Dimension (H x W x D)
3.58 x 2.17 x 1.24 Inches (91 x 55 x 31.5 mm)

Weight
Approx. with Antenna, Belt Clip
7.6 oz [215 g] with [FNB-V142LI, ATU-20, Belt Clip]

Display
8 Character Alphanumeric

Channel Spacing
25/12.5 kHz

Number of Channels and Groups
256/16

Programmable Buttons
4 (Front: 3, Side: 1)

Battery Life 
[5-5-90 Duty with Battery Saver]
Digital 3W: 12 Hours/Analog 2W: 11 Hours

IP Rating
67

Power Supply Voltage
3.7 VDC (Nominal)

Operating Temperature Range
-22º F to +140º F (-30º C to +60º C)

Frequency Stability
± 1.5 ppm

RF Input-Output Impedance
50 Ohms

RECEIVER SPECIFICATIONS

measured by TIA/EIA 603

Sensitivity
Analog 12 dB SINAD: 0.25 uV
Digital 1% BER: 0.28 uV

Adjacent Channel Selectivity
TIA603: 70/60 dB (25 kHz/12.5 kHz)
TIA603D: 70/45 dB (25 kHz/12.5 kHz)

Intermodulation
70 dB

Spurious Rejection
70 dB

Audio Output
500 mW @ 4 Ohms 10 % THD

FM Hum and Noise
45/40 dB (25 kHz/12.5 kHz)

Conducted Spurious Emission
-57 dBm

TRANSMITTER SPECIFICATIONS

measured by TIA/EIA 603

Output Power
Digital 3 W/2 W/1 W/0.5 W, Analog 2 W/1 W/0.5 W

Modulation Limiting
± 5 kHz (25 kHz); ± 2.5 kHz (12.5 kHz)

Conducted Spurious Emission
≤ 38 dBm (+1 GHz), 30 dBm (+1 GHz)

FM Hum and Noise
45/40 dB (25 kHz/12.5 kHz)

Audio Distortion
< 5 % @ 1 kHz

Adjacent Channel Power
70/60 dB

Digital 3W/2W/1W/0.5W, Analog 2W/1W/0.5W

4FSK Digital Modulation
12.5 kHz Data: 7K60F1D/7K60FXD
12.5 kHz Voice: 7K60F1E/7K60FXE
Combination of 12.5 kHz Voice and Data: 7K60F1 W

Digital Vocoder Type
AMBE+2

Digital Protocol
ETSI102 361-1, -2, -3

APPLICABLE MIL-STD

Methods/Procedures

<table>
<thead>
<tr>
<th>Standard</th>
<th>MIL 810C</th>
<th>MIL 810D</th>
<th>MIL 810E</th>
<th>MIL 810F</th>
<th>MIL 810G</th>
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</thead>
<tbody>
<tr>
<td>Low Pressure</td>
<td>5001 proc 1</td>
<td>5002 proc 2</td>
<td>5003 proc 2</td>
<td>5004 proc 1/2</td>
<td>5005 proc 1/2</td>
</tr>
<tr>
<td>High Temperature</td>
<td>5011 proc 1/2</td>
<td>5012 proc 1/1A proc 2/2A</td>
<td>5013 proc 1/1A proc 2/2A</td>
<td>5014 proc 1/1HOT proc 2/HOT</td>
<td>5015 proc 1/1A proc 2/A2</td>
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<tr>
<td>Low Temperature</td>
<td>5021 proc 1</td>
<td>5022 proc 1/3 Cat 3 proc 2/2 Cat 1</td>
<td>5023 proc 1/3 Cat 3 proc 2/2 Cat 1</td>
<td>5024 proc 1/3 Cat 3 proc 2/2 Cat 1</td>
<td>5025 proc 1/3 Cat 3 proc 2/2 Cat 1</td>
</tr>
<tr>
<td>Temperature Shock</td>
<td>5031 proc 1</td>
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<td>5033 proc 1/1A Cat 3 proc 2/2 Cat 1</td>
<td>5034 proc 1</td>
<td>5035 proc 1/1C</td>
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<tr>
<td>Solar Radiation</td>
<td>5051 proc 2</td>
<td>5052 proc 1</td>
<td>5053 proc 1</td>
<td>5054 proc 1</td>
<td>5055 proc 1/1A</td>
</tr>
<tr>
<td>Rain</td>
<td>5061 proc 1/2</td>
<td>5062 proc 1/2</td>
<td>5063 proc 1/2</td>
<td>5064 proc 1/3</td>
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<td>Humidity</td>
<td>5071 proc 2</td>
<td>5072 proc 2</td>
<td>5073 proc 2</td>
<td>5074</td>
<td>5075 proc 2/Agg</td>
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<tr>
<td>Salt Spray/Fog</td>
<td>5091 proc 1</td>
<td>5092 proc 1</td>
<td>5093 proc 1</td>
<td>5094</td>
<td>5095</td>
</tr>
<tr>
<td>Dust</td>
<td>5101 proc 1</td>
<td>5102 proc 1</td>
<td>5103 proc 1</td>
<td>5104 proc 1</td>
<td>5105 proc 1</td>
</tr>
<tr>
<td>Blowing Sand</td>
<td>--</td>
<td>5102 proc 2</td>
<td>5103 proc 2</td>
<td>5104 proc 2</td>
<td>5105 proc 2</td>
</tr>
<tr>
<td>Vibration</td>
<td>5142 proc 8/F, W</td>
<td>5143 proc 1/10 Cat 3 proc 2/2 Cat 3</td>
<td>5144 proc 1/10 Cat 3 proc 2/2 Cat 3</td>
<td>5145 proc 1/1 Cat 24</td>
<td>5146 proc 1/1 Cat 24</td>
</tr>
<tr>
<td>Shock</td>
<td>5162 proc 1/2/3/5</td>
<td>5163 proc 1/4/6</td>
<td>5164 proc 1/4/6</td>
<td>5165 proc 1/4/6</td>
<td>5166 proc 1/4/6</td>
</tr>
</tbody>
</table>

ACCESSORIES

Antennas
- ATU-6A: 400-430 MHz 6.5” (16.51 cm)
- ATU-6B: 420-450 MHz 6.1” (15.49 cm)
- ATU-6C: 440-470 MHz 6.1” (15.49 cm)
- ATU-6D: 450-485 MHz 6” (15.24 cm)
- ATU-20AS: Stubby 400-430 MHz 3.15” (8 cm)
- ATU-20CS: Stubby 420-450 MHz 3.15” (8 cm)
- ATU-20DS: Stubby 440-470 MHz 3.15” (8 cm)
- ATU-20FS: Stubby 450-480 MHz 3.15” (8 cm)
- ATU-21AS: Super Stubby 400-420 MHz 2” (5.08 cm)
- ATU-21CS: Super Stubby 420-440 MHz 2” (5.08 cm)
- ATU-21DS: Super Stubby 440-460 MHz 2” (5.08 cm)
- ATU-21FS: Super Stubby 460-480 MHz 2” (5.08 cm)

Battery
- PMNN446B: 2300 mAh Li-Ion Battery

Carry Solutions
- LCC-S24: Leather Case, Belt Loop
- LCC-S24S: Leather Case, Swivel Belt Loop
- Clip-27: Belt Clip

Chargers
- PA-57: Power Adapter
- CD-65: Standard Single Unit Charging Cradle
- CD-66: Enhanced Single Unit Charging Cradle
- VAC-6066: Multi Unit Charger

Audio Accessories
- MH-89A4B: Earpiece Microphone
- MH-90A4B: Compact Speaker Microphone
- MH-66F4B: IP57 Submersible Speaker Microphone
- VH-190: VOX Lightweight Headset, Behind-the-Head

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