EVX-S24

COMPACT, DISCREET, LIGHTWEIGHT

GOODBYE CROSSTALK

BROADEN YOUR REACH

COME IN LOUD AND CLEAR

KEEP YOUR TEAM SAFE

POWER THROUGH THE SHIFT

PORTABLE DIGITAL RADIO

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.

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 (BCLO)
- Time Out Timer
- Key Lock
- AF Minimum Volume
- Auto Power Off
- Escalating Alerts
- Low Power
- Whisper Mode
- RSSI Indicator
- Internal VOX (VH-190 Required)

SIGNALING FEATURES

- MDC-1200® ANI Encode
  - MDC-1200 ANI
  - MDC-1200 Call Alert
  - MDC-1200 Sel Call
  - MDC-1200 Radio Check
  - MDC-1200 Stun/Revive
- FleetSync® ANI Encode
- CTCSS/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)

MOTOROLA SOLUTIONS

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 Impedence	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	-36 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
Analog FM Modulation	16K0F3E [25 kHz], 11K0F3E [12.5 kHz]
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				
Standard	**MIL 810C**	**MIL 810D**	**MIL 810E**	**MIL 810F**	**MIL 810G**
Low Pressure	500.1 proc 1	500.2 proc 2	500.3 proc 2	500.4 proc 1/2	500.5 proc 1/2
High Temperature	501.1 proc 1/2	501.2 proc 1/A1 proc 2/A1	501.3 proc 1/A1 proc 2/A1	501.4 proc 1/HOT proc 2/HOT	501.5 proc 1/A1 proc 2/A2
Low Temperature	502.1 proc 1	502.2 proc 1/Cat 3 proc 2/Cat 1	502.3 proc 1/Cat 3 proc 2/Cat 1	502.4 proc 1/Cat 3 proc 2/Cat 1	502.5 proc 1/Cat 3 proc 2/Cat 1 proc 3/Cat 1
Temperature Shock	503.1 proc 1	503.2 proc 1/A1 Cat 3	503.3 proc 1/A1 Cat 3	503.4 proc 1	503.5 proc 1/C
Solar Radiation	505.1 proc 2	505.2 proc 1	505.3 proc 1	505.4 proc 1	505.5 proc 1/A1
Rain	506.1 proc 1/2	506.2 proc 1/2	506.3 proc 1/2	506.4 proc 1/3	506.5 proc 1/3
Humidity	507.1 proc 2	507.2 proc 2	507.3 proc 2	507.4	507.5 proc 2/Agg
Salt Spray/Fog	509.1 proc 1	509.2 proc 1	509.3 proc 1	509.4	509.5
Dust	510.1 proc 1	510.2 proc 1	510.3 proc 1	510.4 proc 1	510.5 proc 1
Blowing Sand	–	510.2 proc 2	510.3 proc 2	510.4 proc 2	510.5 proc 2
Vibration	514.2 proc 8/F, W	514.3 proc 1/Cat 10 proc 2/Cat 3	514.4 proc 1/Cat 10 proc 2/Cat 3	514.5 proc 1/Cat 24	514.6 proc 1/Cat 24
Shock	516.2 proc 1/2/3/5	516.3 proc 1/4/6	516.4 proc 1/4/6	516.5 proc 1/4/6	516.6 proc 1/4/6

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

- PMNN4468: 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

EVX-S24 Black

EVX-S24 Yellow

MOTOROLA SOLUTIONS

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