

# Spectralink 84-Series Handsets

## Product Specifications

The Spectralink 84-Series handsets deliver on a fundamental need for enterprise-grade on-site voice mobility. Characterized by market-leading HD voice quality, durability, broad telephony and WLAN interoperability, the Spectralink 84-Series handsets deliver a reliable user experience and predictable return on investment. And with Spectralink VQO built into every 84-Series device, you get an engineered system that delivers superior voice quality. Spectralink VQO links seamlessly to access points using a proprietary, adaptive, algorithm. And only advanced, guided implementation by the Spectralink experts can ensure crystal-clear communication. It's our Performance Promise.

The Spectralink 84-Series enhances the customer value proposition through an optional integrated barcode scanner and an enhanced standards-based applications interface. In partnership with the Spectralink applications development ecosystem, the Spectralink 84-Series products enable new opportunities for end-user productivity solutions.



## PHYSICAL CHARACTERISTICS

### Durability and Performance

#### DISPLAY

- 2.2 in. (55.9 mm)
- 240 x 320 resolution
- 65,000 color palette

#### BUTTONS

- Four (4) context-sensitive softkey buttons
- Push-to-Talk
- Five-way navigation and select control
- Home & Back navigation keys
- Up/Down volume control
- Barcode reader (8452/8453 handsets)
- Start and End Keys
- Panic/Duress

#### STATUS LED

- Message (voicemail) waiting
- Out of coverage
- Phone ringing

#### PERIPHERAL INTERFACES

- Micro USB interface for wall charging and configuration
- 2.5mm connector for wired headset
- Bluetooth

#### BATTERIES

- Two easy-access cosmetic battery capacity options
- Standard – Up to 8 hrs talk time, 80hrs standby time
- Enhanced – Up to 12 hrs talk time, 120hrs standby time

*May vary based on scanner, applications usage, screen brightness settings, etc.*

## PHYSICAL CHARACTERISTICS

### DURABILITY

- Drop/shock: MIL STD 810F, method 516.5 procedure IV
- Ingress protection standard: IP 64 per IEC 60529
- Rubberized molding
- Magnesium LCD mounting

### ENVIRONMENTAL

- Operational temperature: 32 - 104° F (0 - 40° C)
- Storage temperature: -22 -140° F (-30 - 60° C)

### DIMENSIONS & WEIGHT

	SPECTRALINK 8440/8441	SPECTRALINK 8452/8453
Dimensions	5.8 x 2.1 x 1.0 in. (147 x 53 x 25 mm)	5.7 x 2.1 x 1.3 in. (146 x 54 x 34 mm )
Weight	5.1 oz (144.6 gr.)	5.7 oz (161.6 gr.)

As measured with standard battery.

## WIRELESS NETWORKING

### Wi-Fi

BAND	FREQUENCY	DATA RATES
802.11a	5.15 - 5.25 GHz 5.25 - 5.35 GHz 5.47 - 5.725 GHz 5.725 - 5.825 GHz	6, 9, 12, 18, 24, 36, 48, 54 Mbps
802.11b	2.4 - 2.4835 GHz	1, 2, 5.5, 11 Mbps
802.11g	2.4 - 2.4835 GHz	6, 9, 12, 18, 24, 36, 48, 54 Mbps
802.11n*	2.4 & 5 GHz	21.7, 43.3, 65, 72.2 Mbps

2.4GHz and 5GHz dynamic band roaming supported

\*Single-stream, 20MHz channel with SGI

### Bluetooth Headset Support

- Version 2.1, HSP Version 1.2
- Class 1 support with range of ~10 meters

### FRONT VIEW - ALL MODELS



## TELEPHONY FEATURES

### Rich call server feature integration and native Push-to-Talk

#### CALL HANDLING FEATURES\*

- Up to six (6) telephone line appearances
- Call Hold/Resume function
- Last Call Return
- Music on Hold
- Consultation Hold
- Call Transfer (Attended, Unattended)
- Overlap dialing
- Bridged Line Appearance (BLA)
- Three-Way Conferencing (local)
- Find-Me call forking
- Call Screening (Incoming, Outgoing)
- Automatic Answer
- Call Park & Retrieve
- Group Call Pickup
- Call Waiting
- Multiple Calls per Line
- Do Not Disturb
- Calling party ID (Name and Number)
- Called party ID (Name and Number)
- Connected party ID (Name and Number)
- Call Forward (Busy, No Answer, Unconditional)
- Call Reject

\*Summary only – actual feature support will vary among call platforms

#### CODECS

- G.711 (a-law, u-law), G.729, G.722, G.722.1

#### PUSH-TO-TALK (PTT)/PAGING

- On-board native 'walkie-talkie' capability
- One-to-one, one-to-many broadcast communication
- 24 configurable channels
- Priority, default channel

#### ADDITIONAL TELEPHONY FEATURES

- RTCP (RFC 3550, RFC 1889)
- Call server redundancy
- Predictive dialing from contacts list
- Recent call lists

## USABILITY

### Intuitive and user-friendly

#### USER PROFILES

- Downloadable to any handset with ID and Login

#### PERSONAL SAFETY

- Duress/Panic button
- No motion, running, tilt detection
- Alarm notifications

	SPECTRALINK 8440	SPECTRALINK 8441	SPECTRALINK 8452	SPECTRALINK 8453
<b>Duress</b>	X	X	X	X
<b>Running</b>		X		X
<b>No Motion</b>		X		X
<b>Tilt</b>		X		X

#### ADDITIONAL

- Intuitive Graphical User Interface
- Selectable wallpaper/background
- Adjustable display brightness
- Backlit keypad with adjustable timeout period
- Ten (10) selectable ring tones
- Ten (10) selectable alert tones
- Multiple vibrate cadence options
- Vibrate-to-ring options
- Audible and vibrate notification options
- Speed dial menu list
- Contacts directory with support for 1000 local entries
- Call logs - Minimum of 20 logged entries for each call type (Incoming, dialed, and missed)
- Emergency system-wide speed dial
- Auto-answer & any key answer capability
- Selectable ring tones
- Unicode UTF-8 Multilingual User Interface

## MANAGEMENT

### Ease of provisioning, performance and fault management

#### PROVISIONING

- Server based central provisioning via FTP, FTPS, TFTP, HTTP or HTTPS
- Centralized user administration
- Provisioning and call server redundancy
- Initial configuration via USB
- Unicode UTF-8 Multilingual User Interface

#### PERFORMANCE AND FAULT MANAGEMENT

- On-board site survey and diagnostics tools
- Enhanced syslog reporting
- Roaming and handoff reporting
- Event logging
- Hardware diagnostics
- Status and status reporting
- PING support (initiate and response)
- Traceroute

#### CONFIGURATION MANAGEMENT

- User and administrator login and privileges
- PC-connected (USB) and remote over-the-air configuration management

## APPLICATIONS TOOLS

### Feature rich data applications interface options

#### XML APPLICATIONS PROGRAM INTERFACE

- Standards-based XHTML API
- On-board WebKit-based browser (JavaScript, CSS, DOM) for rich applications integration
- Corporate directory access LDAP

#### SPECTRALINK OPEN APPLICATION INTERFACE (OAI)

- Backward compatibility with Spectralink OAI applications

#### INSTANT MESSAGING

- Handset-to-handset, PC client-to-handset IM support via Microsoft® OCS and/or Microsoft Lync

#### REAL TIME LOCATION SERVICES (RTLS)

- Embedded RTLS beacon (Ekahau) for location tracking
- AeroScout

#### CALENDAR - EXCHANGE SERVER INTEGRATION

- Day and month view
- Meeting reminders



## PERFORMANCE

### Industry leading voice and call quality

#### AUDIO QUALITY

- TIA 810B, TIA 920 audio quality standards
- Full-duplex audio (compliant with IEEE 1329 full duplex standards)
- Voice activity detection (VAD)
- Comfort noise fill
- Adaptive jitter buffer & packet loss concealment
- Acoustic echo cancellation & background noise suppression

#### QUALITY OF SERVICE (QOS)

- Wi-Fi Multimedia (WMM)
- WMM-Power Save
- WMM-Admission Control (draft)
- IEEE 802.1p/Q tagging (VLAN)/DSCP tagging

#### SECURITY

- WEP, WPA-Personal, WPA2-Personal, WPA2-Enterprise with 802.1X (EAP-FAST, PEAP-MSCHAPv2) with Opportunistic Key Caching (OKC) and Cisco Client Key Management (CCKM)
- Media encryption via Secure Real-Time Protocol (SRTP)
- SIP signaling encryption via Transport Layer Security (TLS)
- Server-based configuration file encryption (AES 128 bit)
- HTTPS secure provisioning
- Support for signed software executables

## NETWORKING

### Strong support for networking standards

- Address assignment via Manual or Dynamic host configuration protocol (DHCP)
- Domain name resolution via Domain Name Service (DNS)
- Time and date synchronization using Simple Network Time Protocol (SNTP)
- Lightweight Directory Access Protocol (LDAP) for directory lookup and download
- IEEE 802.1p/Q tagging (VLAN)/DSCP tagging

## DATA CAPTURE SPECIFICATIONS

### High-performance scanning

FEATURE	SPECTRALINK 8452/8453
Type	1D/2D Area Imagers
Light Source	617 nm Highly Visible LED (5)
Scan Angle	38.9° Horiz., 25.4° Vert.
Label print contrast	Down to 25%
Resolution	Optical Resolution 752 x 480 pixels
Reading distance	Up to 34 in. (864 mm)

### BARCODE SYMBOLOGIES

- 1D: RSS, Stacked RSS, RSS-14, GS1-DataBar, Code 39, Code 93, Code 128, UPC (E&A)
- 2D: Aztec, Codabar, Code 11, Code 39, Code 93/93I, Code 128, GS1-128, ISBT8, Databar (RSS), Datamatrix, EAN13, EAN8, Interleaved 2 of 5, Micro PDF 417, MSI, PDF 417, Plessey, QC code, Telepen, UPCA, UPCE, UPC/EAN

## ACCESSORIES

### Accessories that deliver mobile communication solutions to the Enterprise

#### SPEAKERPHONE DOCK

- Docking base provides full-duplex HD Voice speakerphone and charging
- Ideal for small group conference settings
- Suitable for replacement of a desktop phone
- Includes on-board mute, volume and speakerphone controls
- Wired headset options
- Provides handset and spare battery charging



#### DUAL CHARGER

- Ideal for desktop use to augment or replace a desktop phone
- Provides handset and spare battery charging



#### QUAD CHARGER

- Charges up to four spare battery packs simultaneously
- Ideal for shift-work environments and highly-mobile users
- Designed for tabletop or wall-mounting



#### MULTI-CHARGER

- Charges up to 12 battery packs simultaneously
- Wall or desk mount
- Ideal for multi-shift environment



#### Learn More

Learn what Spectralink wireless telephones can do for your organization. Visit us at [spectralink.com](http://spectralink.com) or contact your Spectralink representative.

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