

# MOTOTRBO™ SL SERIES



# DIGITAL TWO-WAY PORTABLE RADIO

WHERE FUNCTION MEETS STYLE



A man in a light-colored suit and patterned tie is shown in profile, looking down at a black mobile device he is holding in his hands. The background is a blurred office or hotel lobby with warm lighting and bokeh effects.

# DIGITAL HAS NEVER LOOKED BETTER

From the concierge desk to the convention center, MOTOTRBO™ SL Series keeps you instantly connected and in control with an incredibly sleek and light radio for the ultimate in discreet communication.

Versatile and powerful, our revolutionary MOTOTRBO portable combines the best of two-way radio functionality with the latest digital technology. SL Series radios integrate voice and data seamlessly and offer enhanced features that are easy to use, such as integrated Bluetooth®, covert mode, vibrate alert and Intelligent Audio. Designed in an ultra-thin form factor so sophisticated, it is like no other radio you have used.

Only the SL Series enhances your professionalism, so you can remaster your productivity and image like never before.

### **DISCREET WAS NEVER SO SLEEK**

Everything about the SL Series portable is designed for discretion and professionalism. From its incredibly sleek shape – so your staff will always look professional – to its exceptionally slim size. Hold it in your hand and feel how light it is – less than half the weight of a standard radio. It's so effortless to carry, comfortable to wear and elegant in styling, it complements the most upscale attire.

The accessories are also designed to complement the sleek, compact design of the SL Series portables. Bluetooth® wireless and compact single-wire earpieces enhance discreet communication and increase guest satisfaction.

### **AUDIO BEYOND EXPECTATIONS**

When it comes to exceptional audio clarity, the quality of digital can't be surpassed. With the SL Series portables, you get digital quality plus unique features to help your employees hear and speak clearly, wherever they work.

With the Intelligent Audio feature, the radio's volume automatically adjusts to compensate for background noise so managers won't miss a call on the manufacturing floor or disturb others when they return to the main office. The radio's background noise suppression software filters out external clamor – from crowded conventions to bustling airport gates. And Bluetooth® audio, embedded right in the radio, provides wireless voice communication with outstanding clarity and discretion.

### **INDUSTRY-LEADING DATA**

Whether the front desk is assisting a guest or the event planner is preparing for a special event, sharing information instantly is paramount. The SL Series features text messaging and embedded Bluetooth® data right in the radio so work teams can share real time information, saving

valuable hours and enabling better decision making. Plus your staff can read work order tickets and text messages quickly and clearly on the large, high-resolution, full-color screen.

Take a look at the enhanced work order ticket management in the SL Series and see what true efficiency can be. We've eliminated a number of steps to read work order tickets and the five-line display presents data at a glance – saving time and eliminating scrolling through screens.

And Motorola's Application Developer Program offers customized data applications tailored to your operations. With the largest developer program in the industry, data applications answer your objectives – from email gateways to telephony integration, and more.

### **COVERT WHEN IT COUNTS**

Put the SL Series radio in covert mode and it goes dark – shielding the display, LED lights and audible tones – for the ultimate in discretion. Your security personnel can hear clearly using our discreet audio accessories, but no one else can. These accessories – a swivel earpiece or surveillance earpiece with a translucent tube – are so small, sleek and powerful, your staff can converse privately and conveniently wherever they work.

### **EXCEPTIONALLY INTUITIVE**

The high-resolution, full-color screen on the SL Series portable automatically senses ambient light and adjusts backlighting for optimal viewing in all kinds of conditions. It also features a full keypad and an enhanced programmable button that manages up to nine frequently used features. Press a button and access all of your contacts or check the status of a work ticket with just a touch.

### **MOTOROLA'S APPLICATION DEVELOPER PROGRAM: BUILT FOR YOUR BUSINESS**

Powerful and flexible, MOTOTRBO is a business critical communication tool that adapts to your workforce, your customers and your operations.

With the industry's largest Application Developer Program, MOTOTRBO offers a wide array of data applications to expand communication beyond voice. What's more, you can work directly with third-party developers or your own IT staff to create customized applications designed for your unique needs.



## **KEEP BUSINESS RUNNING SMOOTHLY WITH BUSINESS APPLICATIONS:**



**Work order tickets** for faster customer response



**Integrated Bluetooth®** for sharing data wirelessly and instantly between devices



**Dispatch consoles** for centralized communication



**Email gateways** to connect to email from your radio



**Network monitoring** to maximize system utilization



**Man-down applications** so radios call for help when workers can't



**Telephony** for communication between radios and landline or mobile phones



**Text messaging** for quick and discreet communication

## MOTOTRBO™ SL SERIES DIGITAL TWO-WAY PORTABLE RADIO

Customizable voice announcement provides audible confirmation so a user can be notified of channel and zone changes or programmable button statuses without having to view the radio display. And for discretion, they can use the vibrate alert feature to switch the radio to vibrate mode and never disturb or interrupt guests again.

### EXPANDED CAPACITY AND COVERAGE

Your personnel are on the move – throughout your buildings and across your properties. That's why you need the far-reaching performance of MOTOTRBO. The IP Site Connect solution dramatically improves customer service and productivity by using the Internet to extend coverage to create a wide area network, enhance single-site coverage or link geographically dispersed locations. Capacity Plus provides single-site trunking and expands capacity to over 1,000 users without adding new frequencies. Linked Capacity Plus leverages the high capacity of Capacity Plus, with the wide area coverage capabilities of IP Site Connect to keep your staff connected with an affordable wide area trunking solution. Other multi-site digital trunking solutions, such as Connect Plus, will be supported in a future release. So whether you want expanded coverage at a single site or across multiple ones, MOTOTRBO can be scaled to meet your voice and data communication needs.

### REMARKABLY RELIABLE

The SL Series meets demanding specs, including IP54 for dust and water protection and U.S. Military 810 C, D, E and G. Moreover, it has been proven tough in Motorola's grueling Accelerated Life Test program, in which the design must survive a simulated 5 years of hard service before it is accepted.



"It means a lot that we have a radio that can provide that service because at the end of the day, I want to be satisfied with feeling that I've just given our guests and residents a five-star, Five Diamond service."

- Max Jenue-Gens  
Security Officer, Acqualina Resort and Spa on the Beach, Miami

### MANAGE YOUR FLEET EFFICIENTLY

Make it easy for yourself with the MOTOTRBO Radio Management tool: Configure large fleets of radios in batches instead of individually. Make updates quickly and reliably using a centralized server and easy-to-use templates.

And with Over The Air Programming (OTAP), you can use the power of Radio Management from any location. Manage and update radios when it suits your schedule, without removing them from the field.

### KEEP YOUR TECHNOLOGY IN TOP CONDITION

Managing in-house repairs and maintenance of your radios takes a dedicated staff of technicians and an ongoing investment in diagnostic equipment, repair tools and technical training to keep up to speed on the latest technology.

We've made that investment for you so you can easily and cost-effectively keep radios in top operating condition. Subscriber repair services help you budget for repairs and prevent unexpected costs.

### GET DURABILITY THAT ENDURES

The SL Series is backed by a two-year Standard Warranty (US and Canada) with a minimum one-year warranty on Motorola-branded accessories. Because accidents happen, Motorola recommends Service from the Start Comprehensive, which delivers accelerated turnaround on radio repairs (including physical, chemical and liquid damage) and even covers shipping costs. By reducing your downtime, Service from the Start Comprehensive helps you to lower your total cost of ownership and focus on your business operations, not your technology.



SL 7590 (900 MHz)  
SL Series Radio in Carry Holster  
Radio shown in "face out" position



## FEATURES AT-A-GLANCE

1. Dual internal speakers deliver loud, clear audio quality
2. Tri-color LED indicator for clear, visible feedback of calling, scanning, roaming and monitoring features
3. Contoured push-to-talk button provides comfort and is easy to access
4. Four-way navigation disk for easy scrolling through menus and channels (supports up to 1,000 channels)
5. Three programmable option buttons for quick access to frequently used features; ability to program up to nine of your favorite features into a single programmable button; also supports emergency call
6. Audio connector port supports discreet wired audio accessories (wireless Bluetooth® audio also available)
7. Built-in photosensor automatically adjusts backlighting on the screen to optimize viewing in all types of conditions; special “day/night mode” changes screen and illuminates icons to make them clear and readable in varying light conditions
8. Large, high-definition, five-line, color display offers high clarity and resolution
9. Intelligent Audio feature automatically adjusts the radio volume according to the environment’s noise level
10. Innovative antenna design optimizes range performance

## ADDITIONAL FEATURES

- 2W DMR digital radio
- Weighs less than half of a standard two-way radio
- Discreet communications; covert mode setting and vibrate alert feature for increased security and privacy, eliminates guest disturbances
- Customizable voice announcement provides audible confirmation of channel or zone changes or programmable button statuses, without having to view the radio display
- Send quick text messages including customizable and pre-programmed messages
- Enhanced work order ticket management feature simplifies use and improves work order ticket response time

### STANDARD PACKAGE

- Five-line color display portable radio
- Carry holder
- Compact Li-ion battery
- Battery cover
- Two-year standard warranty

“The Motorola SL Series is fantastic. It’s really lightweight. It’s very easy to use.”

- Ruby Mountain  
 Reception, Claridge’s Hotel, London

**MOTOTRBO™ SL SERIES**  
**DIGITAL TWO-WAY PORTABLE RADIO**

MOTOTRBO SL Series radios are already best in class, but to help you work at your best, you need enhancements targeted to your specific workplace. We've developed a line of accessories with unique features designed to enhance your ability to serve your customers effectively, unleashing the full power of the industry's most advanced digital radio platform.

**UNLEASH YOUR RADIO WITH INTEGRATED BLUETOOTH**

Bluetooth audio is embedded right into your SL Series radio, giving you the flexibility to remove the radio from your belt if needed. A hotel receptionist can place the radio on the desk and communicate unobtrusively with staff on her wireless earpiece while welcoming guests.

Our expansive portfolio of Operations Critical Wireless earpieces give you the flexibility to choose the right earpiece for your workplace. Security teams can operate covertly with the Completely Discreet Wireless Kit. This unique kit allows you to hide all accessories and operate completely under cover. The Operations Critical Wireless earpieces perform well in your busy and noisy workplace.

**MOVE FROM HECTIC TO HUSHED**

Our SL Series radio offers a smart feature – Intelligent Audio – that adjusts radio volume to fit the environment's noise level. Intelligent Audio also works with select audio accessories, giving your workforce even more communication flexibility.

Connect an SL Series accessory and the Intelligent Audio feature automatically adjusts radio volume and filters out background noise, drastically improving audio clarity. Now your employees won't miss a call at a bustling banquet or disturb others when they move into a quiet hallway.

**TALK COMFORTABLY AND COVERTLY**

Our single-wire swivel earpiece and surveillance earpiece are small, sleek and powerful, so your employees can communicate easily wherever they walk and talk.

The transparent coiled cord and rubber earbud on the surveillance earpiece offers greater discreetness for security personnel. The flexible-fitting swivel earpiece is comfortable, even for extended shifts. Both earpieces have an in-line microphone and push-to-talk, making communication easier and unobtrusive.

Add compact carrying accessories – like a swivel carry holder or a lightweight wrist strap – and you've got flexibility and comfort that meets the needs of the busiest people on your team.

**THIN IS IN – FROM BATTERIES TO CHARGERS**

From the standard cell phone-sized batteries to the micro-USB charger that plugs directly in the wall, we designed our SL Series accessories with portability, professionalism and convenience as our top priorities. Both the standard and high-capacity batteries are so slim and lightweight that it's easy to carry spares.

Our unique multi-unit charger merges high power with high image, too. You can charge six radios simultaneously and recharge a battery in the top slot whenever a radio is removed. This charger is both functional and sleek in design.



Carry Holster  
Radio shown in "face in" position



Multi-Unit Charger



Swivel Earpiece



Wrist Strap



Wireless Completely Discreet Kit

"When I first saw the MOTOTRBO SL Series I thought that it was a cell phone, not an actual two-way radio. It has all the capabilities of a two-way radio but with a professional, discreet look that fits absolutely well with all our uniforms."

- Juan Velez  
Director of IT, Acqualina Resort and Spa on the Beach, Miami

## SL SERIES SPECIFICATIONS

GENERAL SPECIFICATIONS					
		SL 7550		SL 7590	SL 7580
		UHF Band 1	UHF Band 2	900 MHz	800 MHz
Channel Capacity		1000	1000	1000	1000
Frequency		403-470 MHz	450-512 MHz	896-902 MHz and 935-941 MHz	806-825 MHz and 851-870 MHz
Dimensions with BT70 Li-ion (1400 mAh) Battery	Height (H) x Width (W) x Thickness (T)	4.76 x 2.17 x 0.68 inches (121 x 55 x 17.4 mm)			
	Weight	5.39 oz / 153 g			
Dimensions with BT90 Li-ion (1800 mAh) Battery	Height (H) x Width (W) x Thickness (T)	4.76 x 2.17 x 0.78 inches (121 x 55 x 19.8 mm)			
	Weight	5.82 oz / 165 g			
Dimensions with BT100 Li-ion (2200 mAh) Battery	Height (H) x Width (W) x Thickness (T)	4.76 x 2.17 x 0.90 inches (121 x 55 x 23 mm)			
	Weight	6.08 oz / 172.4 g			
Power Supply		3.7 V (Nominal)			
Operating Temperature		-20 °C <sup>1</sup> to +60 °C			
FCC Description		ABZ99FT4090	AZ489FT4918	AZ89FT5867	AZ89FT5866
IC Description		109AB-99FT4090	109U-89FT4918	109U-89FT5867	109U-89FT5866

BATTERY				
Average Battery Life	Digital, conventional operation, 5/5/90 duty cycle with transmitter in high power <sup>2</sup>			
BT70 Li-ion (1400 mAh) Battery	8.5 hrs		8.5 hrs	8.5 hrs
BT90 Li-ion (1800 mAh) Battery	11.5 hrs		11.3 hrs	11.3 hrs
BT100 Li-ion (2200 mAh) Battery	13.5 hrs	15 hrs	13.5 hrs	13.5 hrs

RECEIVER				
Frequencies	403-470 MHz	450-512 MHz	935-941 MHz	851-870 MHz
Channel Spacing	12.5 kHz			
Frequency Stability	±1.5 ppm			
Digital Sensitivity	5% BER @ 0.25 uV (0.19 uV typical)			
Rated Audio	0.5 W			
Conducted Spurious Emission (TIA603D)	-57 dBm			

TRANSMITTER				
Frequencies	403-470 MHz	450-512 MHz	896-902 MHz and 935-941 MHz	806-825 MHz and 851-870 MHz
Channel Spacing	12.5 kHz			
Frequency Stability	±1.5 ppm			
Power Output	High Power Output	2 W	2 W	2 W
	Low Power Output	—	1 W	1 W
4FSK Digital Modulation	12.5 kHz Data: 7K60F1D & 7K60FXD			
	12.5 kHz Voice: 7K60F1E & 7K60FXE			
	Combination of 12.5 kHz Voice and Data: 7K60F1W			
Conducted/Radiated Emission (TIA603D)	-36 dBm < 1 GHz / -30 dBm > 1 GHz			
Digital Vocoder Type	AMBE+2™			
Digital Protocol	ETSI TS 102 361 -1,-2,-3			

## MILITARY STANDARDS

APPLICABLE MIL-STD	MIL-STD 810C		MIL-STD 810D		MIL-STD 810E		MIL-STD 810F		MIL-STD 810G	
	METHOD	PROCEDURES	METHOD	PROCEDURES	METHOD	PROCEDURES	METHOD	PROCEDURES	METHOD	PROCEDURES
Low Pressure	500.1	I	500.2	II	500.3	II	500.4	II	500.5	II
High Temperature	501.1	I	501.2	I/A1, II/A1	501.3	I/A1, II/A1	501.4	I/Hot, II/Hot	501.5	I/A1, II/A1
Low Temperature	-	-	502.2	I/C1, II/C1	502.3	I/C1, II/C1	502.4	I/C1, II/C1	502.5	I/C1, II/C1
Temperature Shock	-	-	503.2	I/A1/C1	503.3	I/A1/C1	503.4	I	503.5	I/C
Solar Radiation	505.1	II	505.2	I	505.3	I	505.4	I	505.5	I/A1
Rain	506.1	I	506.2	I	506.3	I	506.4	I	506.5	I
Dust	510.1	I	510.2	I	510.3	I	510.4	I	510.5	I
Vibration	514.2	VIII/F, Curve-W	514.3	I/10, II/3	514.4	I/10, III/3	514.5	I/24	514.6	I/24
Shock	516.2	II	516.3	IV	516.4	IV	516.5	IV	516.6	IV, VI

## ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-20 °C <sup>1</sup> to +60 °C
Storage Temperature	-30 °C to +70 °C
Thermal Shock	Per MIL-STD
Humidity	+50 °C, 90-95% RH, 8 hrs
ESD	IEC 61000-4-2
Dust and Water Intrusion	IP54
Salt Fog	8 hrs exposure to 5% saline solution (sodium chloride) at 35 °C, 16 hours standing period
Packaging Test	MIL-STD 810D and E

## BLUETOOTH®

Version	Supports Bluetooth® 2.1 + EDR Specification
Range	Class 2, 10 meters

<sup>1</sup> Radio only - Li-ion battery -10 °C

<sup>2</sup> Actual battery runtime observed may vary based on the use of certain features such as Bluetooth® and Option Board based applications.

Battery life for trunking operation may be up to 30% less than for conventional operation.

Please contact your Motorola sales representative for battery runtime expectations based on your specific radio configuration.

Specifications subject to change without notice. All specifications shown are typical.

Radio meets applicable regulatory requirements. Version 2.6/13

Please contact your Motorola Dealer for information on the availability of 800 and 900 MHz models.

For more information on the MOTOTRBO™ SL Series, visit [motorolasolutions.com/slseries](http://motorolasolutions.com/slseries).

To find your nearest Motorola Channel Partner, go to [motorolasolutions.com/contactus](http://motorolasolutions.com/contactus).

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DIGITAL  
REMASTERED.