

MOTOTRBO™ SL SERIES PORTABLES AND DM4000 SERIES MOBILES



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GENERAL QUESTIONS

WHAT IS MOTOROLA INTRODUCING?

We are expanding our MOTOTRBO platform with three new subscriber offerings:

The **MOTOTRBO SL Series** is the world's thinnest and lightest digital DMR portable radio. The MOTOTRBO SL Series is a sleek, ultra thin and ultra light portable radio designed to meet the communication needs of business users and executives in the hospitality, services, security and airport industries. Weighing less than your average smartphone, its slim form factor design and integrated data applications enhance your level of professionalism and discretion so you can provide superior customer service and faster response times.

The **MOTOTRBO DM4000 Series** is a fully-featured mobile radio family that transforms your enterprise, delivering unrivaled voice and data communications with integrated Bluetooth® audio and data, integrated GPS and preprogrammed text messaging. You also get best-in-class audio that includes Intelligent Audio and a customizable voice announcement feature.

HOW DO THESE RADIOS FIT INTO THE MOTOTRBO PLATFORM?

These new radios enhance the MOTOTRBO platform and allow you to offer additional solutions that meet your customer's specific needs. These new offerings DO NOT replace our highly successful DM3000 Series mobiles.

WHY ARE YOU INTRODUCING NEW MOTOTRBO PROFESSIONAL TIER RADIOS?

Through extensive "voice of the customer" research, we have identified a number of areas of opportunity where we can deliver increased value to our customers. From a new sleek and lightweight SL Series model to improved text capabilities and Bluetooth® data. Each feature has been designed to meet specific needs found across the key vertical markets we service with MOTOTRBO.

NEW MODEL AVAILABILITY, COMPATIBILITY, AND MIGRATION

WHAT FREQUENCY BANDS WILL THE NEW MOTOTRBO RADIOS SUPPORT?

- The SL Series supports UHF Band 1 (403-470 MHz).
- The DM4000 Series supports VHF (136-174 MHz) and UHF Band 1 (403-470 MHz) in both high and low power configurations. Additional bands will become available in subsequent releases.

WHAT MODELS ARE AVAILABLE?

The SL4000 Series is available in two models – The SL4000 is a “full-featured” model which includes a high resolution colour display, full keypad and integrated Bluetooth® for voice and data. The SL4010 offers the same feature set, plus integrated MOTORBO expansion card hardware for applications.

The DM4000 Series is available in four models – The DM4600 and DM4601 are full colour display models and the DM4400 and DM4401 are 2-digit numeric display models. The DM4401 and DM4601 are also equipped with integrated GPS and Bluetooth® as standard.

ARE ALL THE NEW MOTOTRBO MODELS BACKWARDS COMPATIBLE WITH ANALOGUE SYSTEMS?

The DM4000 Series mobiles do offer backwards compatibility with analogue conventional systems. The SL Series, however, has been optimized for digital ONLY operation in order to maximize the level of performance delivered by its unique form factor and antenna configuration.

CAN USERS USE THEIR EXISTING REPEATER INFRASTRUCTURE?

Yes, the new MOTOTRBO radios are compatible with all MOTOTRBO repeaters.

WHAT SYSTEM CONFIGURATIONS WILL THE NEW MOTOTRBO RADIOS SUPPORT?

The DM4000 Series and the SL Series will support Digital Conventional, IP Site Connect, and Capacity Plus system configurations at launch. Compatibility with Connect Plus will be available at a later date.

ARE ALL NEW MOTOTRBO MODELS COMPATIBLE WITH EXISTING MOTOTRBO SYSTEMS?

Outside the more obvious frequency band availability considerations, MOTOROLA partners need to be aware of other key considerations which need to be reviewed and properly understood before quoting these new radios into existing accounts.

- **System configuration and 3rd party applications** – While these models were under development, separate MOTOROLA engineering teams and third party application providers have continued to progress new capabilities and applications for our existing models. As a result, today we offer certain capabilities in our DM3000 Series mobiles which are not yet available in the new radios.

Some of the capabilities not yet available on our new radios include Connect Plus Trunking and other “Application Card” based apps. We expect this functionality to become available later in 2012. Please check with the specific third party provider in question regarding the availability of their application for the new MOTOTRBO radios.

- **SL Series** – Partners should consider the fact that this radio has an output power of 2 watts and its small size is conducive for the user to place the radio in their pocket thus further reducing the reception as compared to larger size models. We recommend that prior to deployment into an existing system, the proper coverage analysis be performed to ensure that the system has the necessary margin to accommodate a lower power.

WHAT INTRINSICALLY SAFE OPTIONS ARE AVAILABLE ON THE NEW MOTOTRBO RADIOS?

FREQUENTLY ASKED QUESTIONS

The SL Series and DM4000 Series will not offer an Intrinsically Safe option.

CAN EXISTING MOTOTRBO USERS UPGRADE THEIR CURRENT PORTABLE AND MOBILE RADIOS TO RECEIVE THE SAME FUNCTIONALITY AS THE NEW MOTOTRBO RADIOS?

No, new features such as embedded Bluetooth®, Intelligent Audio and Voice Announcement will only be available on the DM4000 Series and SL Series radios.

WILL THE EXISTING MOTOTRBO RADIO MODELS BE CANCELED?

The new radios just introduced expand the overall capabilities of the MOTOTRBO offering. These radios are designed to target specific areas of opportunity and DO NOT replace the existing models.

DO THESE RADIOS REQUIRE NEW PROGRAMMING CABLES AND SOFTWARE?

All MOTOTRBO models, new and existing, will leverage the same CPS programming software (part number RVN5115). Make sure that you download the latest version which now supports the newest radio models.

Programming Cables

- SL Series Requires a new USB programming cable – part no 25-124330-01R
- DM4000 is compatible with existing mobile programming cables (Front Programming Cable – HKN6184 or Rear Programming Cable – PMKN4010) and alignment cable (PMKN4016)

NEW FEATURES AND ENHANCEMENTS

WHAT ARE THE KEY ENHANCEMENTS ON THE NEW MODELS OVER THE EXISTING ONES?

The SL Series is a 2-watt digital only radio that offers the following feature enhancements:

- Professional sleek & thin design
- Weighs less than ½ as much as a standard two-way radio
- Innovative and integrated antenna design to optimize range performance
- High-definition 2", 5 line colour display offers the highest colour, clarity, and resolution
- Built-in photosensor automatically detects ambient lighting and adjusts the display brightness for optimum viewability in all lighting conditions
- Dual internal speakers deliver loud, clear audio quality
- Intelligent Audio feature automatically adjusts the radio volume according to the environment's noise level
- Embedded Bluetooth® capability eliminates need for a separate accessory dongle
- Integrated MOTORBO expansion card hardware for applications (SL4010 only)
- Vibrate alert
- 3 programmable option buttons along with a new "actions" feature that allows up to 9 of your favorite features to be programmed to a single programmable button
- Enhanced work order ticket management feature enhances user interface, decreasing work ticket response time and improving management of work tickets
- 6 unit charger solution offers convenient drop-in charging, the radio can also be charged with a compact plug in wall charger.

The DM4000 Series is 25/45W analogue/digital mobile radio that offers the following feature enhancements over the DM3000 Series:

FREQUENTLY ASKED QUESTIONS

- Intelligent Audio feature automatically adjusts the radio volume according to the environment's noise level
- Embedded Bluetooth® capability eliminates need for a separate accessory dongle
- High-definition 4 line colour display offers the highest colour, clarity, and resolution (DM4600/DM4601 only)
- Display automatically detects ambient lighting and adjusts the display brightness for optimum viewability in all lighting conditions
- Share real-time information by connecting radios with Bluetooth® enabled data devices.
- Voice Announcement enables audible confirmation of zone changes, channel changes and programmable buttons without having to look at the radio

WHAT IS INTELLIGENT AUDIO?

A new feature exclusively from Motorola that automatically adjusts the radio volume to compensate for background noise. As you move from a loud environment such as a large truck running or a bustling convention centre) to a quiet environment like a private office, the radio volume automatically lowers so that you do not disturb co-workers with a loud radio. The radio volume then increases when you move from a quiet environment to a loud environment.

WILL INTELLIGENT AUDIO WORK WHEN AN ACCESSORY IS ATTACHED TO THE RADIO? HOW DOES INTELLIGENT AUDIO WORK WITH AN IMPRES ACCESSORY?

Yes, most accessories have been optimized to work with the Intelligent Audio feature. With IMPRES accessories, the Intelligent Audio feature is further optimized as specific audio profiles are loaded based on the accessory attached. The volume is intuitively adjusted at a level specific to the audio accessory attached.

WHAT HARDWARE ENHANCEMENTS HAVE BEEN MADE TO THE NEW MOTOTRBO RADIOS?

The SL Series features a new form factor never seen in the two-way radio industry. It includes a full colour display, slim compact form-factor and weighs less than half a standard two-way radio.

The DM4600 and DM4601 feature a full-colour display and compact control head design.

WHAT IS UNIQUE ABOUT THE DISPLAYS ON THESE RADIOS?

Both radios ship with a large full colour display that are the most capable, highest resolution display in the professional/commercial two-way radio market. It includes a built-in photosensor that automatically senses ambient lighting conditions and adjusts backlighting as needed to optimize viewability in all lighting conditions.

The display is also protected by a special, high strength covering that protects the display from impact and damage while resisting scratches, drops, and bumps from everyday use.

WILL THE NEW MOTOTRBO RADIOS SUPPORT GPS?

The DM4401 and DM4601 mobiles include GPS integrated into the radio. GPS is currently not available on the SL Series radios.

SL SERIES SPECIFIC QUESTIONS

FREQUENTLY ASKED QUESTIONS

WHAT DOES THE “SL” IN THE SL SERIES STAND FOR?

“SL” stands for *sleek and lightweight*. The “SL” originated from customers who told us that they wanted all of the functionality of traditional MOTOTRBO two-way radios today, but in a smaller, sleeker form factor. The new SL Series tier meets the expanding wireless communication needs of these businesses, especially those requiring discreet, covert communications combined with the higher performance capabilities of digital technology.

WHY IS THE SL SERIES 2W DIGITAL ONLY?

By using a 2W digital design, along with a 3.7V energy system Motorola was able to develop a design that customers desired - a smaller, thinner form factor while also integrating an innovative antenna system intended to provide similar performance to 4W analogue with a stubby antenna.

The DMR digital protocol provides “better basics” including range performance and battery life over analogue and more importantly, focusing on a “digital only” design allowed us to best meet the customer requirement for a lighter, thinner and discreet communications device. In addition to improved battery life, the DMR digital protocol also provides improved range performance over analogue.

WHAT IS REQUIRED TO MAXIMIZE INDOOR COVERAGE?

The SL Series antenna design is optimized to maximize range performance. Many existing MOTOTRBO systems in the field have the coverage margin necessary in order to accommodate this radio without any changes to the infrastructure. In places where this is not the case, the system may need to be enhanced to optimize in-building range performance. Some examples of appropriate infrastructure include:

- distributed antenna systems
- bi-directional amplifiers (BDA's)
- leaky coaxial radiated cables (could also be required depending on building design for complete coverage)

HOW DOES THE ANTENNA WORK?

The SL Series offers an innovative integrated stubby antenna design, intended to optimize range performance. It meets customer requirements for a small, less obtrusive antenna versus a standard radio antenna design. These antennas are attached with a simple torx screw and plug and can be easily changed if needed by the dealer.

APPLICATIONS

FREQUENTLY ASKED QUESTIONS

DO THESE NEW RADIOS SUPPORT THE MOTOTRBO APPLICATION DEVELOPER PROGRAM?

Yes, the SL Series and DM4000 series mobiles are equipped with a variety of new software functions and wireless connectivity options designed to significantly enhance their applications capability.

WILL MY EXISTING MOTOTRBO 3RD PARTY APPLICATION WORK WITH THESE NEW RADIOS WITHOUT ANY CHANGES?

This will depend on the functions served by the specific application and how this application interacts with the subscribers on the system. For example, applications which reside on the subscriber expansion card and present information to the user on the radio display will need to be updated in order to take full advantage of the larger colour display capabilities available on these new radios. Always consult with your application provider to understand what impact, if any, these radios will have on the applications you may already have.

IS THE APPLICATION EXPANSION CARD OFFERED ON THESE NEW RADIOS THE SAME AS IN THE EXISTING MODELS?

While the capabilities offered by the expansion card remain unchanged, the layout of this board has been updated in order to adjust to the new form-factor of the radios and make room for a larger display and new features.

- The DM4000 Series mobile has a removable application Expansion Card in order to accommodate third party option boards.
- The SL4000 model does not have expansion card capability and cannot be upgraded. Users requiring expansion card capability should use the SL4010 model.

STANDARDS AND NARROWBANDING

ARE THE NEW MOTOTRBO RADIOS DMR STANDARDS-BASED?

Yes, these radios are designed to the globally-recognized European Technical Standards Institute (ETSI) Digital Mobile Radio (DMR) tier two standard for professional mobile radio.

DO THE NEW MOTOTRBO RADIO MODELS USE TDMA DIGITAL TECHNOLOGY?

Yes, these new MOTOTRBO radios use two-slot 12.5kHz TDMA-based systems.

ARE THESE RADIOS COMPATIBLE WITH ANALOGUE 25 KHZ CHANNELS? ANALOGUE 12.5 KHZ CHANNELS?

- DM4000 Series - These radios support both 12.5kHz and 25kHz analogue channel spacing
- SL Series – This radio is only offered for digital configurations. All MOTOTRBO digital configurations operate on a 6.25 kHz equivalent bandwidth (2:1 TDMA on 12.5 kHz channel).

ACCESSORIES

FREQUENTLY ASKED QUESTIONS

WILL THE EXISTING DM3000 SERIES ACCESSORIES WORK ON THE NEW DM4000 SERIES MOBILES?

Yes, the DM4000 Series mobiles use the same front accessory connector as the DM3000 Series mobiles. All audio accessories compatible with the DM3000 Series are compatible with DM4000 Series. The only exception is that there is a new keypad microphone (RMN5127) with a 4-way navigation button to allow you to easily navigate the large, full colour display.

IS THE MOUNTING HARDWARE THE SAME FOR DM3000 SERIES VS DM4000 SERIES?

The DM4000 Series mobiles have new mounting kit numbers. The low profile trunnion and high profile trunnion just have new thumbscrews, while the key lock trunnion and in-dash mounting kits were redesigned.

WHAT TYPE OF BATTERIES DOES THE SL SERIES PORTABLE USE?

A 3.7V li-ion compact battery pack. Two battery options are available: A high capacity 1800 mAh battery and a slim 1400 mAh battery option

There are unique battery covers for each battery, intended to maximize the ergonomics of the radio with each battery solution. A locking feature to the battery cover prevents the battery cover and battery from becoming dislodged when dropped, which can often happen with mobile phones of a similar form factor.

WHAT CHARGING OPTIONS ARE AVAILABLE FOR THE SL SERIES?

The SL Series can be charged via a convenient micro USB wall charger or via a drop-in 6 bank multi-unit charger. The multi-unit charger also conveniently offers the option to charge a spare battery in the pocket when a radio is not inserted.

WHAT ARE THE SL SERIES CARRY OPTIONS?

The SL Series radios come with a standard carry holder with a swivel belt clip. This allows the radio to be worn horizontally or vertically on a belt for comfort. With the compact size and light weight, it can also be easily clipped to a portfolio or binder for easy carrying.

A wrist strap is also available which provides another convenient carrying option. Either the carry holder or wrist strap option should be utilized as the primary carrying option.

WHAT IS THE SL SERIES AUDIO CONNECTOR DESIGN?

The SL Series utilizes a single pin connector with a unique locking system. The audio connector plug is inserted by aligning the lock on the audio accessory with the line just above the audio connector, and then twisting the plug. The audio plug is then locked in and secured, which prevents the audio accessory from becoming accidentally dislodged.

WHAT TYPE OF BLUETOOTH® CAPABILITIES WILL THESE NEW RADIOS HAVE?

FREQUENTLY ASKED QUESTIONS

The DM4000 Series and SL Series radios are equipped with an integrated Class 2 Bluetooth® 2.1 transceiver. This enables the radio to interoperate with both wireless audio and data capable devices. For proper compatibility requires the devices needs to support one of the following three profiles:

- Audio - Headset Profile (HSP),
- Data - Serial Port Profile (SPP)
- Audio and Data - Motorola fast push-to-talk device.

The radios are capable of supporting up to 2 wireless devices simultaneously. This means 1 Bluetooth® audio accessory and 1 Bluetooth® data device, or a Bluetooth® accessory and wireless push-to-talk can both operate with the radio at the same time. Bluetooth® data applications may also require a suitable third party application to handle back-end processing of the information collected by the subscriber.

WHAT BLUETOOTH® AUDIO ACCESSORIES ARE COMPATIBLE WITH THE DM4000 SERIES AND SL SERIES RADIOS?

Both radios are compatible with Motorola's unique Operations Critical Wireless Bluetooth® accessory portfolio which includes an earpiece and wireless push-to-talk option. The radios are also compatible with any consumer off-the-shelf Bluetooth® headset.

WILL THESE NEW RADIOS SUPPORT IMPRES BATTERIES, CHARGERS OR AUDIO ACCESSORIES?

The SL Series radios are not compatible with IMPRES batteries, chargers and audio accessories.

The DM4000 Series mobiles are compatible with IMPRES audio accessories.

WARRANTY

DO ALL OF THESE NEW MODELS OFFER A STANDARD 2 YEAR WARRANTY COST?

Our new premium tier MOTOTRBO SL Series and DM4000 Series radios are backed by a two-year Standard Warranty.

For additional peace of mind, Service from the Start with Comprehensive Coverage¹ is also available. This allows you to protect your MOTOTRBO radios against accidental damage, normal wear and tear, and more.

This unique offering comprises fast turnaround times, expert telephone technical support and access to the latest software releases²; all backed by Motorola's global infrastructure, highly qualified support technicians and certified repair facilities. You'll get multi-year technical support and repair coverage, eliminating 'surprise' repair costs and providing the investment protection you need to reduce your total cost of ownership. In addition to normal wear and tear, Service from the Start includes Comprehensive Coverage¹ to protect you from accidental breakage so you can enjoy enhanced peace of mind.

All MOTOTRBO batteries and accessories have one year warranty.

TRAINING AND SALES AVAILABILITY

WHEN CAN I BEGIN PLACING ORDERS FOR THE NEW MOTOTRBO RADIOS?

FREQUENTLY ASKED QUESTIONS

Please refer to Motorola On-line (MOL) for exact timing on ordering and shipping availability.

WHAT IS THE EXPECTED PRICE POINT OF THE NEW MOTOTRBO RADIOS?

Please refer to MOL for detailed pricing information.

WILL DEMO KITS BE OFFERED FOR THE NEW MODELS?

For a limited time, Motorola will offer our channel partners the ability to order a demo kit for the SL Series and DM4000 Series. This offer is limited to one kit per radio model per dealer location. Refer to launch pack for ordering details.

¹ Availability of Service from the Start may vary by country.

² Software release includes patches and maintenance releases of the current version

For more information on how we've remastered digital, visit motorolasolutions.com/mototrbo or find your closest Motorola representative or authorised Partner at www.motorola.com/Business/XU-EN/Contact_Us

MOTOTRBO
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REMASTERED.

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EMEA version 1 (02/2012)