# MOTOTRBOTANALOG TRUNKED RADIOS GET READY TO GET CONNECTED TO THE FUTURE.





# MOTOTRBO™ANALOG TRUNKED RADIOS

XPR™ 6580/6380 SMARNET® PRIVACY PLUS™ PORTABLES XPR 4580/4380 SMARTNET/PRIVACY PLUS MOBILES

### PREPARE FOR DIGITAL TRUNKING TOMORROW WITH MOTOTRBO TODAY

Your workforce is out in the field — making deliveries, manning heavy equipment, responding to customer requests, repairing roads and restoring lost power. How do you keep them all connected, wherever they go? Equip them with future-ready technology that is easy to use? And increase their performance and productivity without sacrificing value?

Versatile and powerful, MOTOTRBO is the ideal solution. It's the professional two-way radio communication system that works with your existing analog technology until you are ready to move to digital trunking.

Take advantage of the many benefits of MOTOTRBO radios — like leading-edge IMPRES™ technology, high battery capacity, intrinsically safe options and outstanding water submersibility — while you continue to use your SMARTNET or Privacy Plus analog trunking system. At the same time, you can prepare to migrate to a MOTOTRBO scalable digital solution: Capacity Plus single-site or Connect Plus multi-site trunking.

Keeping operations running smoothly during a change in communication systems is vital to your business. Because MOTOTRBO radios operate on your SMARTNET or Privacy Plus analog trunking system, when you are ready to migrate to digital, these future-ready radios will make the move with just a software upgrade.

Now you can migrate one talk group or one department at a time as your time and budget allows. So your mobile workers can enjoy all the advantages digital trunking delivers, from integrated data applications and longer battery life to clearer audio and greater capacity.





**FFATURES** 

### GAIN ALL THE BENEFITS MOTOTRBO™ BRINGS TO BUSINESS

Considering the transition to digital but uncertain about the timetable? MOTOTRBO makes it so simple, seamless and scalable. Just use your current analog trunking system while you capitalize on the many benefits MOTOTRBO two-way radios bring to your business today.



### Flexible, reliable calling

Do you want to connect to a fleet of drivers stretched across a city? A security team monitoring a corporate event at a resort complex? Or a crew clearing debris from a busy highway? MOTOTRBO analog trunked radios are designed for these kinds of daily demands, and much more. Not only are they easy to use, they offer exceptional functionality with just the touch of a button — essential for your workers on the move.

**SMARTNET features** include call alert, private call, telephone interconnect, emergency call/alarm, busy queue and callback, recent user priority, push-to-talk ID, priority monitor scan, message/transmission trunking, dynamic regrouping and selective radio inhibit.\*

**SmartZone features** include all SMARTNET® features plus wide area seamless roaming, RSSI operation, preferred site and forced site search.

### Flexible functionality

MOTOTRBO analog trunked radios operate in both 800 and 900 MHz. These portables and mobiles are so versatile, you can use them in Analog Conventional and Type II 800/900 MHz Privacy Plus Enhanced, SMARTNET, StartSite™, SmartWorks™ and SmartZone trunked systems.\*

### **Greater capacity and channels**

The MOTOTRBO XPR 6580 display portable radio supports up to 20 trunked systems and a maximum of 240 channels or trunked personalities radio-wide (16 maximum per zone). The MOTOTRBO XPR 4580 display mobile supports up to 20 trunked systems and a maximum of 240 channels or trunked personalities radio-wide (240 maximum per zone).

\*Some features need to be supported and enabled in the trunked system

# ADVANCE PERFORMANCE. INCREASE PRODUCTIVITY. ENHANCE VALUE.

MOTOTRBO delivers enhanced communication from the field to the factory floor. We've designed MOTOTRBO radios to work so well in both modes, that whether you are using them on your existing analog system or have migrated to digital trunking, you'll see gains in efficiency and productivity like you haven't experienced before.

Here are some of MOTOTRBO's key features that can enhance your communications and advance workforce productivity:

### **Reliable durability**

MOTOTRBO radios meet the most demanding specs, including an IP57 rating for water submersibility (portable radios), U.S. Military 810 C, D, E and F, and our exacting standards for durability and reliability.

### Leading-edge IMPRES™ technology

Batteries, chargers and audio accessories feature our innovative and patented IMPRES technology to maximize talk time and offer exceptionally clear audio quality. You can experience IMPRES features on analog today, and have them migrate with you when you move to digital.

### Long-lasting battery life

IMPRES Li-lon 2150 mAh batteries are designed for and are standard in MOTOTRBO analog trunked portable radios. They provide up to 12 hours of battery life — ideal for long work shifts.

### Intrinsically safe

Purchased with the FM-approved IMPRES Li-lon 1400 mAh battery, you can use MOTOTRBO portables in locations where flammable gas, vapors or combustible dust may be present.

### Easy to move to digital

When you are ready, all it takes is a software upgrade to move your MOTOTRBO radios from analog to digital trunking. No additional hardware is required.

### Voice and data ready

Not only will you gain clearer voice communication, you'll experience a world of data applications in one device when you are ready to move to digital. MOTOTRBO makes it easy to increase your operational efficiency with an integrated GPS module and text messaging capability.

With the industry's largest Application Developer Program, you can choose from a wide variety of other applications to enhance the efficiency of your work teams — including work order ticket management, email gateways, dispatch consoles, network monitoring, telephony, man-down and more. Or you can have customized applications created to meet the unique needs of your business.

### TRANSFORM YOUR WORKPLACE WITH DIGITAL TECHNOLOGY

Two-way radio has been a successful analog communication solution for generations. But in today's technologically advanced environment a new platform is at the forefront — a digital platform that breaks through to higher levels of performance and productivity and is revolutionizing the way mobile professionals communicate.

# DIGITAL DELIVERS WHAT ANALOG CANNOT

Digital two-way radios offer numerous advantages over analog, including:

### **Clearer audio quality**

So messages are heard and understood without background noise or static

### Voice and data on one device

With integrated applications such as text messaging, GPS-based location tracking, work order ticket management, email gateways, dispatch consoles, network management, telephony integration and much more

### Longer battery life

Ideal for extended work shifts where continuous communication is essential

### **Greater capacity**

Twice the number of users for the price of one frequency license

# TDMA GIVES YOU TWICE AS MUCH FOR LESS

Today, there are two primary digital radio technologies — Time-Division Multiple-Access (TDMA) and Frequency-Division Multiple-Access (FDMA). While both offer significant benefits over analog, here's why TDMA is best:

### Double your capacity per channel with less than half the infrastructure

TDMA divides your existing channels into two time slots so you can double the number of users on your system or use data applications. A second call does not require a second repeater. This lowers your costs because there's no need to purchase, install and maintain additional infrastructure equipment.

### Double your capacity without a hassle

TDMA doubles your capacity because it provides two time slots on your existing licensed channels. There is no increased risk of interference and no need for new licenses—simply amend them to specify digital. Plus, TDMA is compatible with all legacy radios working in 12.5 kHz analog channels.

### Get long battery life for long work shifts

Because TDMA uses only half of the transmitter's capacity, it extends battery life. This is invaluable during long work shifts or where data applications that enhance productivity require more power from your radio.

### **Benefit from business-critical features**

TDMA makes smart control features like "transmit interrupt" possible. This interrupts lower priority communication so critical instructions can be delivered right when they're needed. And to help you maximize your infrastructure investment, TDMA transmits voice and data on the same channel.



## XPR<sup>™</sup> 6580 SMARTNET® / PRIVACY PLUS™ ANALOG TRUNKED DISPLAY PORTABLE RADIO

### FEATURES AT-A-GLANCE

- 1 Flexible, menu-driven interface with user-friendly icons or two lines of text for ease of reading text messages\* and navigating through the menus.
- 2 Tri-color LED indicator for clear, visible feedback of calling, scanning, roaming and monitoring features.
- 3 Emergency button alerts supervisor or dispatcher in an emergency situation.
- 4 Accessory connector meets IP57 submersibility specifications and incorporates RF, USB and IMPRES™ audio capability.
- 5 Integrated GPS module enables the use of location-tracking data applications.\*
- 6 Large, easy-to-use navigation buttons allow easy access to intuitive menu-driven interfaces
- 7 Radio housing meets IP57 specifications; submersible in 1 meter of fresh water up to 30 minutes. Offers intrinsically safe options for use in locations where flammable gas, vapors or combustible dust may be present.
- 8 Powerful, front projecting speaker.
- 9 Three side and two front programmable buttons for easy access to favorite features.
- **10** Large, textured push-to-talk button provides good tactile response and easy access, even when wearing gloves.

### **ADDITIONAL FEATURES**

- 20 trunked systems
- 240 conventional channels or trunked personalities
- 130 zones
- 16 trunked talkgroups per zone
- Companding and HearClear audio enhancement options for 12.5 KHz channels
- Available for Type II 800/900 MHz Privacy Plus Enhanced SMARTNET, StartSite<sup>™</sup>, SmartWorks<sup>™</sup> and SmartZone<sup>™</sup> trunked systems
- Upgradeable to MOTOTRBO<sup>™</sup> digital trunking via a software upgrade with no additional hardware required

### **STANDARD PACKAGE**

- Display Portable Radio
- 800 / 900 MHz GPS Antenna
- IMPRES Li-lon 2150 mAh Battery
- IMPRES Single Unit Charger
- 2.5" Belt Clip

- Dust Cover for Accessory Connector
- Built-In Expansion Card\*
- Two-year Standard Warranty plus one-year Repair Service Advantage (US only)/ Extended Warranty (Canada only)



# XPR<sup>™</sup> 6380 SMARTNET<sup>®</sup> / PRIVACY PLUS<sup>™</sup> ANALOG TRUNKED NON-DISPLAY PORTABLE RADIO

### **FEATURES AT-A-GLANCE**

- 1 Tri-color LED indicator for clear, visible feedback of calling, scanning, roaming and monitoring features.
- 2 Emergency button to alert supervisor or dispatcher in an emergency situation.
- 3 Accessory connector meets IP57 submersibility specifications and incorporates RF, USB and IMPRES™ audio capability.
- 4 Integrated GPS module enables the use of location-tracking data applications.\*
- 5 Radio housing meets IP57 specifications; submersible in 1 meter of fresh water up to 30 minutes. Offers intrinsically safe options for use in locations where flammable gas, vapors or combustible dust may be present.
- 6 Powerful, front projecting speaker.
- 7 Three side programmable buttons for easy access to favorite features.
- 8 Large, textured push-to-talk button provides good tactile response and easy access, even when wearing gloves.

### **ADDITIONAL FEATURES**

- 20 trunked systems
- 32 conventional channels or trunked personalities
- 2 zones
- 16 trunked talkgroups per zone
- Companding and HearClear audio enhancement options for 12.5 kHz channels
- Available for Type II 800/900 MHz Privacy Plus Enhanced, SMARTNET, StartSite, SmartWorks and SmartZone trunked systems
- Upgradeable to MOTOTRBO™ digital trunking via a software upgrade with no additional hardware required

### **STANDARD PACKAGE**

- Non-Display Portable Radio
- 800 / 900 MHz GPS Antenna
- IMPRES Li-Ion 2150 mAh battery
- IMPRES Single Unit Charger
- 2.5" Belt Clip

- Dust Cover for Accessory Connector
- Built-In Expansion Card\*
- Two-year Standard Warranty plus one-year Repair Service Advantage (US only)/ Extended Warranty (Canada only)



# XPR™ 4580 SMARTNET® / PRIVACY PLUS™

### **ANALOG TRUNKED DISPLAY MOBILE RADIO**



### **FEATURES AT-A-GLANCE**

- Accessory connector supports USB and IMPRES<sup>™</sup> audio capability.
- 2 Multi-colored LED indicators for clear, visible feedback of calling, scanning, roaming and monitoring features.
- 3 Large, easy-to-use volume knob.
- 4 Integrated GPS module enables the use of location-tracking data applications.\*
- 5 Powerful, front-projecting speaker.
- 6 Large, easy-to-use navigation buttons allow easy access to intuitive, menu-driven interfaces.
- 7 Flexible, menu-driven interface with user-friendly icons or two lines of text for ease of reading text messages and navigating through the menus.
- 8 Four programmable/replaceable buttons for easy access to favorite features.
- 9 Compact and ergonomically friendly microphone.

### ADDITIONAL FEATURES

- 20 trunked systems
- 240 conventional channels or trunked personalities
- 130 zones
- 240 trunked talkgroups per zone
- Companding and HearClear audio enhancement for 12.5 kHz channels
- Available for Type II 800/900 MHz Privacy Plus Enhanced, SMARTNET, StartSite™, SmartWorks™ and SmartZone™ trunked systems
- Upgradeable to MOTOTRBO<sup>™</sup> digital trunking via a software upgrade with no additional hardware required

### STANDARD PACKAGE

- Mobile Radio with Display Control Head
- Compact Microphone
- Mounting Trunion
- 10-Foot Power Cable
- Replacement Button Kit: monitor, scan, backlight, emergency, talkaround, text message, contacts
- Built-In Expansion Card\*
- Two-year Standard Warranty plus one-year Repair Service Advantage (US only)/Extended Warranty (Canada only)

\*Digital feature PAGE 8

# XPR™ 4380 SMARTNET® / PRIVACY PLUS™ ANALOG TRUNKED NUMERIC DISPLAY MOBILE RADIO



### **FEATURES AT-A-GLANCE**

- Accessory connector supports USB and IMPRES™ audio capability.
- 2 Multi-colored LED indicators for clear, visible feedback of calling, scanning, roaming and monitoring features.
- 3 Large, easy-to-use volume knob.
- 4 Integrated GPS module enables the use of location-tracking data applications.\*
- 5 Large, easy-to-use channel navigation buttons.
- 6 Powerful, front-projecting speaker.
- 7 Two programmable/replaceable buttons for easy access to favorite features.
- 8 Compact and ergonomically friendly microphone.

### ADDITIONAL FEATURES

- 20 trunked systems
- 32 conventional channels or trunked personalities
- 2 zones
- 32 trunked talkgroups per zone
- Companding and HearClear audio enhancement options for 12.5 kHz channels
- Available for Type II 900/900 MHz Privacy Plus Enhanced SMARTNET, StartSite™, SmartWorks™ and SmartZone™ trunked systems
- Upgradeable to MOTOTRBO<sup>™</sup> digital trunking via a software upgrade with no additional hardware required

### STANDARD PACKAGE

- Mobile Radio with Numeric Display Control Head
- Compact Microphone
- Mounting Trunion
- 10-Foot Power Cable
- Replacement Button Kit: monitor, scan, backlight, emergency, talkaround, text message, contacts
- Built-In Expansion Card\*
- Two-year Standard Warranty plus one-year Repair Service Advantage (US only)/Extended Warranty (Canada only)

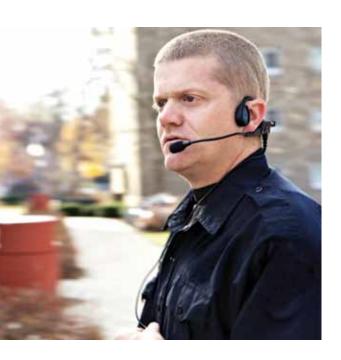
\*Digital feature PAGE 9

### HEAR CLEARER. TALK LONGER. WORK SMARTER WITH EXCLUSIVE IMPRES™

A supervisor managing a road repair. A security team covering a casino. A utility crew responding to downed electrical lines. Your personnel work under changing conditions and challenging environments and they expect to talk without distortion, interruption or loss of power. You expect high quality communications that perform whenever you do, and IMPRES assures that.

We created our patented IMPRES technology as an integral part of our two-way radio audio accessories, batteries and chargers. When your employees use IMPRES accessories, they can be more confident their words will be heard and their radios will keep powering on.

Radio users who rely on IMPRES Smart Audio and Smart Energy systems call them innovative and indispensable. We call IMPRES the intelligent way to communicate — offering enhanced performance and exceptional capabilities between your radio and accessories, your battery and charger, your workforce and workplace.



### **EXCEPTIONALLY CLEAR AUDIO**

Simply attach an IMPRES audio accessory to your MOTOTRBO™ radio and it sends a signal to ensure audio is crisp, clear and continuous. IMPRES automatically suppresses ambient noise, improves voice intelligibility and amplifies loudness — even in noisy situations and difficult weather.

Whether you're a security officer with an IMPRES remote speaker microphone clipped to a lapel or a hospitality manager wearing it in your ear, you can carry on a conversation with clarity, simplicity and certainty.

### **STOP ADJUSTING VOLUME**

Are your employees staging a special event where normal conversation is a challenge? On surveillance where discreet conversation is expected? Trying to talk above the roar of the crowd in a stadium? When they need to speak quietly or at normal volume but not directly into the microphone, enhanced Audio Gain Capability (AGC) makes all the difference.

This IMPRES feature detects changes in voice and automatically increases or decreases microphone gain, so the user receiving the call doesn't have to adjust volume levels repeatedly. And if someone is shouting in the background, IMPRES brings audio down and filters out background clamor.

### **CUSTOMIZE TO YOUR WORKSTYLE**

IMPRES accessory buttons can be programmed with "shortcuts" in addition to the programmable buttons on your radio. You can use your accessory for important features, such as private calls, with just a touch. Access is so convenient and the system is so flexible, you can customize your accessory to fit the specific applications and needs of your business.

### **SURVIVES WATER SUBMERSION**

If you're a public works officer restoring power in a storm or security managing the crowds during a rain delay, you can use our submersible accessories — like the remote speaker microphone — for uninterrupted communication in wet conditions. That's because the MOTOTRBO accessory connector design meets the demanding standard IP57 for water submersibility.

### IMPRES™ SMART ENERGY SYSTEM

For the line worker on a long shift or the public works officer laboring overtime to restore power, the job stops when their radio stops operating. IMPRES Smart Energy System provides the peace of mind to keep you up and running, when you need it most. Our innovative battery charging and reconditioning system streamlines and automates battery maintenance. It draws on our proprietary technology to communicate between your battery and charger to lengthen battery life and extend talk time.

### **AUTOMATES BATTERY MAINTENANCE**

You don't have time to record battery usage or track when it was last reconditioned. Yet you want to make sure you are getting the most out of every battery by maximizing its life. With IMPRES you can, because it automates when you need to recondition your battery.

IMPRES integrates reconditioning capability into the charger along with the means to evaluate battery usage and determine the best time to recondition it. By automating maintenance, IMPRES helps optimize your battery's life.

### **ELIMINATES OVERCHARGING**

At the end of a shift you want to set your battery in a charger and head home. You don't want to think twice about the consequences of leaving it in a charger all night. Or wonder if heat damage will make the battery inoperable the next day.

Fortunately, IMPRES batteries can be left in their IMPRES chargers for extended periods without heat damage from the charger. If radios are accidentally left in the charger — overnight, over a weekend or longer — there's no worry about shortening your battery's life. Because the IMPRES charger automatically monitors battery capacity, batteries are safely charged to the right capacity and always ready to go.

### BETTER DATA FOR BETTER DECISIONS

IMPRES chargers store critical usage information so you don't have to. Each two-line IMPRES charger display presents data at a glance, so you can make informed decisions about battery replacement. Data includes key information such as: actual battery capacity, time remaining to complete charging and each battery's unique serial number.

If you're operating a large fleet of batteries, the IMPRES battery data reader is a valuable diagnostic tool to evaluate individual IMPRES batteries. IMPRES Battery Fleet Management collects and consolidates that data automatically, so you can quickly and easily identify when batteries need to be replaced.

### **EXTENDED WARRANTY**

When you use MOTOTRBO™ IMPRES batteries exclusively with IMPRES chargers, you can count on an 18-month capacity warranty coverage—six months longer than Motorola standard batteries.

### **TESTED TOUGH AND PROVEN TOUGH**

Hazards that kill other brands won't harm IMPRES or any other Motorola batteries. Time after time, in lab test after test — for Drop, Vibration and ESD (Electrostatic Discharge) — they withstand shocks, knocks, drops and shakes and outperform the leading brands. If your radio gets banged on a ride, rattled by heavy equipment or shocked by static electricity, you can depend on IMPRES batteries to stay true and stand tough.

### **ENVIRONMENTALLY FRIENDLY**

Because IMPRES chargers automatically turn off, they prevent overcharging and excess energy consumption. Our single-unit IMPRES chargers with external power supplies consume 40 percent less energy in standby mode than the U.S. Energy Independence and Security Act of 2007 requires.



### MOTOTRBO™ RADIO ACCESSORIES PERFORMANCE THAT LIVES UP TO ITS PROMISE

Whether you're working in harsh conditions, noisy environments, long shifts or looking for discreet communication, MOTOTRBO accessories stand up to the task and stand out in the field. We designed and developed a complete portfolio of solutions with this proprietary, leading-edge technology. Our accessories are specially designed to perform optimally for our portable and mobile radios.







### **PORTABLE RADIO ACCESSORIES**

Our IMPRES™ Smart Audio is a Motorola-exclusive solution that provides exactly what businesses and agencies seek: two-way audio quality that's loud, clear and intelligible in digital and analog modes.

### FLEXIBLE, FEATURE-RICH AUDIO SOLUTIONS

Our diverse portfolio of Remote Speaker Microphones and Public Safety Microphones are designed with many unique features, including IMPRES, Windporting, noise-canceling acoustics and IP57 submersibility.

A wide range of additional audio accessories are available to create a custom radio solution — whether it's heavy-duty headsets for noisy crowds, discreet earpieces for covert conversations or a complete selection of temple transducers, headsets and earpieces.

In addition, our Operations Critical Wireless earpiece is a unique Bluetooth® accessory that's comfortable to wear for long shifts and features leading-edge audio and exceptional clarity.

### **ROAD-TESTED CARRYING SOLUTIONS**

Your people want durable, dependable carrying solutions that withstand wear and tear to keep them connected on the job. MOTOTRBO's complete portfolio of carry solutions includes nylon and leather carry cases, belt clips, shoulder straps and chest packs. They are designed to be very comfortable and functional, yet still resist water and dust and endure rugged conditions.



### **MOBILE RADIO ACCESSORIES**

Whether you're working desktop dispatch at a construction site or driving a squad car cross town, accessories are a key component of mobile systems and must meet challenging installation and operational requirements. MOTOTRBOTM mobile accessories are specifically designed for hands-free, hassle-free communication in a vehicle, for dispatch-enabled communication, and for easy installation.

### **VERY VERSATILE AUDIO SOLUTIONS**

Our keypad microphone lets workers navigate a mobile menu, dial phone numbers and send text messages. The heavy duty microphone is ultra-durable and easy to handle while wearing gloves. And the IMPRES<sup>TM</sup> visor microphone provides hands-free and discreet communications.

Our desktop microphone, tray and external speaker convert MOTOTRBO mobiles into simple base stations — an ideal solution for transportation and dispatch users.

### **SPACESAVING REMOTE MOUNTING SOLUTIONS**

Our Remote Mount cables let you mount your mobile radio in a trunk — a critical accessory for covert operations or where interior vehicle space is limited.

### **EXTENSIVE ANTENNA SOLUTIONS**

A wide variety of antenna options support your specific mobile configuration. Standalone radio frequency (RF) antennas, standalone GPS antennas or combination GPS/RF antennas are available in the frequency band you require.







### **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.

### **SUBSCRIBER REPAIR SERVICES**

Repair Service Advantage (RSA) and Repair Service Advantage Comprehensive (RSA Comprehensive) repairs receive priority service and meet committed cycle times.

### Repair Service Advantage (RSA)

This post-warranty service extends the service coverage of your Motorola portable or mobile subscriber radios. RSA can be purchased as an option with new radios and is available in 1, 2 or 3-year increments. (U.S. only)

### **Repair Service Advantage**

Comprehensive (RSA Comprehensive) We design our portable and mobile radios to take a lot of abuse. But even the best radios are subject to "above and beyond" wear and tear. That's why we've introduced RSA Comprehensive.

RSA Comprehensive offers all the protection of a standard RSA support plan with even more coverage. This includes chemical, liquid and other physical damage to your portable and mobile subscriber radios. RSA Comprehensive is available as an option to your radio purchase for 3 years of coverage. (U.S. only, not available on repeaters)

### **Extended Warranty**

In addition to our 2-year standard warranty, Extended Warranty is available for a total of 3 or 5 years of coverage. (Canada only)





For more information on how to get ready to get connected to the future, visit **www.motorola.com/mototrbo**.

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