



# ***DTR410™***

Digital On-Site Two Way Radio and Accessories

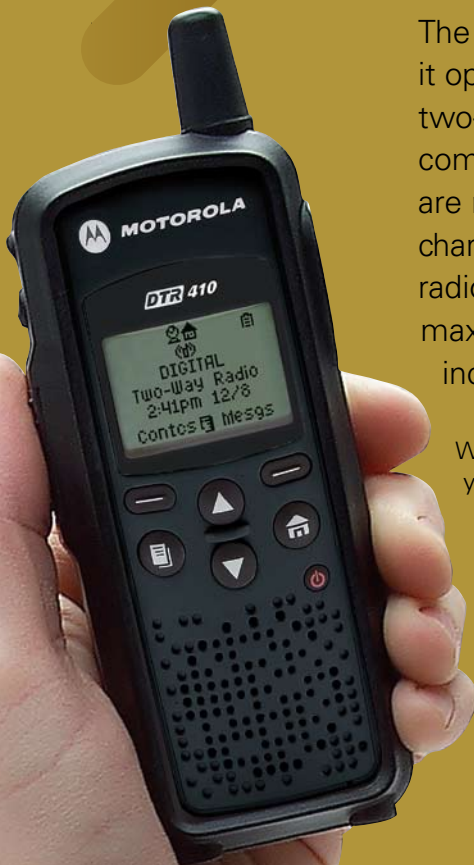


# DO YOU SPEAK DIGITAL?

## Introducing the DTR410™ Digital On-Site Two-Way Radio for Small Business

The better a team communicates, the more efficiently it operates. Motorola DTR Series™ digital on-site two-way radios are the power tools that enable that communication. Unlike alternative technologies, there are no monthly fees. No service towers. No per-minute charges. Moreover, these durable on-site two-way radios help businesses keep operations on schedule, maximize job shift productivity, enhance security, and increase overall customer satisfaction.

What would two-way radios have to provide to be perfect for your on-site operation? Perhaps the ability to call a single unit as well as a group of radios. Or coverage extended by 20%.\* Or up to 45% longer operation on a single charge.\* Remarkably, you'll have all that productivity-enhancing capability—and more—in the DTR Series. You get many other benefits, too, including digital audio quality—which stays loud and clear everywhere you have coverage. And best of all, this pacesetting performance is yours without monthly fees or annual contracts—and at a very affordable price.



# Markets, Decision Makers and Users

The digital performance of the DTR410™ enables you to build bridges that expand the capabilities of individuals and teams, enabling them to get the job done right, fast and safely.



DTR410

That means powerful productivity that's perfect for:

## Education

Maintaining order and enhancing student safety are priorities for any school. DTR Series™ radios keep everyone in touch—from teachers and administrators to crossing guards and maintenance personnel. That enables a quick response to any situation, often preventing small problems from escalating into bigger ones.



## Manufacturing

Success in industry depends on two things: efficiency and responsiveness. Clear communication, often in noisy environments, is essential to avoid downtime—and to enable the fastest response to production problems or injuries. The DTR Series delivers. Its rugged construction stands up to industrial environments, and its long battery life meets the demands of overtime and multi-shift operations.



## Hospitality

Excellent service and customer satisfaction are the keys to loyalty and repeat business. DTR Series radios keep your staff connected, from the front desk and concierge to event planners and maintenance personnel. That means a more productive staff and fast response to guest needs, special events, spills and emergencies.



## Retail

Responsive service is essential to sales and customer satisfaction. DTR Series radios make responsiveness easier to provide, whether it's an answer to a customer's question, a price check, a clean-up or an emergency. With clear, constant communication ensured, customer satisfaction can be taken to the next level.



## Property Management

With DTR Series radios, building managers, maintenance technicians, groundskeepers and security personnel can respond fast to tenant needs or emergencies, minimizing costs and enhancing tenant satisfaction.



## Construction

To keep any construction project on track, you need timely coordination from management to foremen, subcontractors, and individual tradespeople. DTR Series radios make it easy, helping keep projects on schedule, avoid errors, meet deadlines and keep costs on budget.



# The Digital Difference

## Why Motorola Digital On-Site Two-Way Radios Meet Your Needs Best



Enhanced coverage, battery life, and audio quality aren't the only advantages of our new digital on-site two-way radios. No license is required to operate our 900 MHz units. And for enhanced security, we added Frequency Hopping Spread Spectrum (FHSS) with 50 non-overlapping groups. Unlike analog radios, multiple group communications can occur simultaneously on the same channel.

In addition to these overall benefits, you'll be able take advantage of many leading-edge operational features that were never available previously. And you'll soon wonder how you managed without them.

Because the digital technology of the DTR410™ enables each unit to have its own unique 11-digit identification, you get a new level of radio communication versatility with these calling options:

### Digital One-to-One Calling

Allows you to call and talk privately with a specific user's radio. A private-call recipient can receive an alert—either an audible or vibrating signal. And the recipient's unit displays the caller's ID.

### Digital One-to-Many Calling

#### Public Group Call

All other DTR Series™ radios on the same group ID and channel hear communications, similar to analog radio operation.

#### Private Group Call

Other DTR Series radios on the same group ID and channel hear communications, similar to analog radio operation.

#### Individual unit identification also enables:

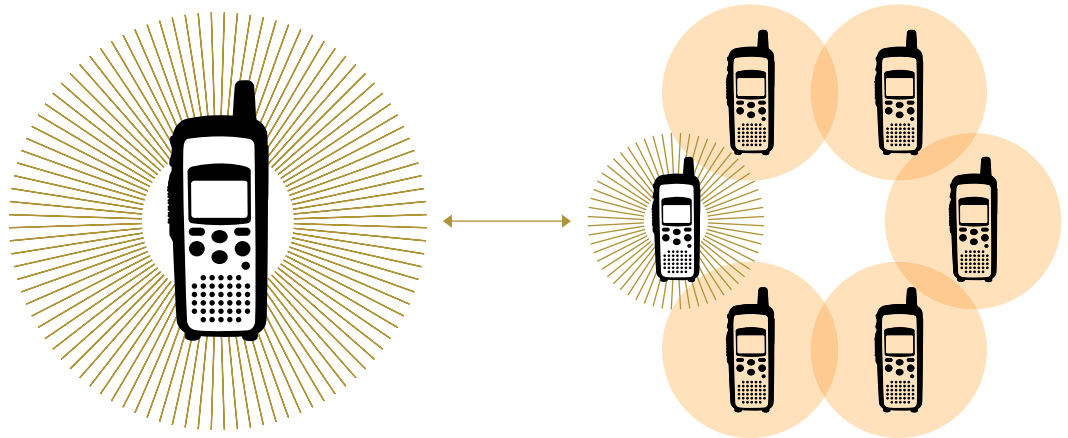
- Call forwarding to other radio IDs—notify others that you're unavailable and allow them to speak with another contact for assistance.
- Transmit ID—receiving radios will display the radio ID of the transmitting unit and, if listed in the receiving radio's contact list, the transmitting unit's radio name.

#### The DTR410 also features:

- Short message service (SMS) text messaging—with a total of twenty preset messages for example, "I'll call you back in 5 minutes," and support for keyed-in custom messages to meet more specific needs.
- Scroll list—you can view a recent-calls list, showing the source and target of the last 20 transmissions with time and date information.

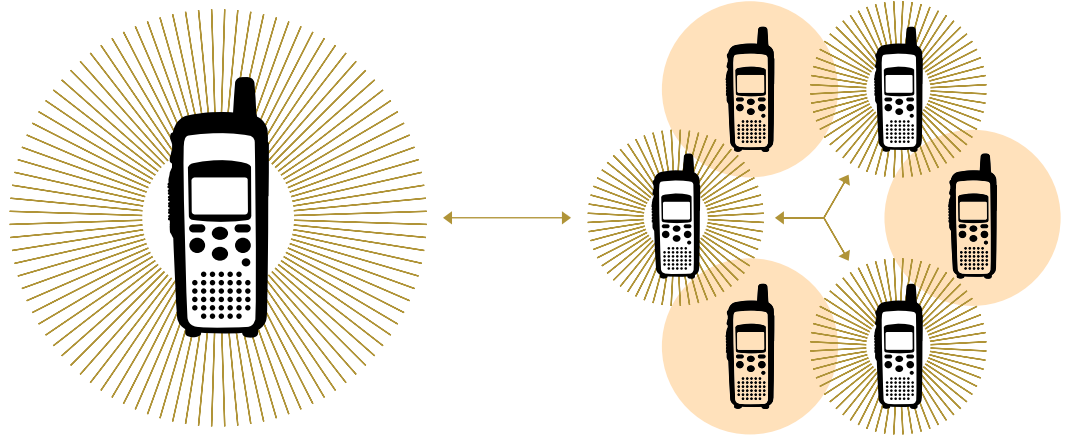
It all adds up to a superb combination of features for your convenience, management, and productivity all at an extraordinary value.

## Digital One-to-One Calling



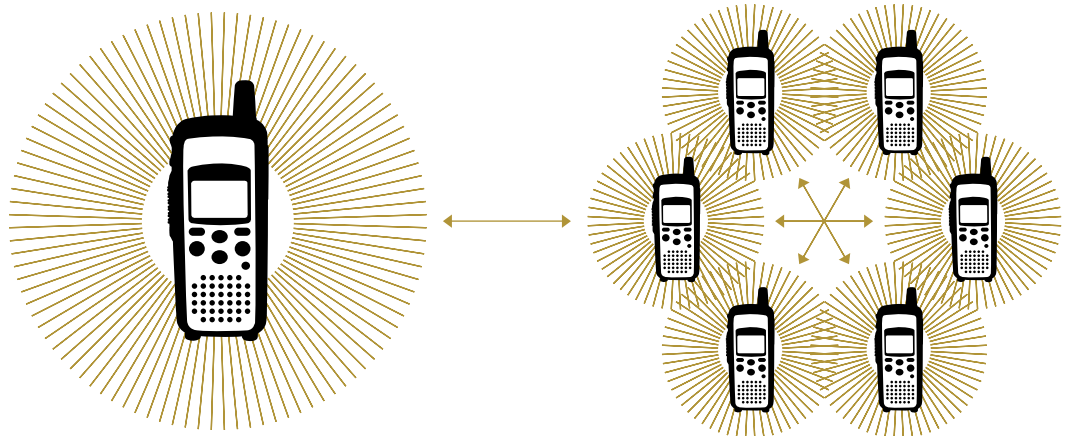
## Digital One-to-Many Calling

### Private Group Call



## Digital One-to-Many Calling

### Public Group Call



# Digital On-Site Two-Way Radio Features



- 1 Antenna
- 2 Audio Jack  
Connect audio accessories
- 3 Custom Programming Software/Accessory Connector  
Use to connect radio to PC for easy programming. Also for use to connect non-audio accessories or for plug-in charging
- 4 Home Key  
Use to exit the current menu and return to the idle screen
- 5 Menu Key
- 6 Microphone
- 7 Navigation Keys  
Use to select members in scroll list or scroll through menu settings
- 8 Option Keys  
Use to select display options
- 9 Power Button  
Press to turn on, hold to turn off
- 10 PTT (Push-to-Talk) Button
- 11 Volume Controls

## The DTR410™ Features:

- 900 MHz ISM license-free band
- Digital one-to-one private call
- Digital one-to-many group call
- Public groups available—up to 25 (20 default)
- Frequency Hopping Spread Spectrum (FHSS)
- Battery life—Standard, up to 14.5 hours of operation per charge
- Charge time—3 Hours
- Short Message Service (SMS) text messaging reception and origination
- Preprogrammed messages for quick and easy response
- Customizable messages (via optional Mini Keyboard)
- SMS time/date stamping
- Name aliasing (via optional Mini Keyboard)
- Remote monitor, disable and time
- Over-the-air time/date update
- Call forwarding
- Call Alert
- Alert reminder tone
- Caller ID
- Recent call list—last 20 transmissions
- Rugged, compact polycarbonate housing with rubber overmold for comfort (5.2" H x 2.3" W x 1.4" D)
- 2-pin audio accessory jack with captive connector cover
- Full-graphic backlit display with contrast adjustment and backlight timer
- Battery gauge
- Electronic on/off control
- Unit-to-unit configuration cloning (via optional Cloning Cable)



## Excellence in Design; Exceptional Durability

Rugged and reliable, the DTR410 digital on-site radios undergoes rigorous testing in the design process using U.S. Military 810 C,D,E and F Standards—so you can rest assured it will hold up under demanding conditions. These tests are designed to simulate the very harshest environments, including:

### **Blowing Rain**

Steady rainfall and wind for 30 minutes on every surface.

### **Salt Fog**

48 hours of exposure.

### **Vibration**

Up to nine hours of exposure to vibration that simulates the rigors that a radio could undergo while being carried or transported.

### **Blowing Dust**

Six hours of blowing dust on all surfaces.

### **Shock**

18 shocks with a minimum G force of 40 G each.

### **Temperature Storage**

Multiple hours of exposure to storage temperatures as low as -67° F and as high as 160° F.

# DTR410™ Accessories

Create a customized communication solution for your customers' specific needs with DTR Series™ radios and Motorola Original® Accessories.

## Standard Package Includes:

- One DTR Series™ Digital On-Site Two-Way Radio
- Swivel Belt Holster
- Charger
- Drop-in Charging Tray
- Lithium Ion Battery
- 1/4 Wave Stubby Antenna
- Quick Reference Guide
- User's Guide



DTR Series Standard Package

## Audio Accessories



### Lightweight Headset with Boom Microphone

Part #53815

Ideal for fast-paced work environments. Enables discreet operation.



### Remote Speaker Microphone

Part #53862

Convenient way to speak and listen without having to reach for your Motorola two-way radio. Clips on shirt or collar.



### Earpiece with Microphone

Part #53863

Fits over ear for clear reception even in noisy areas.



### Headset with Swivel Boom Microphone

Part #53865

Ideal for noisy work areas or to avoid disturbing those around you. Convenient way to speak and listen without having to remove radio from its holster.



### Earbud with Clip Microphone and Push-to-Talk (PTT)

Part #53866

For convenience and uninterrupted productivity. Push-to-talk button activates microphone when you're ready to speak.



### Earpiece with Inline Push-to-Talk (PTT) Microphone

Part #56517

Convenient earpiece enables communication without removing the radio from its holster. Push-to-talk button activates microphone when you're ready to speak.



### Earpiece with Boom Microphone

Part #56518

Enables communication without removing the radio from its holster.

## Holsters & Carry Cases



### DTR Series™ Holster

Part #53961

Replacement for the durable holster that comes standard with each DTR Series radio purchased.

## Connectivity



### Mini Keyboard

Part #53967

Access options, update contacts and enter commands on your radio keyboard. Also enables quick and easy text messaging.

(Radio not included)



### Cloning Cable

Part #53968

Provides time-saving cloning capability of all configurations and user menu settings at the touch of a button.

## Batteries & Chargers



### High Capacity Lithium Ion Battery

Part #53964

High capacity rechargeable battery provides up to 19 hours of battery life per full charge.



### Standard Capacity Lithium Ion Battery

Part #53963

Have a spare battery ready for when you need it. Rechargeable battery provides up to 14.5 hours of battery life per full charge.



### 1-Hr Rapid Charger

Part #53969

Enables you to fully charge your DTR Series radio in 1 hour.



### 3-Hr Standard Charger

Part #NNTN4841A

Enables you to fully charge your DTR Series radio in 3 hours.



### Vehicle Power Charger

Part #NNTN6343

Conveniently plugs into a standard vehicle cigarette lighter port for remote charging.



### Replacement Drop-In Charging Tray

Part #53962

An extra charger gives you even more places to recharge—at home, in the office, or while traveling. Recharge your radio wherever there is an electrical outlet available.



### Multi-Unit Charger

Part #53960

Allows drop-in charging for up to six radios and/or batteries from a single outlet in three hours. This wall mountable unit also provides a central storage location for radios at the end of a workshift.

# DTR410™ Specifications

## General Specifications

Frequency Range	900 MHz ISM FHSS
Contact List Capacity	100 (Shared Group/Private)
Default Programming	20 Public Groups
Power Supply	3.8V ± 0.4V
Dimensions	132.3mm H x 57.2mm W x 35.4mm D / (5.2" H x 2.3" W x 1.4" D)
Weight: with 1200 mAH Li-Ion Battery with 1500 mAH Li-Ion Battery	200.2g (7.1oz.) 205.7g (7.3oz.)
Average Battery Life @ 5/5/90 Duty Cycle: with 1200 mAH Li-Ion Battery with 1500 mAH Li-Ion Battery	14.5 Hrs. 19 Hrs.
FCC Designation	AZ489FT5842
IC Designation	109U-89FT5842

## Receiver Specifications

Sensitivity: (3% BER Sensitivity)	-125 dBm
Frequency Stability: (-30° C to +60° C)	± 0.0005% (± 5PPM)
Spur Rejection	55 dB
Blocking Immunity: Interferer from ±500 kHz to ±1 MHz Interferer from ±1 MHz to ±15 MHz	75 dB 80 dB
Audio Output @ < 5% Distortion	1W

## Transmitter Specifications

RF Output	1 W
Channel Spacing	50 kHz
Frequency Stability: (-30° C to +60° C)	± 0.0005% (± 5PPM)
Spurs/Harmonics	500 uV/m ( 3m)
Audio Distortion	<3%
TX ACCPR	-50 dBc
FCC Modulation	8-level FSK 900 MHz ISM FHSS

## Accelerated Life Test

Motorola's Accelerated Life Test (ALT) is a developmental process of rigorous laboratory testing that simulates years of field use. Motorola has a firm commitment to quality and reliability. These radios have been designed, manufactured, and tested to achieve high levels of component and workmanship quality. Motorola radios are designed to minimize costly repairs and downtime.

All specifications subject to change without notice.



### **Motorola—A Name You Know and Trust**

For more than 75 years, Motorola has been a leader in creating state-of-the-art wireless communications for people like you. The DTR410™ digital on-site two-way radio upholds that superior standard. And each radio (and radio accessory) is backed by a limited one-year warranty. So when you select the DTR410 radio, you'll experience the same exceptional quality you've come to expect from all Motorola products.



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