

# 2-Way Radio Callbox

# DMR Digital

## Tier 2, TDMA Technology

## Finally—The Freedom To Put Wireless Communication Right Where You Need It!

Position the DMR Series digital radio callbox virtually anywhere to maximize manpower efficiency, improve safety or service response times. Purpose-built, ground-up radio design, not a portable radio in a box. Deploys easily — no wires, no trenching, no construction required. Can be used stand-alone using alkaline batteries or can be powered using external AC adapter.

The DMR Series callbox provides crisp, clear, long-range 2-way voice communication, permitting co-workers and visitors to communicate with your DMR radio-equipped staff from points near and far—be it from the plant floor, maintenance garage, gated entry area, delivery dock or the parking lot.

## Features / **Benefits:**

- Wireless, Push-To-Talk, 2-Way, DMR Digital, Tier 2 (12.5kHz) TDMA Technology  
**No Costly Trenching or Construction.**
- Enhanced Digital Performance, Business Band Frequencies  
**Long Range — Up to 1 Mile\*, Line-Of-Sight. Works with Any Other DMR digital Business Band 2-Way Radio.**
- Rugged, High-Impact Gasket Sealed Enclosure  
**Durable, Sealed and Weatherproof For Outdoor Use**
- Built-in Antenna and Tough, Machined-Aluminum PTT Button  
**Long-Life, Tamper and Vandal-Resistant**
- Battery Powered or External Power Capable  
**No Wires, Stand Alone Operation or Can Be Externally Powered with Optional AC Adapter For Always-On Operation**
- High Audio Output Capability  
**Adjustable Volume - Loud, Easy To Hear In Loud Environments**
- PC Programmable and User Adjustable Settings  
**Allows Easy, In-The-Field Programming**
- Recordable Voice Messages—Greeting/Alert/Power Fail/Low Battery Alert Voice Message  
**Automatic Messages Increase System Usefulness**
- Built-In Relay Control  
**Allows Long-Range, Remote Control Of Locked Gates Or Doors**
- Standard Flange Mount Hole Pattern  
**Easy Installation. Optional Mounting Brackets Available**
- Choice of 2 Enclosure Colors  
**Pick The Color Best Suited To Meet Your Need:**
  - High Visibility Green and Coal Black
  - Custom Colors Available For Volume Application

**Applications....** Education • Construction • Manufacturing • Emergency Evac Rally Points • Health Care • Gate Secured Areas • Parking Lots • Amusement Parks and Resorts



# DMR Digital 2-Way Radio Callbox

## Accessories...



Strobe Light



Goose Neck  
Mounting Bracket



PN RPS-EXPO  
AC Power Adapter



Solar Power Kit



External  
Antenna

## Specifications...

Models	Description -DMR Digital	TX Pwr Using 3 D-Cells	TX Pwr Using Ext 12VDC Pwr	Includes Built-In Relay, Stored-Voice Msg, Sensor Switch Inputs
RQX-117DMR	VHF, 150-160 MHZ, Part 90 Freqs, Hi-Viz Green Housing	700mW	2 Watts	Yes
RQX-117DMR-BLK	VHF, 150-160 MHZ, Part 90 Freqs, Black Housing	700mW	2 Watts	Yes
RQX-417DMR	UHF, 450-470 MHZ, Part 90 Freqs, Hi-Viz Green Housing	700mW	2 Watts	Yes
RQX-417DMR-BLK	UHF, 450-470 MHZ, Part 90 Freqs, Black Housing	700mW	2 Watts	Yes
No. of RF Channels:	1			
Signaling-DMR Digital Mode:	16 Color Codes, Subscriber Unit ID (SUID), Destination ID (Individual & Group Selective Call, All-Call)			
Dimensions:	7" H x 5" W x 3" D			
Weight:	2.75 lbs			
Enclosure Material:	Gasket Sealed, High-Impact Polycarbonate			
Colors:	Black or High-Viz Green			
Environmental:	Splash resistant, shock and vibration per Ritron test			
Operating Temperature:	-20°C to +55°C (-4°F to 131°F) Battery rating. At 0°C the capacity is < 50% rated) Talk range will decrease at low temperatures when operating on alkaline batteries.			
Programming:	Field programming capability of limited parameters. Full programming capability using internal USB Connector used for full PC Programming.			
Remote Control Relay :	Can be used to remotely control gates, doors or strobe light. Relay switch is controlled when callbox receives the pre-programmed selective signaling command code.			
Aux Sensor Monitoring Input:	SPDT, 3A, 125VAC/30VDC – Normally Open or Normally Closed (NO Default). Modes of Operation: Momentary or Toggle, On/Off. Optional sensors used to detect motion, gate movement, vandal/tamper or vehicle presence can be connected to the callbox using the sensor input. Sensor input responds to an Open or Closed switch. Callbox will send either an alarm tone or a recordable voice message when optional switch/sensor detects a change. Can also be programmed to automatically turn callbox ON and transmits recordable voice message or alarm tone to radios monitoring callbox activity.			
Adjustable Speaker Volume:	Adjustable 20% to 100%			
Automatic Turn-Off Feature:	Conerves batteries. Selectable turn-off times will automatically turn callbox off after a set period of inactivity on the radio channel. Auto Turn-OFF feature must be enabled when using battery only power.			
Listen-In Feature:	Callbox can be selectively paged to allow remote monitoring of audio in the vicinity of the callbox.			
Busy Channel TX Inhibit:	Prevents Callbox from transmitting if someone else is using the radio channel.			
<b>Recordable Voice Messages</b>				
1. Greeting Message:	12 sec length max, for benefit of visitor, plays only on the callbox speaker when the On/PTT button is 1st pressed.			
2. Send Call Alert Message:	4 sec length max, transmitted to radios monitoring callbox activity when On/PTT button is 1st pressed.			
3. Send Sensor ON Message:	4 sec length max, transmitted to radios monitoring callbox activity when the Sensor Input goes low.			
4. Send Sensor OFF message:	4 sec length max, transmitted to radios monitoring callbox activity when the Sensor Input goes high.			
5. Send Low Battery Message:	4 sec length max, transmitted to radios monitoring callbox activity when low battery is detected.			
6. Send Power Fail Message:	4 sec length max, transmitted to radios monitoring callbox activity when loss of External 12 VDC is detected.			
Automatic Voice Message "Re-Send":	When Alert message from Callbox is not immediately answered, Alert message will automatically be "re-sent" up to 5 times. Selectable 0-5 times.			
<b>Battery Life**</b>				
3 D-Cell Batteries:	Alkaline			
Number of Transmissions:	Approximately 5,000 based on duty cycle stated below			
Duty Cycle:	3 seconds receive, 3 seconds transmit, 10 seconds standby			



\*Actual range may be reduced by man-made obstructions, foliage, or terrain.

\*\*Each callbox application is unique, to compute the expected battery life of your callbox application, visit the Ritron Battery Life Calculator at [www.ritron.com/BLcalculator](http://www.ritron.com/BLcalculator).

Call 800-USA-1-USA (872-1872) or visit [www.ritron.com](http://www.ritron.com)



Founded in 1977, Ritron, Inc. specializes in the design and manufacture of commercial and industrial-grade wireless voice and data communication equipment.