DMP SR3 Bluetooth and Proximity Reader User Guide

INSTALLATION AND PROGRAMMING GUIDE
SR3
Bluetooth and Proximity Reader

Contents

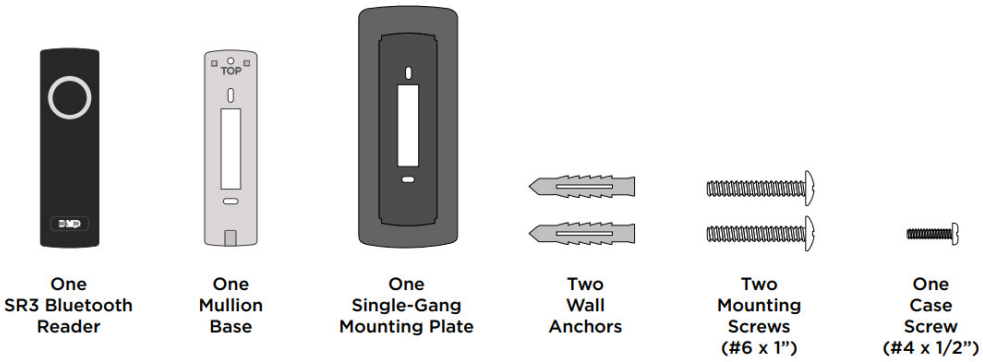
GET STARTED

SR3 Bluetooth and Proximity Readers support Mobile Credentials and 125 kHz proximity credentials. The reader comes
with two mounting options, mullion or single-gang, and is suitable for indoor or outdoor use. The SR3 uses the Wiegand
reader protocol to communicate with door controllers or access control modules.

Procedure

The installation must follow this procedure:
Step 1 (Technician): Install the reader.
Step 2 (Technician): Enroll and associate the reader with a system in Tech APP.
Step 3 (Administrator): Purchase credentials for a customer in Dealer Admin.
Step 4 (Customer): Assign credentials to a user in Virtual Keypad.
Step 5 (End User): Bind a mobile credential to a user's device in Virtual Keypad.
Step 6 (End User): Use the credential at the SR3 Bluetooth Reader.
This guide walks you through all 6 steps.

What's Included



What You'll Need

- Drill
- If mounting with wall anchors, a 5/16" (8.0 mm) drill bit
- If mounting without wall anchors, a 5/64" (2.0 mm) drill bit
- #1 Phillips screwdriver
- #2 Phillips screwdriver
- Pliers
- Wire connectors
- Electrical tape

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STEP 1: INSTALL THE READER

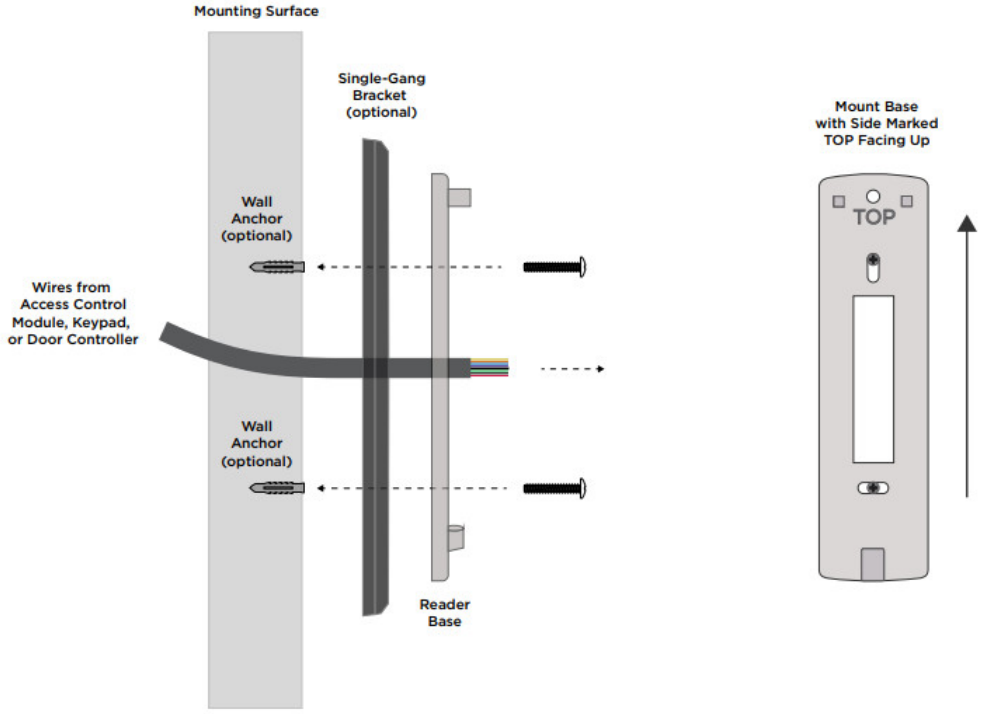
This section covers the steps required for a technician to physically install the reader including mounting, wiring, and
attaching the cover.

Mount the Reader

WARNING: Do not press and hold the button on the back of the reader. This procedure clears the unit's

memory and firmware, which renders the device inoperable until it is reconfigured and re-enrolled.
Never mount the reader directly on a moving surface such as a door or gate. Isolate the reader from repetitive shocks and potential damage. The reader can be mounted on a wall or any suitable flat surface.

1. Determine the purpose of each wire before removing an existing reader. Use a voltage meter to verify that 12 VDC is supplied by the controller, then disconnect power from the reader's power source
2. Pull the existing wires through the wall. Use the reader base to mark locations for the mounting holes on the surface. Do not use the plastic base as a guide when drilling.
3. Move any wires in the drill's path. Drill holes in the surface no more than 1 inch deep. If using wall anchors, insert them into the holes you drilled in the mounting surface.
4. Slide the base over the existing wiring. If using the single-gang bracket, slide the bracket on first, then the reader base. Ensure the base side marked TOP is mounted up.
5. Use the included #6 screws to secure the mounting base to the surface. Do not overtighten the screws.



Mounting and Base Orientation

Mounting and Base Orientation

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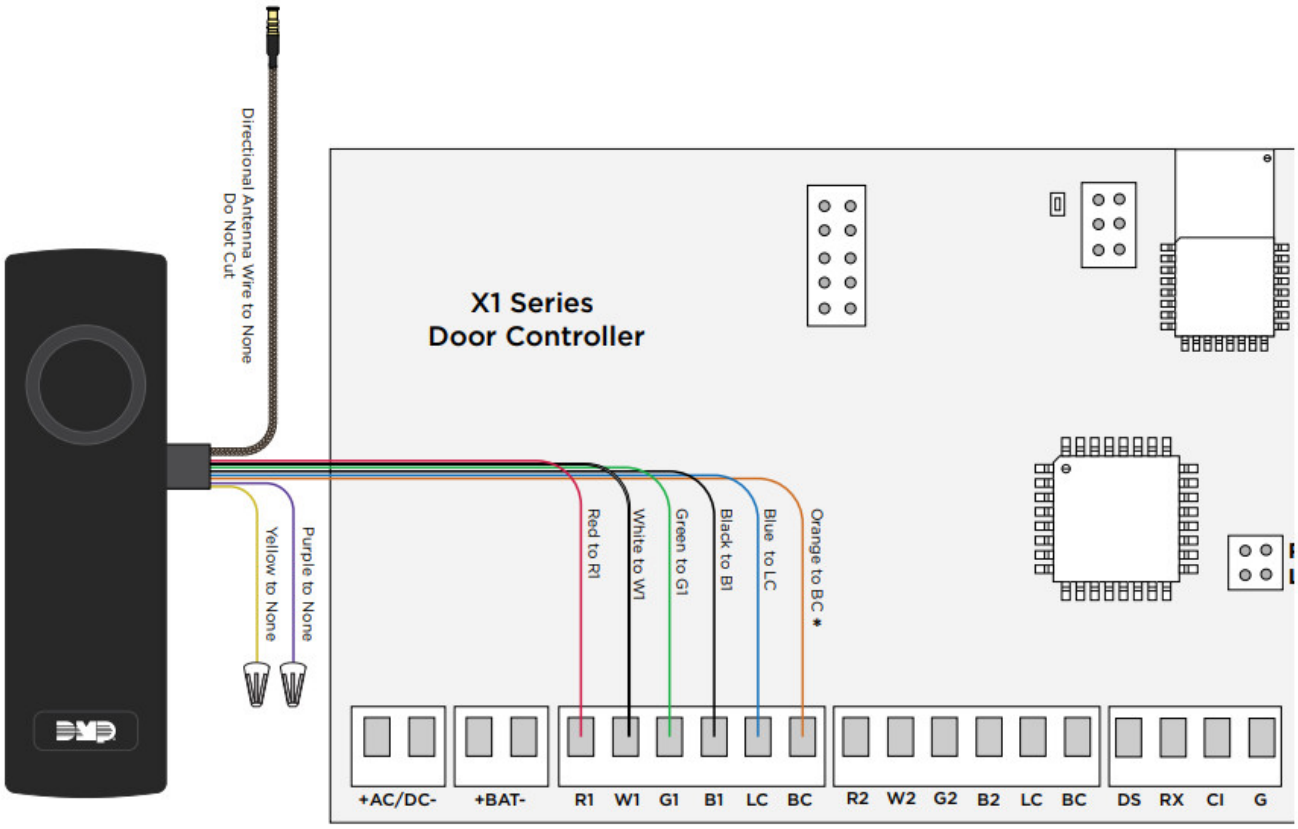
Wire the Reader
Connect the reader wires to the access controller according to the purpose of each controller terminal. Refer to Table 1 and the examples that follow for details. For wiring and power requirements, refer to "Wiring and Power".

Caution: Do not cut the braided directional antenna wire. Wrap it around and secure it to the wiring harness for
future use.

WIRE COLOR	PURPOSE	TYPICAL X1 SERIES TERMINALS	TYPICAL 734 SERIES TERMINALS	TYPICAL KEY PAD WIRES
Red	Power (Positive)	R1	RED	Red
Black	Ground (Negative)	B1	BLK	Black
White	Data 1	W1	WHT	White
Green	Data 0	G1	GRN	Green/White
Blue	Green LED	LC	LC	None
Orange	Beeper* (optional)	BC	RA	None
Purple	Red LED (optional)	None	None	None
Yellow	Smart Card Present (optional)	None	None	None
Copper, braided - Do not cut	Directional Antenna (optional)	None - Do Not Cut	None - Do Not Cut	None - Do Not Cut

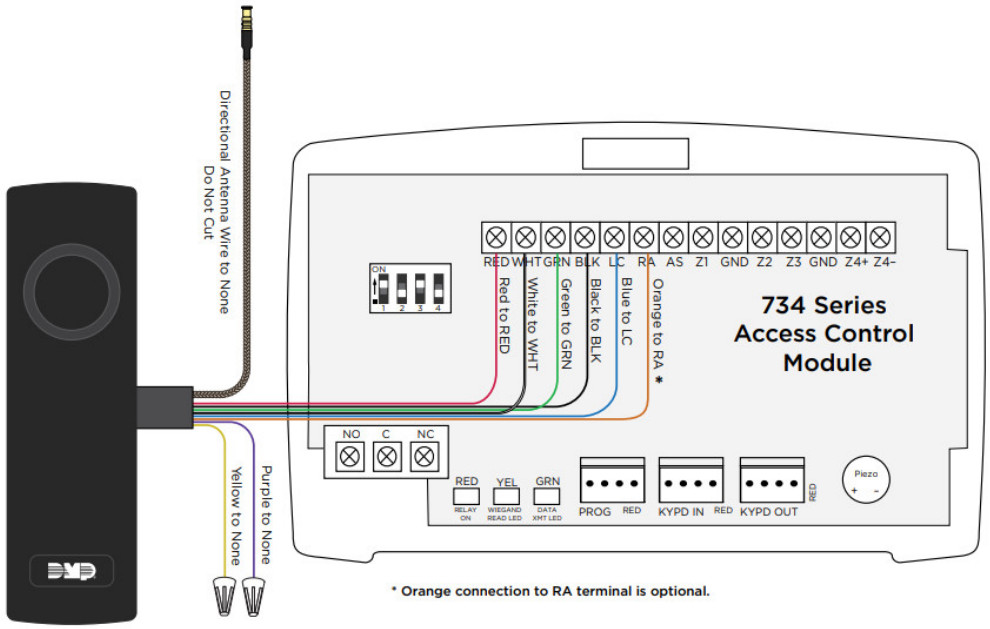
* If connected, the orange wire (beeper) mimics keypad beeping.

Table 1: Wire Connections



* Orange connection to BC terminal is optional.

X1 Wiring Example

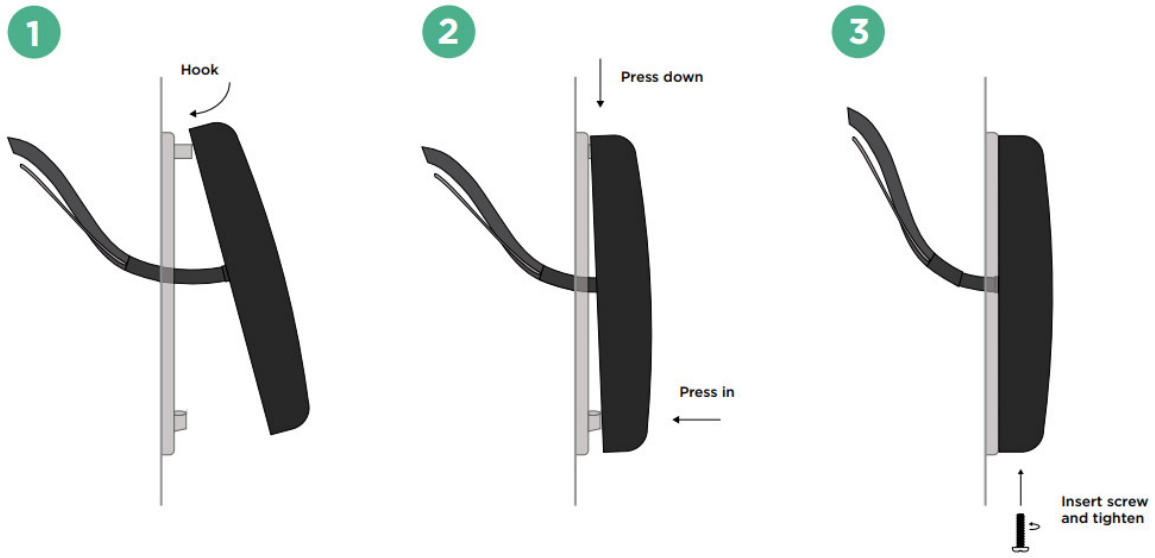


X1 Wiring Example

Attach the Cover

1. Hook the reader cover onto the top two base latches.
2. Press the reader down and in to seat the cover bottom on the bottom latch.
3. Use the included #4 case screw to secure the reader cover onto the base. Do not overtighten the screw.

4. Apply power to the reader's connected power source.
   After the reader powers on, the LED remains steady yellow.



Installing the Cover

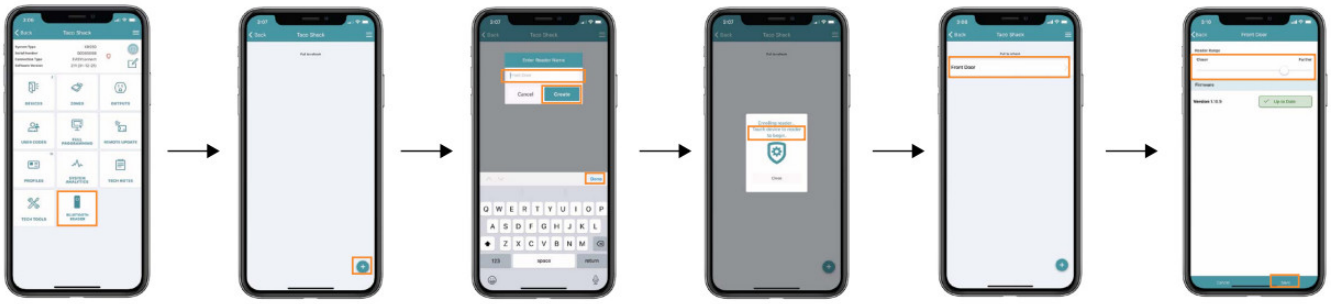
STEP 2: ENROLL & ASSOCIATE THE READER

A technician on site must associate each reader with a system before mobile credentials can be purchased in Dealer Admin by an Administrator.

Note: For XR Series panels with 734 Series Access Control Modules, ensure Program 734 Options is turned on and
Card Options is set to Custom in Device Setup before proceeding.

1. Stand at the reader and ensure your device has Bluetooth turned on.
2. Open Tech APP, then find and open the appropriate system.
3. Tap the Bluetooth Readers tile.
4. Tap Add. Name the reader, then tap Create.
5. When prompted, touch your device to the reader. When paired successfully, the reader beeps.
6. In Tech APP, open the reader you added. Use the slider to adjust the Reader Range closer or farther as needed. Range is 3 in to 30 ft (7.62 cm to 9.14 m).
7. To update the reader's firmware, go to Firmware and tap Update. If no new firmware is available, this button is not displayed.
8. Tap Save.

After being enrolled and associated, the reader's LED changes from steady yellow to steady white.
If you receive a message that states the 56-bit card format cannot be added, you must add the format manually in Full **Programming > Device Setup > Card Formats**. For more information, refer to "56-Bit Card Format".



56-Bit Card Format

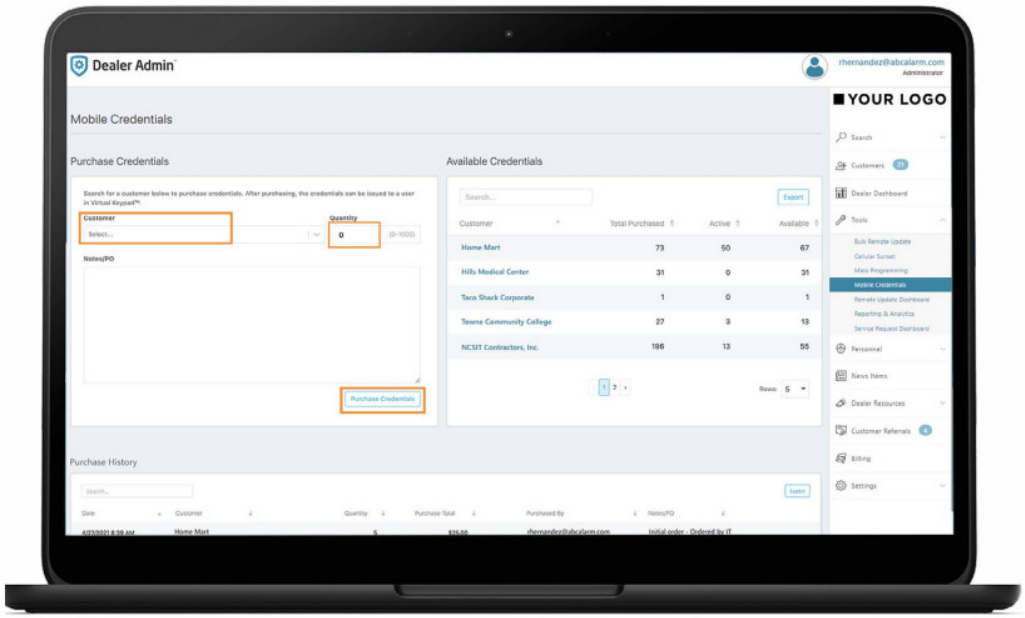
NAME	WIEGAND CODE LENGTH	SITE CODE POSITION	SITE CODE LENGTH	USER CODE POSITION	USER CODE LENGTH	USER CODE DIGITS
BLUETOOTHFORMAT	56	1	16	17	34	10

STEP 3: PURCHASE CREDENTIALS

This section covers how an Administrator purchases credentials for a customer in Dealer Admin. These steps can only be completed after the SR3 Bluetooth Reader is installed and associated with a customer's system in Tech APP.

Note: To purchase and issue credentials in Dealer Admin, you must either have an Administrator role or a custom role with Mobile Credential permissions. For more information, refer to Personnel Roles in Dealer Admin Help.

1. Go to Tools > Mobile Credentials.
2. Go to Purchase Credentials.
3. In Customer, select the customer that you want to purchase credentials for.
4. In Quantity, select the number of credentials you want to purchase for your customer.
5. If needed, enter notes. You can use the Notes/PO field to help you track items like why the credentials were issued and who requested them.
6. To purchase the credentials, select Purchase Credentials. Notify your customer that you completed their purchase.



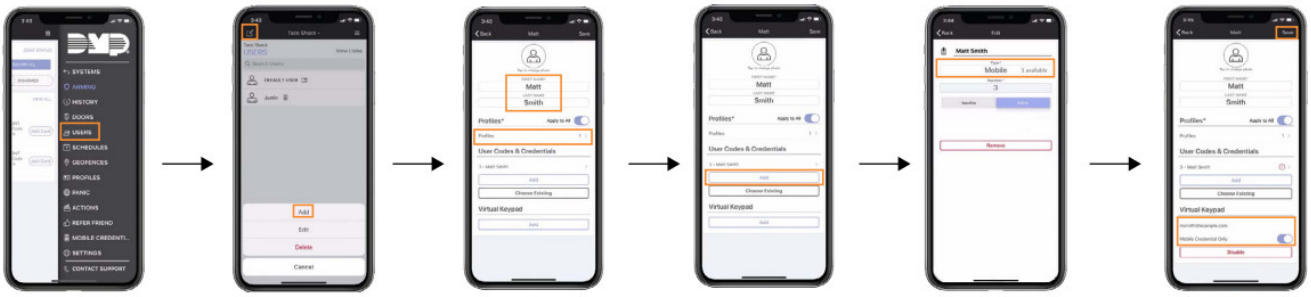
Purchasing Credentials in Dealer Admin

STEP 4: ASSIGN A MOBILE CREDENTIAL

After a customer's dealer purchases them in Dealer Admin, mobile credentials are assigned to users in Virtual Keypad.

This procedure covers how to create a new user and assign a mobile credential to them.

1. Tap ☰ Menu and select **Users.**
2. Tap ✎ Edit, then tap **Add.**
3. Enter the **User Name** and **User Number.**
4. Assign the user an authority level or select a **Profile**, then tap **Back.**
5. In **User Codes and Credentials**, tap **Add.**
6. In Type, select Mobile, then tap Back.
7. In **Virtual Keypad**, add the user's email address.
8. If you want the user to only have Virtual Keypad for mobile credentials, turn on Mobile Credential Only.
9. Tap **Save**. The user received an email notifying them that they have been issued a mobile credential.



Assigning a Mobile Credential in Virtual Keypad

User Training Tips

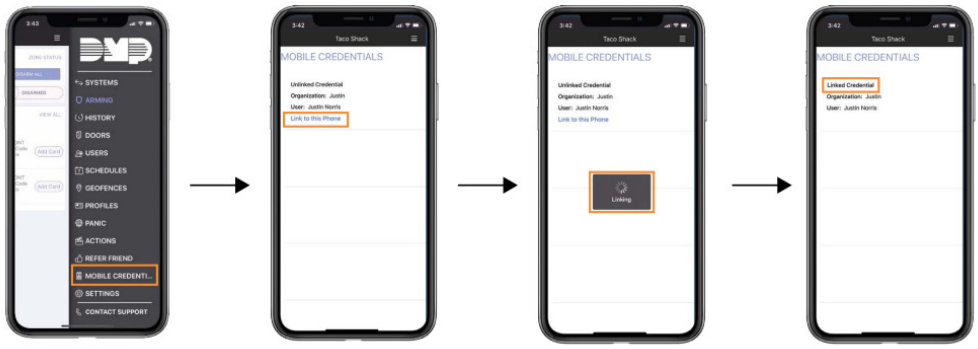
To avoid issues during normal use, keep the following in mind:

- Once bound to a phone, credentials cannot be transferred
- Credentials are lost if Virtual Keypad is deleted, a user's mobile credential is removed in Virtual Keypad, a user is removed in Virtual Keypad, or if a user's phone is the factory reset
- If a user doesn't bind an assigned credential to their phone within 2 weeks, the credential expires and returns to the customer's pool of credentials

STEP 5: BIND A CREDENTIAL TO A DEVICE

Before using your device to access a door, you must bind the mobile credential that was assigned to you to that device.

1. Tap ☰ Menu and select Mobile Credentials.
2. Find the credential that is labeled as Unlinked Credential and tap Link to this Phone.
3. When the credential is successfully bound, the link text disappears and the label changes to Linked Credential.



Binding a Mobile Credential to the Device in Virtual Keypad

STEP 6: USE A CREDENTIAL

After you've bound a mobile credential to your device and set up Virtual Keypad, you're ready to use your device to
access a door with a compatible reader.

1. The LED ring is white when the reader is idle. Wave your hand in front of the reader. If you are wearing gloves, you may need to remove them so the reader can sense your movement.
2. The reader LED ring turns blue and starts spinning. Move into range of the reader with your device. The reader beeps when it finds a device.
3. If access is granted, the reader's LED ring flashes green. If access is denied, the LED ring goes back to solid white, the door remains locked, and the sequence starts over.

Using the Credential at the Bluetooth Reader

Reduce Notifications (Android)

Because of Android's app requirements, Virtual Keypad sends a notification to your device's notification drawer every
time you use a mobile credential. You can hide these notifications from your device's Settings menu.
When you receive a notification from Virtual Keypad after using your mobile credential, swipe left on the notification and
tap Settings. Turn off Mobile Credential Notifications.

REFERENCE

Test the Reader

To safeguard customer security, DMP does not allow technicians to assign or bind mobile credentials in Dealer Admin or
the Tech APP. Additionally, a technician device may not have both an enrollment authorization token from Tech APP and
a mobile credential from Virtual Keypad.

To fully test the reader with a mobile credential, we recommend that you guide your customers through "Step 4: Assign a Mobile Credential", "Step 5: Bind a Credential to a Device", and "Step 6: Use a Credential". Alternatively, you can manually add an enrollment authorization token to a panel as a credential for testing purposes.

LED Operation

All Reader LED Operations

Troubleshooting

ISSUE	LIKELY CAUSES	WHAT TO TRY
The reader is not powering on	• The wires may not be connected properly • The power from the controller is not sufficient • The reader is powered on, but the LED is not connected	• Verify wiring • Check power source of controller/module: Ensure main power source like breaker is on. Verify that the voltage between the red and black wires is greater than 6 V under all conditions
The reader LED is flashing and the reader is beeping repeatedly	• Enough voltage is present, but not enough current	• Apply additional power from the controller/module or external power supply
The reader won't enroll from Tech APP	• Installer doesn't have proper Tech APP permissions • Device is outside of read range or is experiencing interference • Device's Bluetooth and Location aren't turned on • Device does not meet minimum requirements	• Ensure the installer has proper permissions • Move to closest read range (3") and check for sources of interference • Ensure device's Bluetooth and Location are turned on • Check mobile device's operating system and BLE version
The enrolled reader does not respond when a card is presented	• Voltage issues • Access Denied • Credential not recognized • Device does not meet minimum requirements	• Verify that the voltage between the red and black wires is greater than 6 V under all conditions • Use Virtual Keypad to view access attempts and add the credential to a user in Virtual Keypad if necessary • Ensure credential is bound to user's device • Check mobile device's operating system and BLE version

Enrolled reader does not beep after presenting prox card	• The prox card may not be a supported format • Insufficient voltage	• Check prox card format and compatibility • Verify that the voltage between the red and black wires is greater than 6 V under all conditions • Check that beeper wire is connected (orange wire to beeper control/remote annunciation)
Enrolled reader beeps when a card is presented, but the door does not open	• Access Denied •Data isn't being passed correctly •Insufficient current	• Use Virtual Keypad to view access attempts and add the credential to a user in Virtual Keypad if necessary • Check green and white wires for connection or reversal • On new long wire installations (hundreds of feet), make sure there is enough current going to the door strike. Consider increasing wire gauge or double up wire pairs
The door opens when a card/mobile credential is presented, but the reader doesn't display the green LED. Power is confirmed at 12 V.	• The blue wire or LED Control from the controller/module is not working properly	• Ensure Blue wire is connected to LC (LED Control) • Disconnect the blue wire and touch it to the black wire. If the LED turns green, reader hardware is functioning properly. • Check the configuration on the controller/module, it may be in a mode that operates the LED line differently than is expected. For the Green LED to operate correctly, the Blue line must be pulled down to 0 V.
Tried all of the above steps and the reader still doesn't work	• Potential enrollment or firmware issue	• Reset the reader to defaults, then re-enroll it
Defaulted the reader, re-enrolled, and it still doesn't work	• Potential enrollment, firmware, or hardware issue	• Perform a factory reset, then re-enroll it

Tried everything above and the reader still does n't work	• Issue beyond installer scope	• Call Tech Support at 1-888-4DMPTec

Reset the Reader

WARNING: Pressing and holding the button on the back of the reader clears the unit's memory and firmware, which renders the device inoperable until it is reconfigured and re-enrolled.

Before resetting the reader, you must ensure that:

- A technician is on-site with permission to enroll readers in Tech APP
- An Administrator is available to push reader firmware from Dealer Admin
- The technician has a way to contact DMP Tech Support
- Recommended: A customer is present with a mobile credential for testing

Reset to Defaults

 This process clears the reader's recent memory and unenrolls it from a customer's system.

1. Remove the case screw from the bottom of the reader.
2. Pull the reader up and out from the base.
3. Locate the small gray button on the back of the reader, just below the wire wrap. Press and hold the button for 5 seconds.
4. After the reader has been reset to defaults, the LED will flash a series of different colors, then rest on solid yellow.
5. Follow the previous steps to Attach the Cover.
6. Follow the steps in this guide to Enroll & Associate the Reader.

Factory Reset

This process fully clears the reader of any saved data, including enrollment, all firmware updates, and all customer data.

Use this process only as a last resort during troubleshooting.

1. Remove the case screw from the bottom of the reader.
2. Pull the reader up and out from the base.
3. Locate the small gray button on the back of the reader, just below the wire wrap. Press and hold the button for 10 seconds.
4. After the reader has been factory reset, the LED will flash a series of different colors, then rest on solid yellow.
5. Follow the previous steps to Attach the Cover.
6. Follow the steps in this guide to Enroll & Associate the Reader.
7. If none of the previous steps fix issues with the reader, call DMP Tech Support at 1-888-4DMPTec for assistance.

Compatibility

Note that panels also require a compatible access control module or keypad.

PANELS AND DOOR CONTROLLERS	MINIMUM FIRMWARE VERSION
XT30/XT50 Series Panels	100
XT30 International Series Panels	620
XR150/XR550 Series Panels	183
XR150/XR550 International Series Panels	683
X1 Series Door Controllers	211

ACCESS CONTROL MODULES	MINIMUM FIRMWARE VERSION
734 Series Access Control Modules	104
734 International Series Access Control Modules	104
734N/734N-POE Series Access Control Modules	103
1134 Series Access Control Modules	107

KEYPADS	MINIMUM FIRMWARE VERSION
7800 Series Touchscreen Keypad	203
7800 International Series Touchscreen Keypads	704
7000 Series Thinline/Aqualite Keypads	308
7000 International Series Thinline/Aqualite Keypads	607

APPS	MINIMUM SOFTWARE VERSION
Technician Device (Tech APP)	2.15.0 or higher
Customer Device (Virtual Keypad)	6.35.0 or higher
BLE (Bluetooth Low Energy)	4.2 or higher
Android devices	8.0 (Oreo) or higher and Bluetooth enabled
iOS devices	10.0 or higher and Bluetooth enabled

125 kHz PROXIMITY CREDENTIALS
PSC-1 standard light proximity card
PSK-3 proximity key ring tag
PSM-2P ISO imageable proximity card
1306 ProxPatch™
1326 ProxCard II® card
1346 ProxKey III® access device
1351 ProxPass®
1386 ISOProx II® card

Specifications

Operating Voltage	12 VDC
Current Draw	100 mA typical at 12 VDC
	135 to 155 mA max at 12 VDC
Read Range	Adjustable, range 3.0 into 30 ft (7.62 cm to 9.14 m)
Operating Temperature	-27 °F to 151 °F (-33 °C to 66 °C)
Recommended Humidity	85% RH or lower, non-condensing
IP Rating	IP65
Dimensions	6.0” x 1.7” x 1.3” (15.24 cm x 4.32 cm x 3.30 cm)
Weight	0.5 lb (0.23 kg)

Compliance Requirements

Wiring and Power

- Connections must be made in accordance with NFPA 70: Do not connect to a receptacle controlled by a switch
- Shield must run continuously from the reader to the panel
- The reader ground, shield line, and earth ground must be connected to a single point at the panel
- To avoid creating a ground loop, do not ground the shield line at the reader
- Minimum wire gauge is 24 AWG with a maximum single wire run length of 500 ft (150 m)

UL 294
For UL 294 Compliance, the readers shall be connected to a class two power-limited power supply or control panel output.

Certifications

- FCC Part 15 RFID Reader FCC ID: 2ANJI-SR3
- Industry Canada ID: 10727A-SR3

Underwriters Laboratory (UL) Listed
ANSI/UL 294 Access Control System Units Level I
Destructive Attack, Line Security, Standby Power
Level III Endurance

FCC Information
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications made by the user and not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Industry Canada Information
This device complies with Industry Canada License-exempt RSS standard(s). Operation is subject to the following two conditions:

1. This device may not cause interference, and
2. This device must accept any interference, including interference that may cause undesired operation of the

device.

INTRUSION • FIRE • ACCESS • NETWORKS
2500 North Partnership Boulevard
Springfield, Missouri 65803-8877
Domestic: 800.641.4282 | International: 417.831.9362
DMP.com

Documents / Resources

	DMP SR3 Bluetooth and Proximity Reader [pdf] User Guide SR3, Bluetooth and Proximity Reader
	DMP SR3 Bluetooth and Proximity Reader [pdf] Installation Guide SR3, Bluetooth and Proximity Reader

References

- Buy.DMP.com
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