INSTALLATION AND PROGRAMMING GUIDE

7800 Series
Graphic Touchscreen Keypad

CONTENTS

GET STARTED

7800 Series Graphic Touchscreen Keypads offer an easy to use touchscreen interface, optional panic keys, an AC Power/Armed LED, an internal speaker, a simple terminal connection to a 4-wire keypad bus, and other model-specific features. Keypads can be mounted in a conduit or backbox, or on a flat surface with appropriate fasteners.

Model-Specific Features

FEATURE	7872	7873	7873H
Built-in proximity card reader	X	X	X
4 Class B, Style A programmable, supervised, power limited protection zones	X	X	X
Door strike relay		X	X
Allows Wiegand or OSDP input from external card readers		X	X
Allows the keypad digits to automatically randomize on user code entry			X
Integrated privacy filter on the keypad screen			X
Standby current	**NORMAL**: 145 mA + 1.6 mA per active zone **ALARM**: 215 mA + 2 mA per active zone	**NORMAL**: 143 mA + 1.6 mA per active zone **ALARM**: 222 mA + 2 mA per active zone	

What's Included

- One 7800 Series Graphic Touchscreen Keypad
- Four screws (#6 x 1")
- One Model 333 Suppressor (7873/7873H only)
- Four 1k Ohm EOL resistors

What You'll Need

- 5/64" (2.0mm) drill bit
- #2 Phillips screwdriver

Procedure

This guide walks you through the required steps needed to install a 7800 Series keypad. They are:

1. Install the keypad.
2. Program the panel.
3. Program the keypad.
4. Test the keypad.
5. Train your customers.

INSTALL THE KEYPAD

1 Remove the Cover

To see how to remove the cover, watch the video How to Open a Touchscreen Keypad.

The keypad housing is made up of two parts: The cover, which contains the circuit board and components, and the base. When removing the cover, refer to Figure 1.

To separate the keypad cover from the base, insert the flat tip of a slotted screwdriver into one of the slots on the bottom of the keypad, then press in slightly to disengage the tab and pry open. Repeat with the other slot. Remove the cover from the base and set aside.

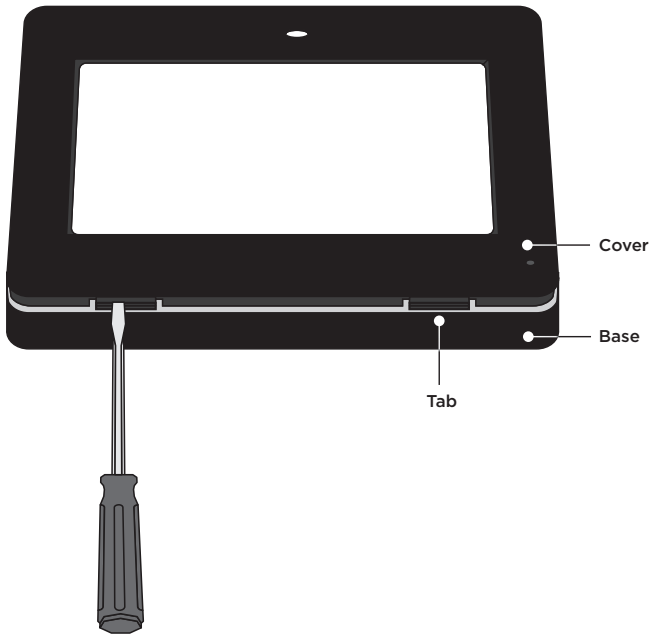


Figure 1: Removing the Cover

2 Run Wire

Run wire from the power source and card readers to the keypad mounting location.

3 Mount the Keypad

All DMP keypad housings are designed to install on any 4" square box, 3-gang switch box, compatible backboxes, or directly on a flat surface. For more information about mounting accessories, refer to "Ordering Information".

1. Route the keypad wires through the cutouts in the base. See Figure 2.
2. Use the keypad base to mark the holes for the screws on the mounting surface.
3. Set the base aside and drill the holes.
4. Use the included screws to secure the keypad base to the surface. Do not overtighten.
5. When all wire connections have been completed, place the keypad cover back onto the base and snap it into place.

A Mounting holes
B Wiring cutouts
C Cover latches

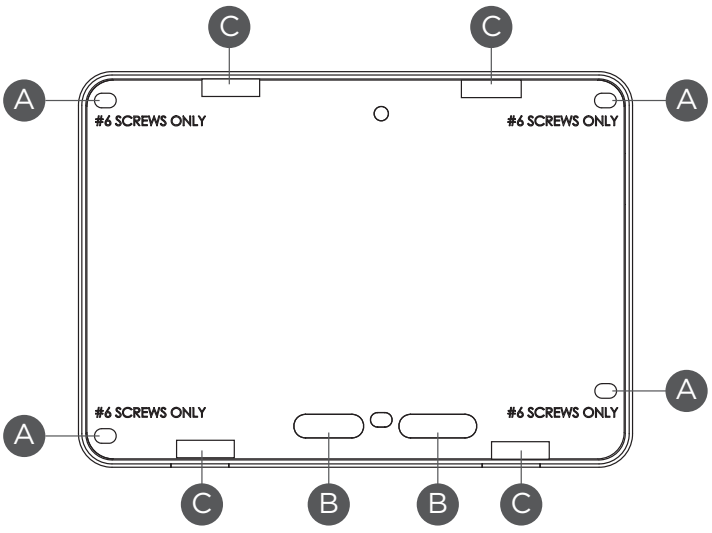


Figure 2: Mounting Hole Locations

4 Wire the Keypad

To wire the keypad, make the connections shown in Figure 3. To wire external readers to the keypad, make the connections shown in Figure 4 and Figure 5 as required for your installation.

Caution: Disconnect all power before wiring. Failure to do so may result in equipment damage or injury. Observe polarity when making power connections.

Each keypad model has specific wiring assignments. All zones are supervised and suitable for residential burglary or fire applications. The maximum zone line impedance is 100 Ohms. The ground fault is detected at 1420 Ohms or less. See "Keypad Bus Wiring Specifications" in this document for additional wiring information.

Use 1k Ohm EOL resistors DMP Model 311 on keypad zones 1-4.

1. Connect the harness to the keypad header.
2. Connect the red wire to panel terminal 7.
3. Connect the yellow wire to panel terminal 8.
4. Connect the green wire to panel terminal 9.
5. Connect the black wire to panel terminal 10.
6. For 7873/7873H keypads, use a 5-wire harness for external card reader connection.

WIRE COLOR	PURPOSE
Black	Ground from Panel*
Green	Receive Data from Panel*
Yellow	Send Data from Panel*
Red	Power from Panel*
Black	Ground to Reader
Red	Power to Reader
White	Reader Data 1
White/Green	Reader Data 0

WIRE COLOR	PURPOSE
Violet	Door Strike, NC
Gray	Door Strike, C
Orange	Door Strike, NO
White/Brown	Zone 1
White/Red	Zone 2
White/Orange	Zone 3
White/Yellow	Zone 4

*Required connections

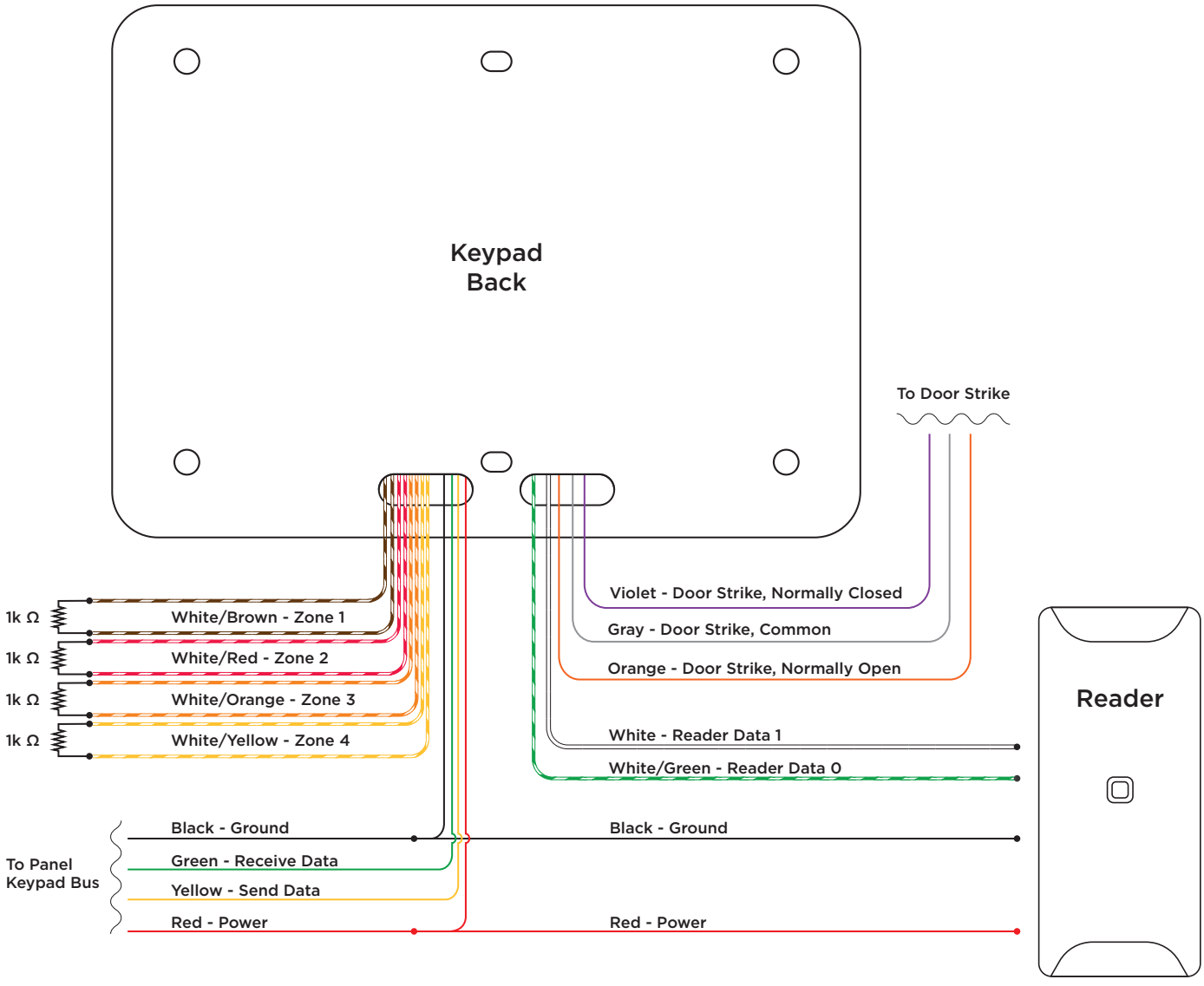


Figure 3: Keypad Wiring

Optional: Wire for Access Control

Internal Access Control Reader

7873/7873H and 7872 keypads provide a built-in proximity card reader that is compatible with most standard 125 kHz proximity credentials. For a list of publicly supported card formats, see Public Card Formats.

Note: Some proximity credentials are not compatible with DMP proximity keypads. Thoroughly test the intended proximity credentials with the application before installation. DMP does not guarantee compatibility with credentials not purchased from DMP.

External Access Control Reader

An external 13.56 MHz proximity reader can be connected and will be compatible with 13.56 MHz proximity credentials. To accept OSDP or Wiegand data input from other external card readers, connect a 12 VDC external card reader to a 7873/7873H keypad. Connect the red and black power wires from the card reader to the power wires from the panel. These connect in parallel with the keypad power wires. Connect the Data 1 (reader) wire to the white wire on the 5-wire keypad cable. Connect the Data 0 (reader) wire to the green/white wire on the 5–wire keypad cable. See Figure 3.

Note: Once OSDP has been selected, the onboard proximity reader will automatically be disabled. This feature is only available on keypads with Rev 12 or higher hardware.

Wire the Access Control Lock

7873/7873H keypads provide a Form C (SPDT) relay for controlling locks and other electronically-controlled barriers. The Form C relay draws up to 15 mA of current and the contacts are rated for 1 Amp at 30 VDC maximum, resistive. The wires marked NO C NC allow you to connect the device wiring to the relay for module control. Use an additional power supply to power magnetic locks and door strikes. See Figure 4 and Figure 5.

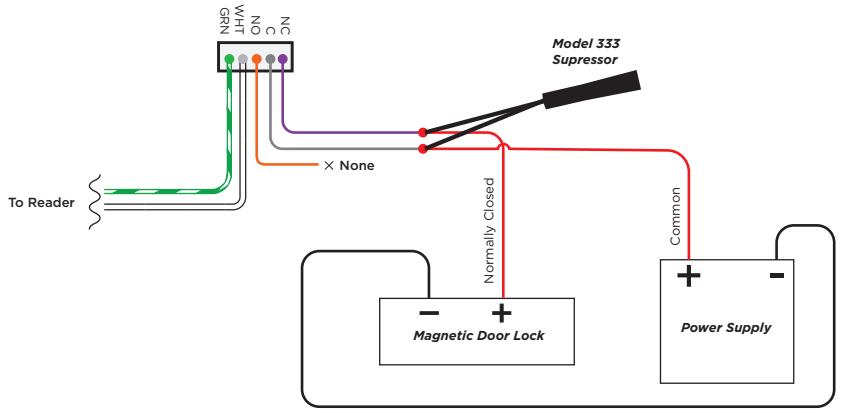


Figure 4: Typical Magnetic Lock Wiring

Wire the 333 Suppressor

Use the included 333 suppressor with the keypad to suppress any surges caused by energizing a magnetic lock or door strike. Install the 333 across the keypad C (common) and NO (normally open) or NC (normally closed) wires.

If the device being controlled by the relay is connected to the NO and C wires, install the suppressor on the NO and C wires. Conversely, if the device is connected to the NC and C wires, install the 333 Suppressor on NC and C wires. See Figure 4 and Figure 5.

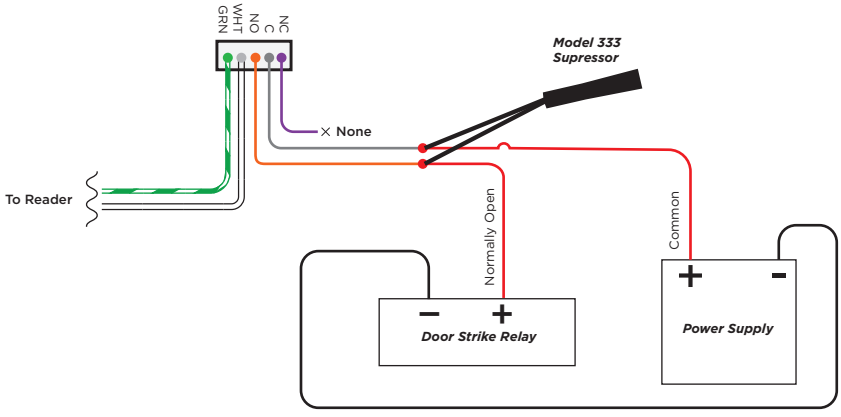


Figure 5: Typical Door Strike Wiring

USE THE KEYPAD

Keypad Layout

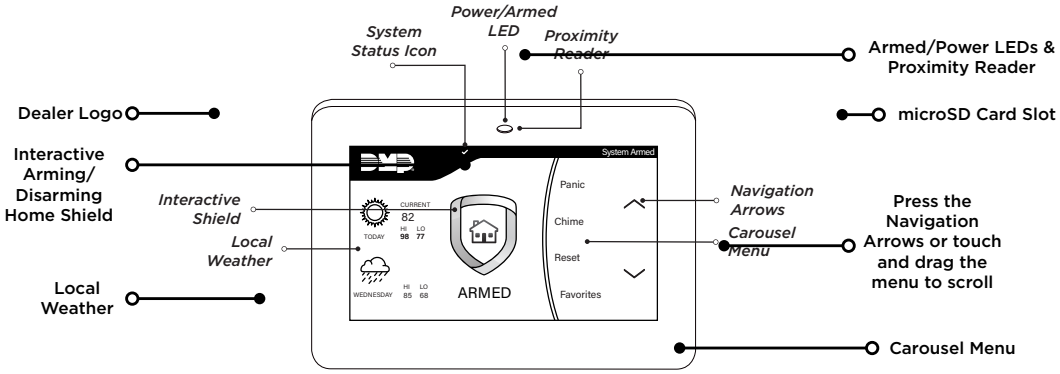


Figure 6: Keypad Layout

Enter Characters

To see how to enter characters, watch the video How to Type on a Keypad.

NUMBER	SELECT AREA			
	1	2	3	4
1	A	B	C	([{
2	D	E	F	)] }
3	G	H	I	! ^ ~
4	J	K	L	? " |
5	M	N	O	/ \ `
6	P	Q	R	& $
7	S	T	U	@ %
8	V	W	X	, =
9	Y	Z	Space :	_ ;
0	- +	. '	* <	# >

Table 1: Characters

Number Pad

1. Choose a character from Table 1.
2. Identify the **Number** the character correlates with and press that number on the number pad.
3. Identify the **Select Area** for the character and press that select area on the keypad. Press that select area again for the lowercase letter. See Figure 7.
4. When the desired character displays on the keypad, return to Step 1 to enter another character or press **CMD** if finished.

Standard Keyboard

- Press **ABC** to enter uppercase letters.
- Press **abc** to enter lowercase letters.
- Press **!@#** to enter special characters.
- Press **123** to enter numbers and to return to the number pad. See Figure 8.

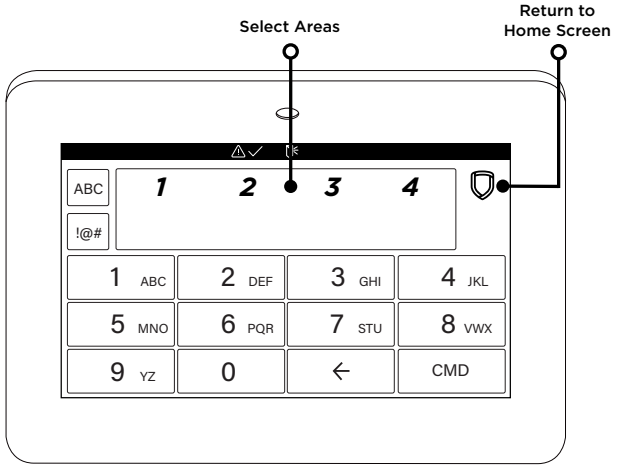


Figure 7: Number Pad

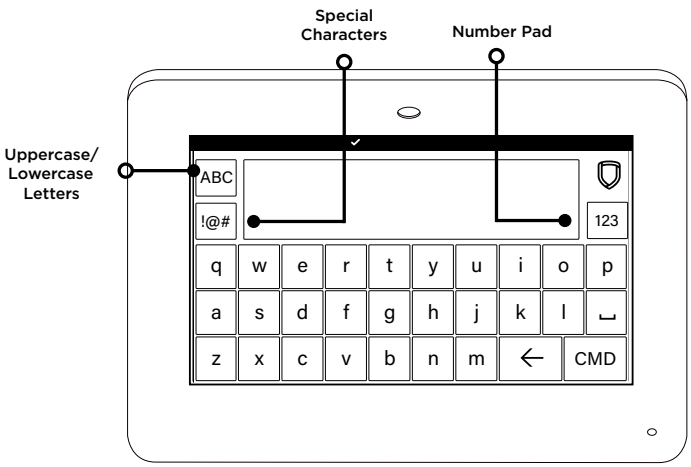


Figure 8: Standard Keyboard

PROGRAM THE PANEL

Before continuing with programming and setup, you'll program the keypad in the panel as a device.

To access the Programmer menu, reset the panel, press **Keypad** in the carousel menu, enter **6653** (PROG), then press **CMD**.

After completing each of the following steps, press **CMD** to advance to the next option. Refer to the panel programming guide as needed.

DEVICE SETUP

DEVICE SETUP

Advance to Device Setup, then press a select area to enter the setup menu.

DEVICE SETUP
DEVICE NO: -

Device Number

Set the keypad address.

Panel Models	Compatible Device Numbers
XR550	1 - 16
XR150	1 - 8
XT Series	1 - 8

DEVICE SETUP
UNUSED

Device Name

Enter the a name for the device.

DEVICE SETUP
TYPE: **KEYPAD**

Device Type

For use as a standard keypad, select **KPD**. For use as an access control keypad, press any select area, then select **DOOR**.

DEVICE SETUP
COMM TYPE: **KPD**

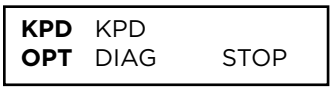
Communication Type

Ensure the **COMM TYPE** is set to **KPD** (Keypad Bus).

Configure additional options as needed. To configure custom card options for the keypad, do not program **CARD OPTIONS** in Device Setup.

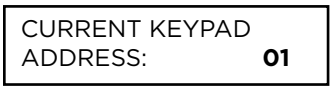
PROGRAM THE KEYPAD

Refer to the appropriate panel programming guide as needed. Keep in mind that operation for some programming options is restricted to the appropriate model. To access the Keypad Options menu, press **Options** in the carousel menu. Press the Installer Options wrench icon, enter **3577** (INST), then press **CMD**.



KEYPAD OPTIONS

To program keypad options, press the select area under **KPD OPT**. When finished programming, press **STOP** to save all programming.



Current Keypad Address

Set the current keypad address from 1 to 8 for XT Series and XR150 Control Panels, or 1 to 16 for XR550 Control Panels. The default address is set at **01**. To change the current address, press any select area to clear the keypad display, enter the new address, and press **CMD**. It's not necessary to enter a leading zero for addresses 1 to 9.

Keypad Mode

Keypads with programmed zones must be supervised and cannot share an address with other keypads. Unsupervised keypads can operate together sharing the same address and cannot be used when Device Fail Output has a programmed value other than zero. To select a keypad mode, press the select area for **SUP** or **UNSUP**. An asterisk appears next to the selected option. Press again to deselect that option.

Default Keypad Message

Enter a custom message of up to sixteen characters to appear at the top of the keypad display. Press any select area, enter a new message, and press **CMD**. See Enter Characters.

Arm Panic Keys

Use this option to enable or disable the panic keys. Press the icon name: **PN** (panic), **EM** (emergency), and **FI** (fire). Once the panic option is enabled, an asterisk displays next to the selected options.

Reader Protocol Type

Set the keypad to work with Wiegand or OSDP card readers. Press any top row select area to change the keypad's Reader Protocol Type. The default is **WIEGAND**.

If you choose Wiegand, the menu advances to "Activate Zone 2 Bypass". If you choose OSDP, the menu advances to Initialize OSDP.

Note: Once OSDP has been selected, the onboard proximity reader will automatically be disabled.

Initialize OSDP

Select **YES** to initialize the keypad and reset all OSDP options. Select **NO** to continue without changing the keypad memory.

OSDP LED Control

Select **YES** to enable reader LED operation. Select **NO** to disable reader LED operation.

BUZZER CONTROL
NO YES

OSDP Buzzer Control

Select **YES** to enable built-in reader annunciation. Select **NO** to disable reader annunciation.

TAMPER CONTROL
NO YES

OSDP Tamper Control

Select **YES** to enable tamper control for the 734 Access Control Module. Select **NO** to disable tamper control. Default is **NO**. This feature is only available for XR Series Control Panels with Version 231 (1/25/24) or higher and 734 Access Control Modules with Version 107 (11/16/23) and 7873 Series Keypad Rev 12.

To test the OSDP Tamper Control, ensure the OSDP reader's tamper is no longer satisfied and observe the tamper message at the keypad and in messages sent to the Monitoring Center.

SECURE KEY

ODSP Secure Key

The secure key is programmed into the OSDP reader and is used to establish 128-bit AES encrypted two-way communication between reader and keypad.

Record this key and store it in a secure location away from the keypad and reader. After the reader is bonded to the keypad, the secure key cannot be changed in the reader or retrieved from programming. Replacement keypads can be bonded to any compatible keypad with the keypad secure key.

Caution: OSDP readers can only be programmed locally from the keypad. To properly bond the reader to the keypad, the keypad must be initialized and the reader must be new or factory reset. After programming is complete, the reader is bonded to the keypad and cannot be reprogrammed with a different secure key until it is factory reset by the manufacturer.

SECURE KEY
****

Enter a secure key up to 16 alphanumeric characters. These characters are visible until **CMD** is pressed.

Note: This option is only valid if a secure key has not yet been entered. If a key has already been entered, you will not be able to change the secure key information.

ACTIVATE ZONE 2
BYPASS? **NO** YES

Activate Zone 2 Bypass

Select **YES** to activate the zone 2 bypass operation. Selecting **NO** allows standard zone operation on zone 2. The default is **NO**.

If the door being released by the keypad is protected (contact installed), a programmable bypass entry/exit timer can be provided by connecting its contact wiring to the keypad zone 2. When the onboard Form C relay activates and the user opens the door connected to zone 2, the zone is delayed for the number of seconds programmed in **ZONE 2 BYPASS TIME** allowing the user to enter/exit during an armed period.

If zone 2 does not restore (door closed) within the programmed time, the keypad sounds every other second during the last ten seconds. If zone 2 restores prior to the end of the programmed time, the keypad silences. If the zone does not restore before the programmed time, the keypad ends the bypass and indicates the open or short zone condition to the panel.

ZONE 2 BYPASS TIME: **40**

Zone 2 Bypass Time

Enter the number of bypass seconds to elapse before the bypass timer expires. Range is 20-250 seconds. Press any select area to clear the keypad display and enter the number of seconds. Default is **40** seconds.

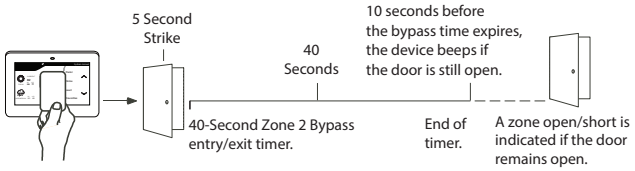


Figure 9: Zone 2 Bypass Timeline

RELOCK ON ZONE 2 CHANGE? **NO** YES

Relock on Zone 2 Change

Select **NO** (default) to leave the relay on when Zone 2 changes to an open or short condition during bypass. Select **YES** to turn the relay off when Zone 2 changes to open or short during bypass.

ACTIVATE ZONE 3 REX? **NO** YES

Activate Zone 3 Request to Exit

Selecting **YES** activates the zone 3 Request to Exit (REX) option. Selecting **NO** allows standard zone operation on zone 3. Default setting is **NO**.

Connect a motion sensing device or a mechanical switch to zone 3 to provide REX capability to the system. Zone 3 can be used to activate the strike relay and bypass or activate bypass only. For zone wiring details, refer to Figure 7.

Activate Strike Relay and Bypass

Wire zone 3 as normally open with a 1k Ohm EOL resistor.

When zone 3 shorts, the onboard Form C relay activates for the programmed number of seconds. See Zone 3 REX Strike Time. During this time, the user can open the protected door to start the programmed zone 2 bypass entry/exit timer. After the programmed number of seconds, the relay restores the door to its locked state.

Activate Bypass Only

Wire zone 3 as normally closed with an in-line 1k Ohm resistor.

When zone 3 opens from a normal state, only a bypass occurs: the onboard relay does not activate.

ZONE 3 REX STRIKE TIME: **5**

Zone 3 REX Strike Time

Enter the number of REX seconds to elapse. Range is 5-250 seconds. Press any select area to clear the keypad display and enter the number of seconds. The default is **5**.

ALL? NO YES
DELAY: **2**

Arming/Disarming Wait Time

Select the number of seconds (1-9) the keypad should wait to arm and disarm when an area system displays **ALL? NO YES** or an H/S/A system waits during arming only. If a selection is not made before the delay expires, the keypad automatically selects **YES** or **AWAY**. Select zero (**0**) to disable this feature. The delay also occurs when a credential is presented for arming the H/S/A system. Default is **2**.

For non-Area systems with keypads that have firmware version 205 or higher, presenting a credential to the keypad automatically initiates the arming sequence after the arming wait time expires. All/Perimeter systems arm All. Home/Sleep/Away and Home/Away systems arm Away.

CARD OPTIONS
DMP CUSTOM ANY

Card Options

Select **DMP** to allow credentials that use a 26-45 bit data string. The menu advances to **REQUIRE SITE**.

Select **CUSTOM** to disable DMP format and program slots 1-8 as needed. The menu advances to **FORMAT NO**.

Select **ANY** to allow all Wiegand or OSDP card readers to activate the door strike relay. The door strike relay is activated for the length of time programmed in **ZN 3 REX TIME**. No user code information is sent to the panel. The menu advances to **NO COMM WITH PNL**.

The default card format is **DMP**.

CARD FORMATS
FORMAT NO: -

Card Format Number

Select the slot number (1-8) that you want to program for a custom non-DMP card format. The format that is programmed into slot 1 is the default format. In the event that a card with an unrecognized format is used, that card will be read in the format that is programmed in slot 1. To restrict card reads to specific formats, only program slots 2-8.

See Public Card Formats for some publicly available card formats that can be used with the keypad. Other private or custom formats may also be compatible. Please contact the credential supplier or manufacturer for the bit structure.

Note: If you select slot 1 and you are upgrading from XR panel version 182 or earlier, **FORMAT NAME** will automatically be named **SINGLE CARD FORMAT** and **WIEGAND CODE LENGTH** will default to 45.

FORMAT NAME
UNUSED

Format Name

Press any select area to rename the card format. Press **CMD** to save and advance.

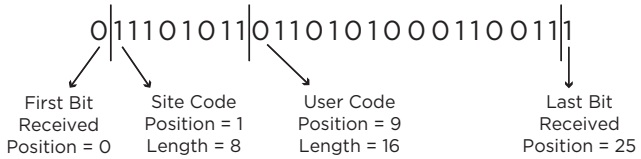
WIEGAND CODE
LENGTH: **26**

Wiegand Code Length

When using a custom credential, enter the total number of bits to be received in Wiegand or OSDP code including parity bits.

Press any select key or area to enter a number between 1-255 to equal the number of bits. Default is **26** bits.

An access card contains data bits for a site code, user code, and start/stop/parity bits. The starting position, location, and code length must be determined and programmed into the keypad. See Figure 10.



Example: Wiegand Code Length = 26 bits

Figure 10: Wiegand Data Stream Bit Location

SITE CODE
POS: **1** LEN: **8**

Site Code Position and Length

Enter the site code start position and length in the data string. Press select area 2 to clear the site code start position and enter a number between 0-255. Press **CMD** to save. Default is **1**.

Press select area 4 to clear the site code length and enter a number between 1-24. Press **CMD** to save. Default is **8**.

USER CODE
POS: **9** LEN: **16**

User Code Position and Length

Define the user code start bit position and length. Press select area 2 to clear the user code position and enter a number between 0-255. Press **CMD** to save. Default is **9**.

Press select area 4 to clear the user code length and enter a number between 16-64. Press **CMD** to save. The default is the DMP value of **16**.

REQUIRE SITE
CODE: **NO** YES

Require Site Code

Press the top row select key or area under **YES** to use a site code and press **CMD** to view the site code entry display. Press **NO** to advance to **NO OF USER CODE DIGITS**. Default is **NO**.

In addition to user code verification, door access is only granted when any one site code programmed at the **SITE CODE ENTRY** option matches the site code received in the Wiegand or OSDP string.

SITE CODE 1:

Site Code Display

You can program up to eight 8-digit site codes. The site code range is 0-16,777,214.

In the keypad display, enter site code 1 and press **CMD**. The display will ask for site code 2 followed by site code 3 and so on. When you have selected the site code you want to change, press **CMD**.

NO OF USER CODE
DIGITS: **5**

Number of User Code Digits

The keypad recognizes user codes from 4-12 digits long. Press any top row select key or area to enter a user code digit length. This number must match the user code number length being programmed in the panel. The device will recommend a number of user code digits based on the user code length. Default is **5**.

All bits are read and converted into a decimal number string. The number string is left padded with 0 (zero) if needed for long user code lengths.

Example:

# decoded	1234567
10 digits	0001234567
4 digits	4567

NO COMM WITH PNL
OFF

No Communication with Panel

Define the relay action when communication with the panel has not occurred for 5 seconds: **OFF**, **SITE**, **ANY**, **ON**, or **LAST**. Default is **OFF**. Press any select key or area to change the default relay action:

OFF SITE ANY ON

Press the first select key or area to choose **OFF** (Relay Always Off). The relay does not turn on when any Wiegand or OSDP string is received. **OFF** does not affect any REX operation. If communication is lost during a door strike, the relay remains on for the door strike duration but turns off at the end of the door strike timer.

OFF SITE ANY ON

Press the second select key or area to choose **SITE** (Accept Site Code). Door access is granted when the site code string received matches any programmed site code. Refer to Require Site Code for more information.

OFF SITE ANY ON

Press the third select key or area to choose **ANY** (Any Wiegand or OSDP Read). Access is granted when any Wiegand or OSDP string is received.

OFF SITE ANY ON

Press the fourth select key or area to choose **ON** (Relay Always On). The relay is always on.

LAST

Press **CMD** to display additional actions. Press the first select key or area to choose **LAST** (Keep Last State). The relay remains in the same state and does not change when communication is lost.

SYSTEM OPTIONS
AREA A/P H A/A HSA

System Type

Program the keypad as the same system type selected in panel programming.

DEALER LOGO
ADD DELETE

Dealer Logo

Use this option to add a custom dealer logo to the main screen of the keypad. Prior to selecting **ADD**, insert a microSD card containing the logo file in to the slot on the right side of the keypad. Refer to Figure 12. Select **ADD** to upload the file to the keypad.

ADDING LOGO
SURE? NO YES

Adding Logo Sure? The keypad will display **ADDING LOGO SURE?**. Select **YES** to proceed. While the logo is being uploaded, the keypad displays **ADDING LOGO**. **ADDING LOGO COMPLETED** displays to confirm a successful upload.

DEALER INFO
ADD DELETE

Dealer Info

Select **ADD** at the **DEALER INFO** prompt to include information about the dealer when the logo is pressed. The keypad displays **ADDING INFO SURE?** to confirm the selection. Press **YES** to proceed.

ADDING INFO
SURE? NO YES

Adding Info Sure? While the info is being uploaded to the keypad, the keypad displays **ADDING INFO**. **ADDING INFO COMPLETED** displays to confirm a successful upload. Press and release the microSD card to eject.

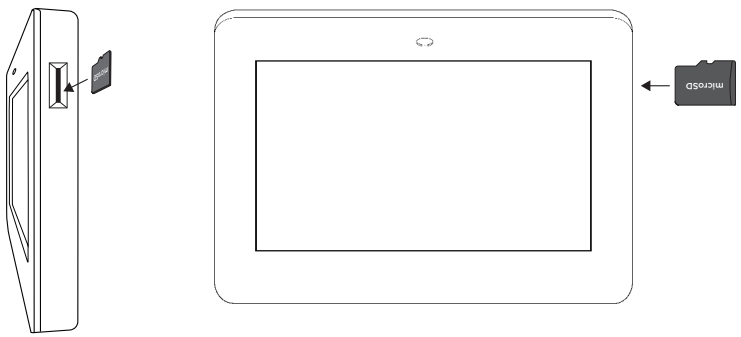


Figure 11: Inserting a microSD Card

Program the Carousel Menu

The carousel menu allows the user to pick and choose what displays within the carousel menu on the home screen. Press Options in the carousel menu. From here, adjust the keypad screen brightness, keypad tone, and keypad volume. Press a box under **Display In Menu** to select that option to display in the carousel menu. Press that box again to deselect that option. See Figure 12.

A **Brightness** setting of 1 allows the keypad display to turn off automatically after a brief period of inactivity. The Arm/Disarm LED remains lit. A **Brightness** setting of 0 allows both the keypad display and LED to turn off automatically after a period of inactivity. To wake the display, tap any part of the touchscreen surface.

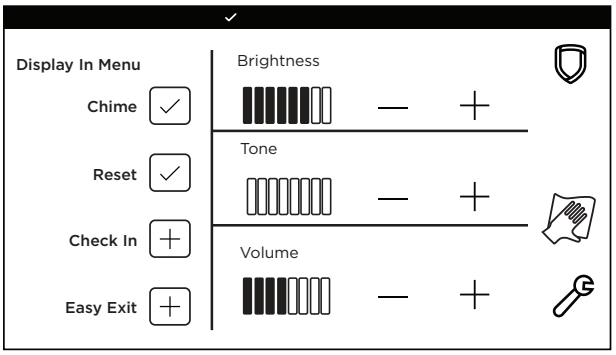


Figure 12: Keypad Options

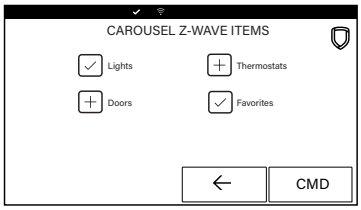


Figure 13: Carousel Z-Wave Items

Carousel Z-Wave Items

Carousel Z-Wave Items allows you to select the Z-Wave options to display in the carousel menu. Press an item to select and a check–mark displays. Press again to de–select that option. Items for the carousel include Lights, Doors, Thermostats, and Favorites. Press **CMD** at the bottom of the screen to advance to the next options screen and the back arrow return to the previous screen. Default is no items selected. See Figure 13.

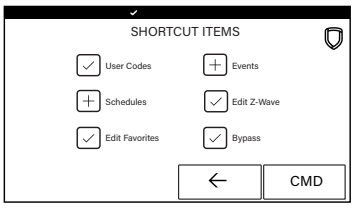


Figure 14: Shortcut Items

Shortcut Items

Shortcut Items allows you to select additional menu items to display in the carousel menu. Press the item to select and a checkmark displays. Press again to deselect that option. Items for the carousel include User Codes, Schedules, and Events. Default is no items selected. Select Edit Z-Wave to display the Edit Z-Wave icon for the Lights, Doors and Thermostats screens. Select Edit Favorites to display the Edit Z-Wave icon on the Favorites screen. See Figure 14.

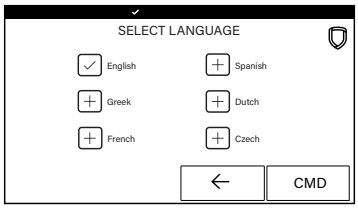


Figure 15: Select Language

Select Language

Select Language allows you to select the language for text on the home screen, the carousel menu screens, and some programming screens. Press a box to select a language and a check mark displays. Press that box again to deselect that option. Only one language can be selected at a time. Default is **English**.

Note: The keypad does not translate information from the panel that displays on the keypad screen. See Figure 15.

Additional Programming

Users can manually enter their user code into the keypad which then verifies the user code and its authority with the panel. The 7873/7873H activates the on-board Form C relay releasing a door strike or magnetic lock. To provide added flexibility, the keypad allows connection of an external Wiegand or OSDP output compatible reader.

Program a Credential

1. Access the User Menu by pressing **CMD** until **MENU? NO YES** displays, choose **YES** and present your proximity credential to the reader or manually enter your user code at the keypad.
2. Press **CMD** until **USER CODES?** displays.
3. Press any select key. Choose **ADD**.
4. At **ENTER CODE**, present the credential to the reader. The keypad works by reading the user code from the data string sent by the access control reader.

Update the Keypad

To see how to update a touchscreen keypad, watch the video Updating a Touchscreen Keypad.

Restart Keypad on keypads running Version 107 or higher allows the technician to restart the keypad to initiate a firmware update from a microSD card. This process takes approximately 5 minutes to complete.

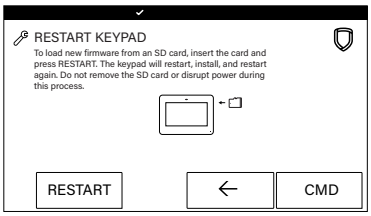


Figure 16: Restart Keypad

1. Go to DMP.com/Software_Downloads.
2. Select the latest software update.
3. Click **Download** and enter **Your Name**, **Your Company**, and **Email** information.
4. After the .zip download is complete, unzip the files and save them all to the root directory of a FAT32 format microSD card.
5. Insert the microSD card into the microSD card slot on the right side of the keypad.
6. Press **Options** in the carousel menu and press the **Installer Options** or wrench icon.
7. Enter **3577** (INST) at the keypad and select **KPD OPT**.
8. Press **CMD** until **Restart Keypad** displays.
9. Press **Restart**. Do not remove the microSD card or disrupt power.
10. When the keypad is finished restarting and returns to the home screen, remove the microSD card.

TEST THE KEYPAD

Test the keypad to ensure keypad lighting, individual shortcut keys, and any programmed zones work properly. Access the Keypad Diagnostics menu by pressing **Options** in the carousel menu. Press the **Installer Options** or wrench icon and enter **3577** (INST) and press **CMD**.

KPD **KPD** OPT **DIAG** STOP

KEYPAD DIAGNOSTICS

Press the select area for **KPD DIAG**. The keypad lights all display segments and illuminates red. The display then changes to green. The keypad alternates between these two states for up to two minutes. Press **CMD** at any time to begin testing individual keys.

Z1 OPEN Z2 OPEN Z3 OPEN Z4 OPEN

Zone Test

This option allows the keypads to display the current electrical status of the four protection zones. The status is shown as **OPEN**, **SHRT**, or **OKAY**. The zone test displays on the other keypads, but is not operational.

INPUT WIEGAND

Test the Credential Reader

This option tests the internal and external reader input from proximity credentials. The display shows **OKAY** each time a good proximity read is received.

TRAIN YOUR CUSTOMERS

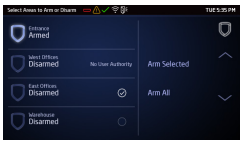
This section contains instructions on how users can arm and disarm their system, use access control, and entry delay. All of the examples displayed assume that **CLOSING CODE** is **YES** in panel programming.

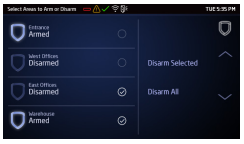
For more information about using your system, refer to the appropriate system user guide.

Access the User Menu

1. In the Carousel Menu, select **Keypad**.
2. Tap **CMD** to advance to **MENU? NO YES**. Tap **YES**.
3. Enter your user code, then tap **CMD**.
4. Tap **CMD** to advance through the menu items. To enter a menu, tap any select area.

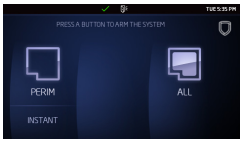
Arm and Disarm the System





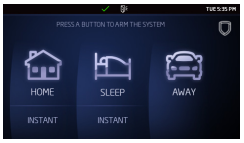
Area System Type

1. Press and release the home screen shield to open the arming options screen. Tap your preferred option.
2. If arming, the keypad displays **ALL? NO YES**. Select **NO** to arm individual areas. Tap the area name and then select **Arm Selected** at the right of the screen. To arm all areas, select **Arm All** at the right of the screen.
3. If disarming, the keypad displays **ENTER CODE**. Enter your user code or present a credential to the reader. The keypad will display **ALL? NO YES**. Select **NO** to disarm individual areas. Tap the area name and then select **Disarm Selected** at the right of the screen. To disarm all areas, select **Disarm All** at the right of the screen.



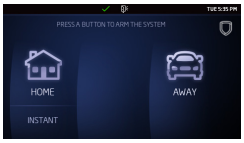
All/Perimeter System Type

1. Tap the home screen shield in the center of the kepad.
2. If arming, select **ALL** to arm all areas or **PERIM** to arm only the perimeter. If **ENTER CODE** displays, enter a user code at the keypad or present a credential to the proximity reader.
3. If disarming, enter a user code at **ENTER CODE** or present a credential to the proximity reader.



Home/Sleep/Away System Type

1. Tap the home screen shield in the center of the keypad.
2. If arming, **HOME SLEEP AWAY** displays. Select **HOME** to arm the perimeter, select **SLEEP** to arm everything except the bedroom areas, or select **AWAY** to arm all areas. If a selection is not made, all areas will automatically arm **AWAY**.
3. If **ENTER CODE** displays, enter a user code at the keypad or present a credential to the proximity reader.



Home/Away System Type

1. Tap the home screen shield in the center of the keypad.
2. If arming, **HOME SLEEP AWAY** displays. Select **HOME** to arm the perimeter, select **SLEEP** to arm everything except the bedroom areas, or select **AWAY** to arm all areas. If a selection is not made, all areas will automatically arm **AWAY**.
3. If **ENTER CODE** displays, enter a user code at the keypad or present a credential to the proximity reader.

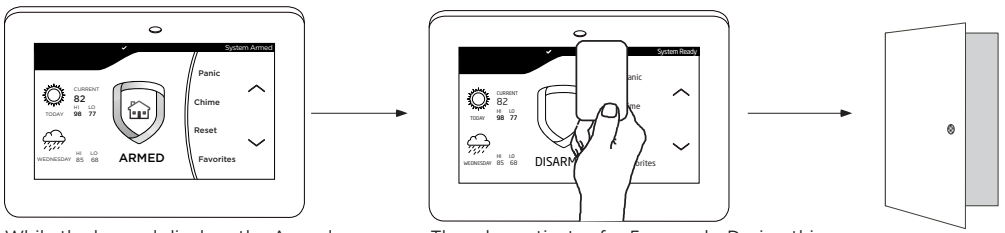
Touchless Arming

Present a credential to the built-in reader to automatically arm the system without touching the keypad. After the arming delay expires, All/Perimeter systems arm **All**. Home/Sleep/Away and Home/Away systems arm **Away**.

Use Access Control

Access an Area with a Door Strike

If the Door Strike Relay was wired and programmed at the keypad, present a credential to the proximity reader. Once the system validates the card, the Door Strike Relay activates. See Figure 17.



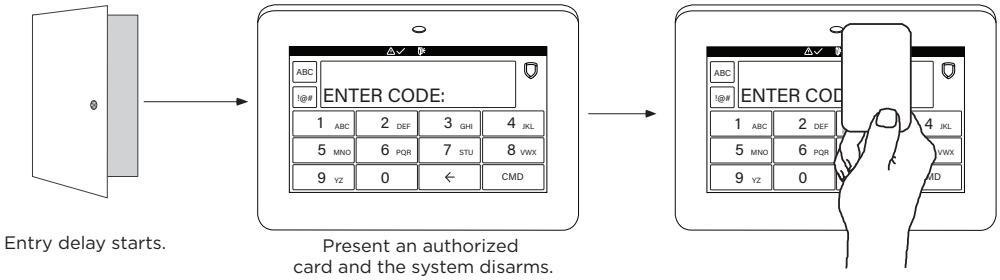
While the keypad displays the Armed shield, present your access card.

The relay activates for 5 seconds. During this time, you can open the door. You have 40 seconds to exit and close the door before the time expires.

Figure 17: Present Access Card

Use Entry Delay When Disarming

If Entry Delay was programmed at the keypad for Area system types, the keypad sounds an entry tone and displays **ENTER CODE** if an access door was accessed. Present a credential to the proximity reader. Once validated, the system disarms all areas accessible by the credential and activates the Door Strike Relay. Area systems provide a delay to allow selected areas only to be disarmed. See Figure 18.



Entry delay starts.

Present an authorized card and the system disarms.

Figure 18: Entry Delay

Change System Wi-Fi Password

When you change your network's Wi-Fi password on a 5-inch Touchscreen Keypad, the alarm system detects that the password has changed and asks you to update it. Refer to Figures 19 and 20.

To change your password and re-establish communication on a 5-inch Touchscreen Keypad, complete the following steps:

1. In the top right-hand corner of the screen, **CHANGE? NO YES** displays to notify you that the Wi-Fi has been disconnected. In the carousel menu, select **Keypad**.
2. **INVLD WIFI PSWRD CHANGE? NO YES** displays. Select **NO** to dismiss the message. Select **YES** to change your Wi-Fi password.
3. Enter your user code.
4. Enter Wi-Fi password.
5. Select **CMD**.

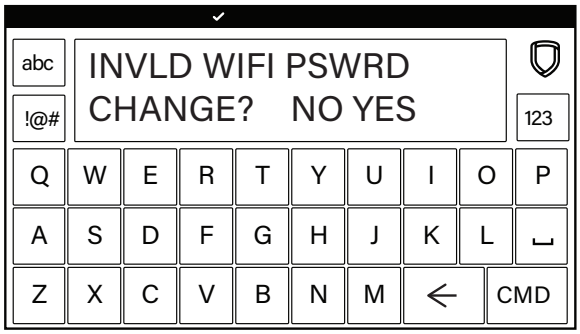


Figure 19: Invalid Wi-Fi Password Screen

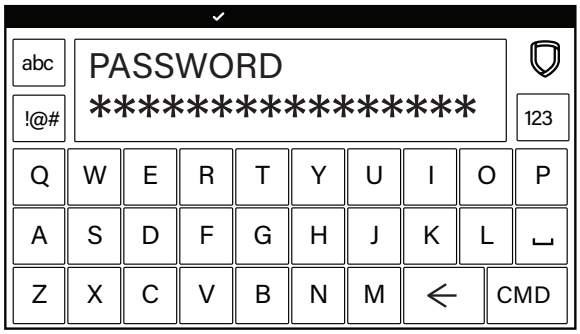


Figure 20: Enter Wi-Fi Password Screen

Clean the Keypad

Failure to follow cleaning recommendations may result in equipment damage.

The Clean Keypad Screen option locks the screen for 40 seconds so you can clean it without accidentally pressing buttons.

Use gentle pressure to clean the display, screen, keys, and housing. Use only alcohol sprays or wipes that contain 70% isopropyl alcohol to clean keypad surfaces.

Avoid spraying cleaner directly onto the keypad, oversaturating cleaning cloths, or allowing cleaner to make contact with internal electronic components, cables, or power sources.

1. In the Carousel Menu, tap **Options**.
2. Tap Clean Keypad Screen.
3. Use an alcohol wipe or spray a small amount of rubbing alcohol onto a clean, dry microfiber cloth to gently wipe down all keypad touch surfaces, removing any excess cleaner.
4. Wait 10 seconds, then completely dry all keypad surfaces.
5. If necessary, use a clean, dry microfiber cloth to gently remove streaking.

After the countdown timer expires, the keypad returns to normal operation. To exit the countdown early, press and hold the Shield icon for 2 seconds.

Icons

Arming Shield Icons

Armed

Home Sleep Away

Perimeter All System

Alarm

Burglary Fire

Quick Arm

Ready To Exit

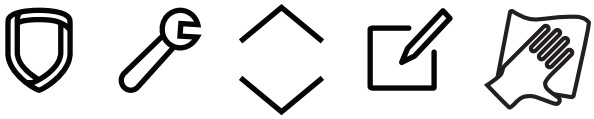
Exit Timer

Enter Code Arm Instant

Popups

Attention List Alert

Menu



Home Installer Navigation Edit Clean Screen

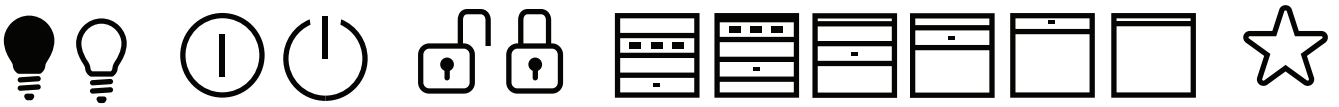
Arming Options

Home Sleep Away Perimeter All System

Panic Options

Police Emergency Fire

Z-Wave

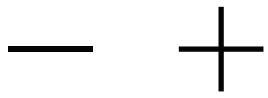


Lights Appliances Doors Garage Door Favorites

Z-Wave Thermostats

Auto Heat Cool Off Fan Room Temp

Controls



Decrease Increase

Status Bar Header

System Ready Attention List Armed (Area) Home Sleep Away Perimeter All System

Chime Battery Trouble AC Trouble Wi-Fi

REFERENCE

Wiring Specifications

- DMP recommends using 18 or 22-gauge unshielded wire for all keypad and AX-Bus/LX-Bus circuits. Do not use twisted pair or shielded wire for AX-Bus/LX-Bus and Keypad Bus data circuits. All 22-gauge wire must be connected to a power-limited circuit and jacket wrapped.
- On Keypad Bus circuits, to maintain auxiliary power integrity when using 22-gauge wire do not exceed 500 ft. When using 18-gauge wire do not exceed 1,000 ft. To increase the wire length or to add devices, install an additional power supply that is listed for Fire Protective Signaling, power limited, and regulated (12/24 VDC nominal) with battery backup.

  Note: Each panel allows a specific number of supervised keypads. Add additional keypads in the unsupervised mode.
- Maximum distance for any one bus circuit (length of wire) is 2,500 ft regardless of the wire gauge. This distance can be in the form of one long wire run or multiple branches with all wiring totaling no more than 2,500 ft. As wire distance from the panel increases, DC voltage on the wire decreases. Maximum number of AX-Bus/LX-Bus devices per 2,500 ft circuit is 40.
- Maximum voltage drop between the panel (or auxiliary power supply) and any device is 2 VDC. If the voltage at any device is less than the required level, add an auxiliary power supply at the end of the circuit. When voltage is too low, the devices cannot operate properly.

For additional information refer to the panel's Installation Guide or the 710 Installation Sheet (LT-0310).

Requirements for Listed Installations

- The keypad LED brightness setting must be set above the minimum setting.
- Degraded Mode must be set to Relay Always Off.
- Do not mount keypad on metal surfaces or metallic electrical boxes.
- Do not use double-sided tape for listed installations.
- For listed access control applications, the keypad must be installed within the protected area and all REX devices must be Listed to UL 294.

Public Card Formats

CARD FORMAT	WIEGAND OR OSDP CODE LENGTH	SITE CODE POSITION	SITE CODE LENGTH	USER CODE POSITION	USER CODE LENGTH	USER CODE DIGITS
H10301 26 BIT	26	1	8	9	16	5
H10302 37 BIT W/O FAC	37	0	1	1	35	11
H10304 37 BIT W/FAC	37	1	16	17	19	6
FARPOINTE 39 BIT	39	1	17	18	20	7
CORPORATE 1000 35 BIT	35	2	12	14	20	6
CORPORATE 1000 48 BIT	48	2	22	24	23	7

Readers and Credentials

125 kHz WIEGAND PROXIMITY READERS	
P-300	Cascade Proximity Reader
P-500	Alps Proximity Reader
P-620	Denali Proximity Reader With Keypad
P-640	Patagonia Proximity Reader With Keypad
MP-5365	MiniProx™ Proximity Reader
MX-5375	MaxiProx® Proximity Reader
PP-6005B	ProxPoint® Plus Proximity Reader
PR-5355	ProxPro Proximity Reader With Keypad
PR-5455	ProxPro® II Proximity Reader
TL-5395	ThinLine II® Proximity Reader

125 kHz PROXIMITY CREDENTIALS	
PSC-1	Standard Light Proximity Card
PSK-3	Proximity Key Ring Tag
PSM-2P	ISO Imageable Proximity Card
1306	Prox Patch™
1326	Proxcard II® Card
1346	ProxKey III® Access Device
1351	ProxPass®
1386	IsoProx II® Card

OSDP PROXIMITY READERS AND CREDENTIALS	
CSR-35-OSDP	Bluetooth Smartcard Reader
DELTA3-OSDP	Mullion Mount Smartcard Reader
DELTA5-OSDP	Single-Gang Box Mount Smartcard Reader
DELTA6.4-OSDP	Smartcard Reader With Keypad
PCR-35-L-H-A	Mobile-Ready Proximity Reader

13.56 MHz WIEGAND SMARTCARD READERS	
DELTA3*	Mullion Mount Smartcard Reader
DELTA5*	Single-Gang Box Mount Smartcard Reader
DELTA6.4*	Smartcard Reader With Keypad
CSR-35P	Bluetooth Smartcard Reader

13.56 MHz SMARTCARD CREDENTIALS	
DE2	MIFARE® DESfire® EV2 Smartcard
CSK-2	MIFARE® DESfire® EV2 Key Fob Smartcard

*Delta Proximity Readers and Credentials not evaluated by UL.

Ordering Information

Keypads

7872-B	Graphic Touchscreen Keypad (black, 4 zones, prox reader)
7872-W	Graphic Touchscreen Keypad (white, 4 zones, prox reader)
7872-W/DEMO	7872 Demo Keypad (white)
7873-B	Graphic Touchscreen Keypad (black, 4 zones, prox reader, relay)
7873-W	Graphic Touchscreen Keypad (white, 4 zones, prox reader, relay)
7873H-W	High Security Graphic Touchscreen Keypad (white, 4 zones, prox reader, relay)

Accessories

Wiring Harnesses

300-7800-5	Replacement 5-Wire Harness
300-7800-12	Replacement 12-Wire Keypad Harness
300-7800-12ADPT	12-Wire Harness Adapter

Backboxes, Mounting Plates, and Stands

694-7800-W	7800 Keypad Backplate (white)
695-7800-B	In Wall Mount Backbox (black)
695-7800-W	In Wall Mount Backbox (white)
695-7800-SFC-W	7800 Keypad Conduit Backbox (white)
698-7800-B	Plastic Keypad Wall Cover (black)
698-7800-W	Plastic Keypad Wall Cover (white)
699-7800	Keypad Deskstand (with hardware and cord)

SPECIFICATIONS

Operating Voltage	12 VDC
Dimensions	5.8” W x 4.135” H x 0.6” D
Environmental	
Temperature	0° C to 49° C
	32° F to 120° F
Humidity	5% to 85% RHNC

COMPATIBILITY

- XT Series Control Panels
- XR Series Control Panels

CERTIFICATIONS

- California State Fire Marshall (CSFM)
- FCC Part 15 RFID Reader FCC ID: CCKPC0131
- Industry Canada ID: 5251A-PC0131

Underwriters Laboratory (UL) Listed

ANSI/UL 294	Access Control System Units
Level I	
Destructive Attack and Line Security	
Level IV	
Endurance and Standby Power	
ANSI/UL 365	Police Connected Burglar
ANSI/UL 609	Local Burglar
ANSI/UL 1023	Household Burglar
ANSI/UL 1610	Central Station Burglar
ANSI/UL 985	Household Fire Warning

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.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

1. l'appareil ne doit pas produire de brouillage, et
2. l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

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