INSTALLATION AND PROGRAMMING GUIDE

7000 Series
Thinline™ and Aqualite™ Keypad

CONTENTS

GET STARTED

Thinline™ Series and Aqualite™ Series LCD keypads offer flexible features and functionality. Each keypad provides:

- Custom 16-character home or business name in the display
- Four 2-button panic keys
- AC Power/Armed LED
- 32-character display
- Backlit keyboard and DMP logo
- Internal speaker
- Red keyboard lighting in alarm conditions
- Simple harness connection to 4-wire keypad bus
- Optional backboxes for conduit or wall mount applications

Models 7070/A, 7073/A, 7170, and 7173

Provides four fully-programmable, Class B, Style A, supervised, power limited protection zones that can be programmed for a variety of burglary and access control applications.

Models 7063/A, 7073/A, 7163, and 7173

Provides a built-in proximity card reader designed to read 125KHz proximity credentials.

Models 7073/A and 7173

Provides a door strike relay and allows Wiegand input from external card readers.

What's Included

- One 7000 Series Keypad
- Icon Stickers
- Four screws (#6 x 1")
- One Model 333 Suppressor
- Four 1k Ohm EOL resistors

What You'll Need

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

Procedure

To install a 7000 Series Keypad, this guide walks you through these required steps:

1. Enter characters.
2. Install the keypad.
3. Program the panel.
4. Program the keypad.
5. Custom card format.
6. Test the keypad.
7. End user training.

INSTALL THE KEYPAD

1 Remove the Cover

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.

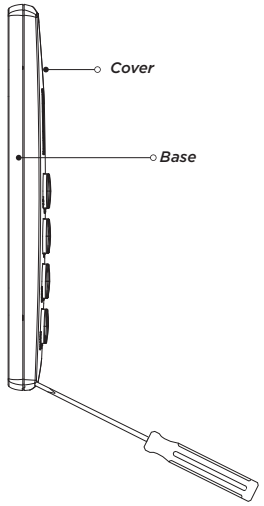


Figure 1: Separate the Keypad Housing

2 Wire the Keypad

To wire the keypad, make the connections shown in Figure 2. To wire external readers to the keypad, make the connections shown in Figure 3 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 red wire to panel terminal 7.
3. Connect yellow wire to panel terminal 8.
4. Connect green wire to panel terminal 9.
5. Connect black wire to panel terminal 10.

Models 7060/A, 7063/A, 7160, and 7163

Supplied with a 4-wire harness for panel keypad bus connection.

Models 7070/A, 7073/A, 7170, and 7173

Supplied with a 12-wire data bus/zone harness. Four wires connect to the keypad bus. The remaining eight wires are for the four zone inputs, four wires for each zone.

Models 7073/A and 7173

Supplied with a 5-wire output/reader harness and a 12-wire data bus/zone harness.

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

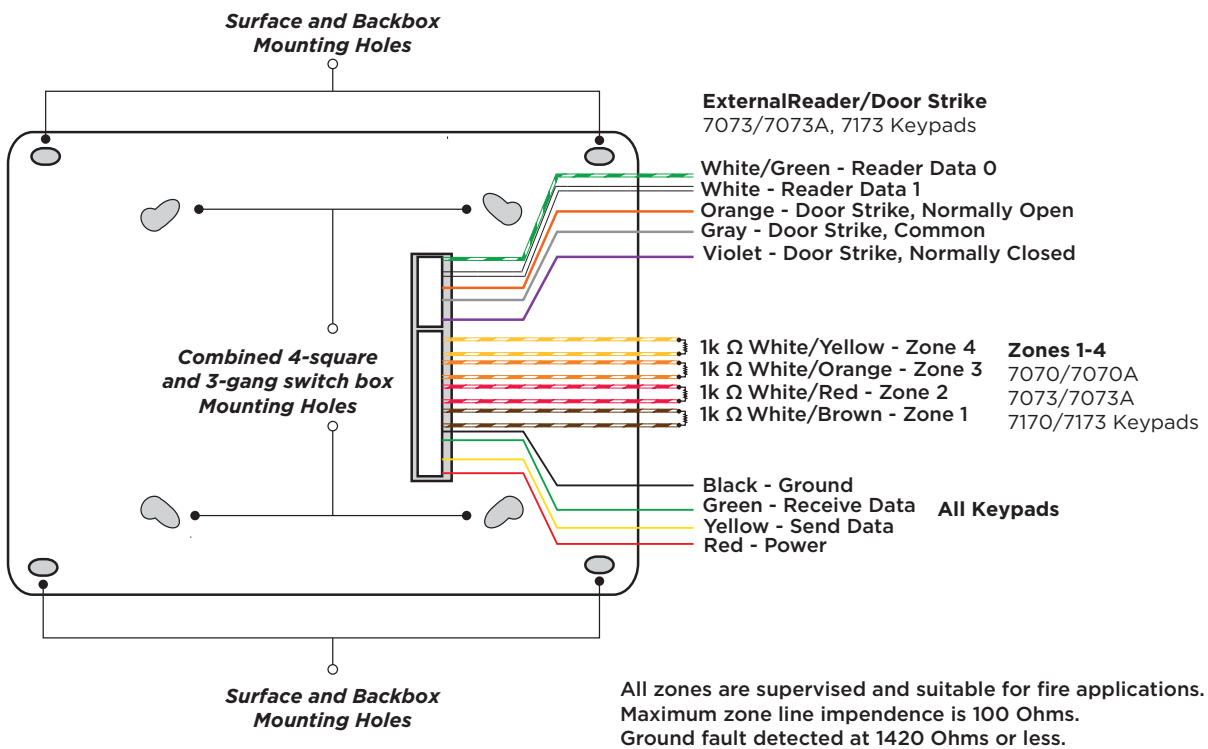


Figure 2: Keypad Back Showing Wiring Harness Assignments

Additional Power Supply

If the current draw for all keypads exceeds the panel output, provide additional current by adding a Model 505-12 auxiliary power supply.

1. Connect all keypad black ground wires to the power supply negative terminal.
2. Run a jumper wire from the power supply negative terminal to the panel common ground terminal.
3. Connect all keypad power (+12 VDC) wires to the power supply positive terminal.

Caution: Do not connect the power supply positive terminal to any panel terminal. Refer to the 505-12 Power Supply Installation Guide (LT-0453) if needed.

Keypad Bus Monitor

For listed fire protective systems, the 893A Module or 277 Trouble Sounder must be installed on the XR150/XR550 Series panel to monitor the keypad bus. It should be programmed to sound when the keypad bus fails to operate.

3 Wire for Access Control (Optional)

Internal Access Control Reader

The 7063/A, 7073/A, 7163, and 7173 keypads provide a built-in proximity card reader that is compatible with most standard 125 kHz proximity credentials. An external 13.56 MHZ proximity reader can be connected and will be compatible with 13.56 MHz 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. 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

To accept Wiegand data input from other external card readers, connect a 12 VDC external reader to a 7073/A or 7173 keypad. Connect the red and black power wires from the reader to the power wires from the panel. These connect in parallel with the keypad power wires. Connect the reader (Data 1) wire to the white wire on the 5–wire keypad cable. Connect the reader (Data 0) wire to the green/white wire on the 5–wire keypad cable. See Figure 2.

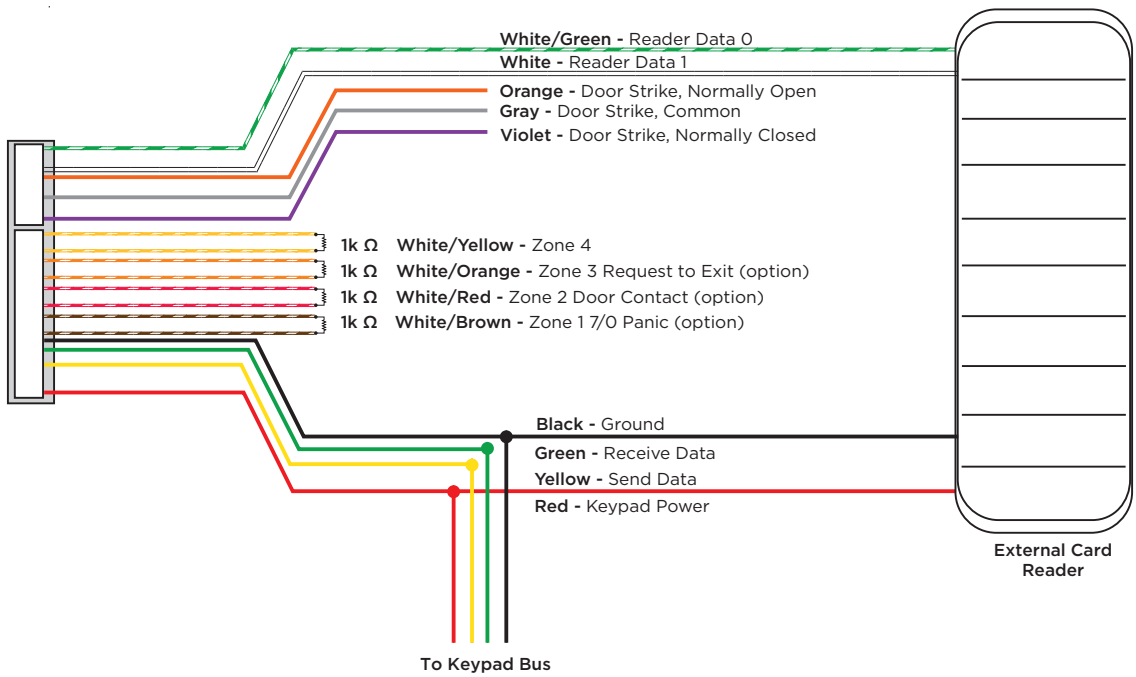


Figure 3: Access Control Wiring

Wire the Electronic Lock

The 7073/A and 7173 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 6.

Wire the 333 Suppressor

Use the included 333 suppressor with the keypad to suppress any surges cause 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 devices is connected to the NC and C wires, install the 333 suppressor on NC and C wires. See Figure 6.

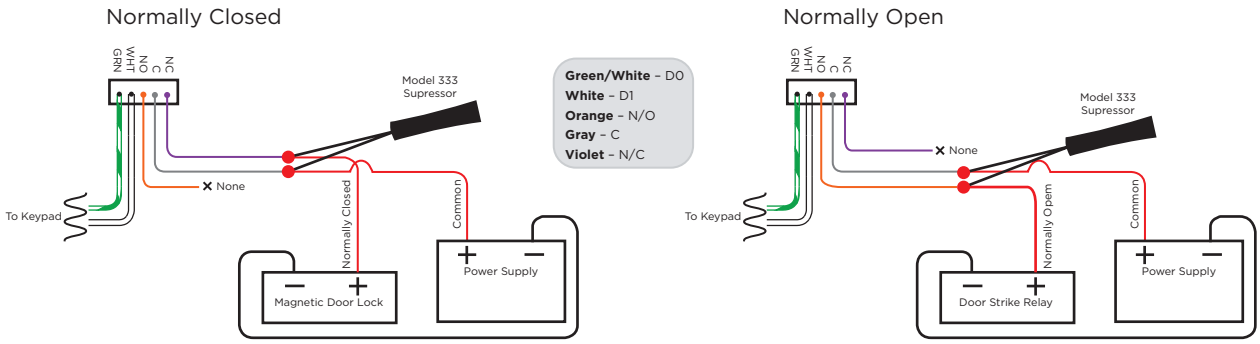


Figure 4: 5-Wire Harness and 333 Suppressor Installation

4 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.

1. Route the keypad wires through the cutouts in the base. See Figure 7.
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.

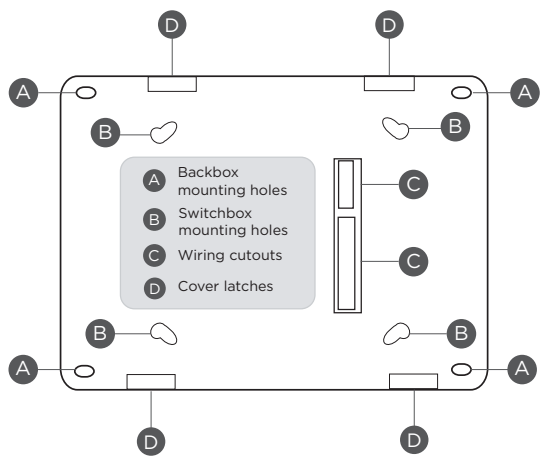


Figure 5: Mounting Hole Locations

Door Strike Relay Operation

When the user code sent from the reader is verified by the panel, the keypad door strike relay activates for five seconds. During this time, the access door connected to Zone 2 must be opened to start the programmed entry/exit timer and Zone Bypass if programmed and used. The five second door strike is panel programmable when the keypad is used on an XR150/XR550 Series panel.

Zone 2 Door Contact with Bypass

If the door being released by the 7073/A and 7173 keypad is protected, you can provide a programmed bypass time by connecting its contact to Zone 2 (white/red pair) on the keypad and enabling the bypass feature. Door contacts may be N/C or N/O.

Zone 3 Request to Exit

You can also connect a N/O PIR (or other motion sensing device) or a mechanical switch to Zone 3 (white/orange pair) on the 7073/A and 7173 keypad to provide Request to Exit (REX) capability. When Zone 3 shorts, the keypad relay activates for 5 seconds. During this time, the user can open the protected door to start the programmed Bypass entry/exit timer. If the door is not opened within five seconds, the relay restores to its locked state.

A Zone 3 REX is inhibited for three seconds after the keypad reads a card and a door strike occurs. This is to allow area entry and pass under a REX PIR. For zone 3 REX when shorted, the lock relay will not activate and the zone 2 bypass begins (normally with electric strikes). If Zone 3 goes open, the lock relay will activate for the programmed REX time and the zone 2 bypass begins (standard with magnetic locks).

Keypad Features

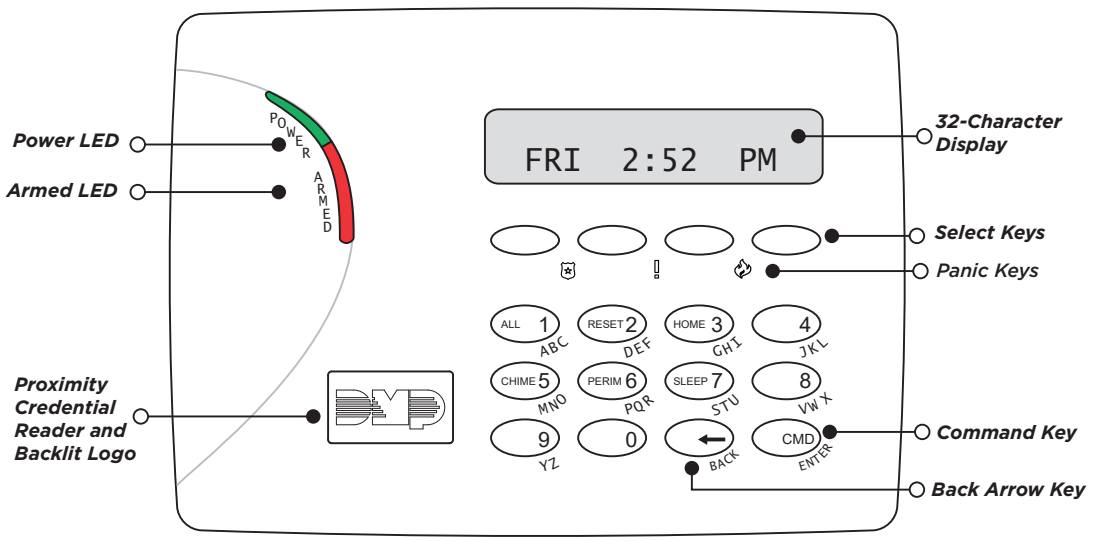


Figure 6: 7000 Series LCD Keypad

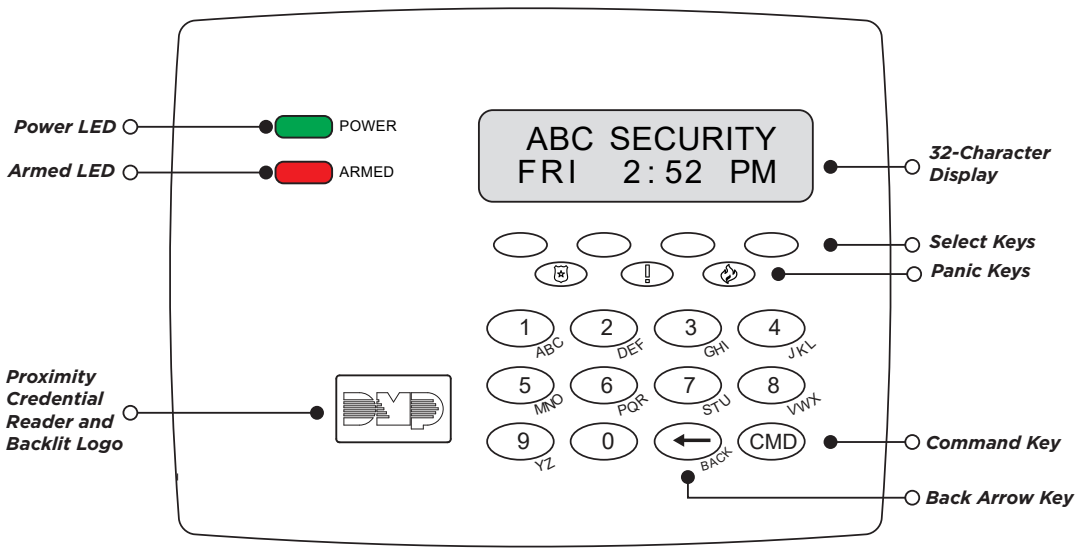


Figure 7: 7100 Series LCD Keypad

Enter Characters

Number Pad

1. Choose a character from the table. Use the *Greek Characters* table if Greek was selected as the keypad language setting.
2. Identify the **Number** the character correlates with and press that number on the number pad.
3. Identify the **Select Key** for the character and press that select key on the keypad. Press that select key again for the lowercase letter (Latin characters only).
4. When the desired character displays on the keypad, return to step 1 to enter another character or press **CMD** if finished.

NUMBER	SELECT KEY			
	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: Latin Characters

NUMBER	SELECT KEY			
	1	2	3	4
1	Α	Β	Γ	([{
2	Δ	Ε	Ζ	)] }
3	Η	Θ	Ι	! ^ ~
4	Κ	Λ	Μ	? " |
5	Ν	Ξ	Ο	/ \ `
6	Π	Ρ	Σ	& $
7	Τ	Υ	Φ	@ %
8	Χ	Ψ	Ω	, =
9	Space	Space	Space :	_ ;
0	- +	. '	* <	# >

Table 2: Greek Characters

Panic Key Options

2-Button Panic Keys

All keypads offer a panic key function that allows users to send panic, emergency, or fire reports to the central station in an emergency. Enable the panic key function in the keypad user menu. Place the supplied icon stickers below the top row select keys. The user must press and hold the two select keys for two seconds until a beep is heard.

- **Panic** (left two select keys)—Zone 19 + Device Address
- **Emergency Non-Medical** (center two select keys)—Zone 29 + Device Address
- **Fire** (right two select keys)—Zone 39 + Device Address

User Options Menu

To access the Options menu, press and hold the back arrow and **CMD** keys for 2 seconds.

Backlighting Brightness

Adjust the LCD display brightness level, power and armed LEDs, the keyboard, and the logo backlighting. At **SET BRIGHTNESS**, use the left select key to decrease the brightness and the right select key to increase the brightness. If the brightness level is lowered, it reverts to maximum intensity whenever a key is pressed. If no keys are pressed, and the speaker has not sounded for 30 seconds, the user-selected brightness level restores.

Internal Speaker Tone

Adjust the keypad internal speaker tone. At **SET TONE**, use the left select key to decrease the tone and the right select key to increase the tone.

Internal Volume Level

Adjust the keypad internal speaker volume for key presses and entry delay tone conditions. During alarm and trouble conditions, the volume is always at maximum level. At **SET VOLUME LEVEL**, use the left select key to decrease the volume and the right select key to increase the volume.

Model Number

Displays the keypad model number, firmware version, and date.

Keypad Address

Displays the current keypad address.

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, 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 key to enter the setup menu.

DEVICE SETUP
DEVICE NO: -

Device Number

Set the keypad address from 1-8 for XT30, XT50, and XR150 Series panels, or 1-16 for XR550 Series panels.

DEVICE SETUP
UNUSED

Device Name

Enter the 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 key, 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 the 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. Operation for some programming options is restricted to the appropriate model. To access the Keypad Options menu:

Hold down the back arrow and **CMD** keys for two seconds. At **SET BRIGHTNESS**, enter **3577** (INST) and press **CMD**.

The display changes to **KPD OPT KPD DIAG** and **STOP**.

KPD KPD **OPT** DIAG STOP

Keypad Options

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

CURRENT KEYPAD ADDRESS: 1

Current Keypad Address

Set the current keypad address from 01 to 08 for XT30/XT50 or XR150 Series panels, or 01 to 16 for XR550 Series panels. The default address is **01**. To change the current address, press any select key and enter the new address and press **CMD**. Do not enter a leading zero for addresses 01 to 09.

KEYPAD MODE: *SUP UNSUP

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, but cannot be used when Device Fail Output has a programmed value other than zero. To select a keypad mode, press the select key under **SUP** or **UNSUP**. An asterisk appears next to the selected option.

DEFAULT KPD MSG:

Default Keypad Message

Enter a custom message of up to 16 characters to appear at the top of the keypad display. Press any select key, enter a new message, and press **CMD**.

ARM PANIC KEYS: *PN EM *FI

Arm Panic Keys

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

7/0 PANIC ENABLE: **NO**

7/0 Panic

Press the fourth select key to choose **YES**, configuring the 7 and 0 keys as two-button panic keys. Select **NO** to disable the option. Default is **NO**.

ACTIVATE ZONE 2 BYPASS? **NO**

Activate Zone 2 Bypass (7073/A, 7173 only)

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 ends the bypass and indicates the open or short zone condition to the panel.

ZONE 2 BYPASS
TIME: **40**

Zone 2 Bypass Time (7073/A, 7173 only)

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

RELOCK ZONE 2
CHANGE: **NO** YES

Relock on Zone 2 (7073/A, 7173 only)

Select **NO** to leave the relay on when zone 2 faults to an open or short condition during bypass. Select **YES** to turn the relay off when zone 2 faults open or short during bypass. Default is **NO**.

ACTIVATE ZONE 3
EXIT: **NO** YES

Activate Zone 3 Exit (7073/A, 7173)

Select **YES** to enable the Request to Exit feature on zone 3. Select **NO** to allow standard zone operation on zone 3. Default is **NO**.

When zone 3 shorts, the onboard Form C relay activates for the programmed number of seconds. During this time, the user can open the protected door to start the programmed bypass entry/exit timer. If the door is not opened within the time programmed in the Zone 3 REX Strike Time, the relay restores the door to its locked state.

ZONE 3 REX STRIKE
TIME: **5**

Zone 3 REX Strike Time (7073/A, 7173)

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

ALL?: NO YES
DELAY: **2**

Arming/Disarming Wait Time (7063/A, 7073/A, 7163, 7173)

Select the number of seconds (1-9) the keypad should wait when an area system displays **ALL? NO YES** during arming/disarming or a HOME/SLEEP/AWAY 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 any credential is presented for arming the Home/Sleep/Away system. Default is **2**.

CUSTOM CARD FORMAT

Custom card format programming options are only available on 7063/A, 7073/A, 7163, and 7173 keypads.

CARD FORMATS
DMP CUSTOM ANY

Card Formats

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 card reads 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 key to rename the card format. Press **CMD** to save and advance.

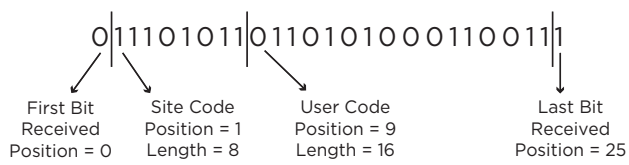
WIEGAND CODE
LENGTH: **26**

Wiegand Code Length

When using a custom credential, enter the total number of bits to be received in Wiegand 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 8.



Example: Wiegand Code Length = 26 bits

Figure 8: 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 key 2 to clear the site code start position and enter a number between 0-255. Press **CMD** to save. Default is **1**.

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

Press select key 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 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 SITE ANY ON

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:

Press the first select key or area to choose **OFF** (Relay Always Off). The relay does not turn on when any Wiegand 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.

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

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

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

NO COMM WITH PNL
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.

KYPD LANGUAGE:
LANG: **ENGLSH**

Keypad Language

Define the keypad's language. Default is **ENGLSH**.

Press any select key to change the language options.

KYPD LANGUAGE:
ENG SPN FRN DUT

Press select key 1 to select English. Press select key 2 to select Spanish. Press select key 3 to select French. Press select key 4 to select Dutch.

Press **CMD** to advance the language options.

KYPD LANGUAGE:
ΕΛΛ CZK

Press select key 1 to select Greek. Press select key 2 to select Czech.

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 7073/A and 7173 activate 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 output compatible reader.

Proximity Credential Compatibility

DMP keypads with internal proximity readers are compatible with most standard 125 kHz proximity credentials. An external 13.56 MHz proximity reader can be connected and will be compatible with 13.56 MHz proximity credentials. For a list of publicly supported card formats, see Public Card Formats.

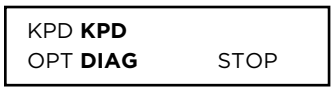
Note: Some proximity credentials are not compatible with DMP proximity keypads. Test the intended proximity credentials with the application before installation. DMP does not guarantee compatibility with credentials not purchased from DMP.

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.

TEST THE KEYPAD

Test the keypad to ensure keypad lighting, individual shortcut keys, and any programmed zones work properly. To begin testing, access the Installer Options menu. Hold down the **back arrow** and **CMD** keys at the same time until **SET BRIGHTNESS** displays. Enter **3577** (INST) and press **CMD**.

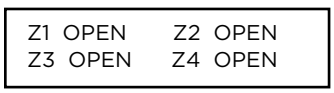


Keypad Diagnostics

Press the select key under **KPD DIAG**. The keypad lights all display segments and illuminates the keyboard in red. The display backlighting then changes to green/blue. The keypad alternates between these two states for approximately two minutes. Press **CMD** at any time to begin testing individual keys.

Test Individual Keys

The display changes to **PRESS KEY TO TEST**. This option tests each key on the keyboard to ensure it is operating properly. Press and hold each key for two seconds. The key number being held appears in the display. Verify the correct number displays before testing the next key.



Zone Test (7070, 7073/A, 7170, 7173)

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 (7063/A, 7073/A, 7163, 7173)

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

Exiting the Installer Options

When done, press **CMD** once to return to the Installer Options screen. Press the select key under **STOP** to exit the Installer Options function.

END USER TRAINING

This section covers 7063/A, 7073/A, 7163, and 7173 keypads and contains three sections:

- Keypad Arming and Disarming
- Keypad Access Control
- Keypad Entry Delay

All of the examples displayed assume that **CLOSING CODE** is **YES** in panel programming.

Figures 9 through 12 show the user presenting a card to the keypad. When an external reader is connected to a 7073/A and a 7173 keypad, the user presents a card to the reader rather than to the keypad.

Keypad Arming and Disarming

Area System Type

1. Press **CMD** until the keypad displays **ARM DISARM**.
2. Press the select key under the preferred option.
3. The keypad displays **ENTER CODE: -**. The user presents their card to the reader.

Once validated by the system, all areas assigned to that code arm or disarm automatically and the 7073/A and 7173 keypad door strike relay activates. See Figure 9.

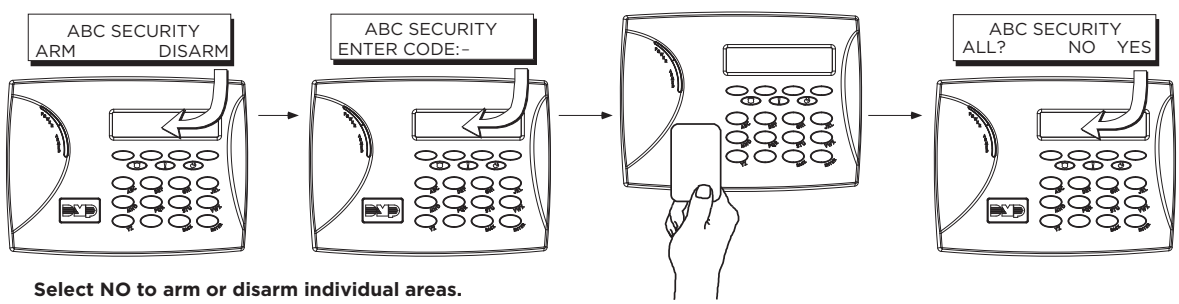


Figure 9: Area Arming and Disarming

All/Perimeter System Type

Present the card to the reader or press **CMD**, the keypad displays **DISARM?** or **PERIM ALL** (when arming). Press the select key under the desired option. The keypad displays **ENTER CODE: -**. Present the card to the reader. Once validated by the system, the selected areas arm or disarm automatically. On 7073/A and 7173 keypads, the Door Strike relay then activates.

Home/Away System Type

Present your card to the reader. If the system is armed, once the card is validated, all areas are disarmed and the keypad displays **ALL SYSTEM OFF**. If the system is disarmed when you present your card, once the card is validated, **HOME SLEEP AWAY** displays. Manually select **HOME**, **SLEEP**, **AWAY** or after a short time-out, all areas automatically arm in the **AWAY** mode.

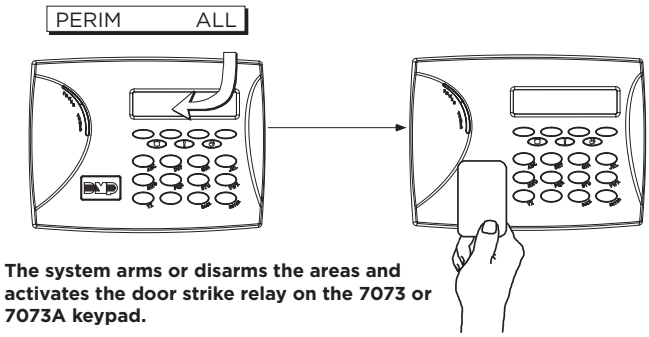


Figure 10: All Perimeter Arming and Disarming

Keypad Access Control

Area and All/Perimeter Door Strike

From the Status List, present your card to the reader. Once the system validates the card, the Door Strike relay activates. Home/Away systems only activate the 7073/A and 7173 Door Strike relay when arming and disarming.

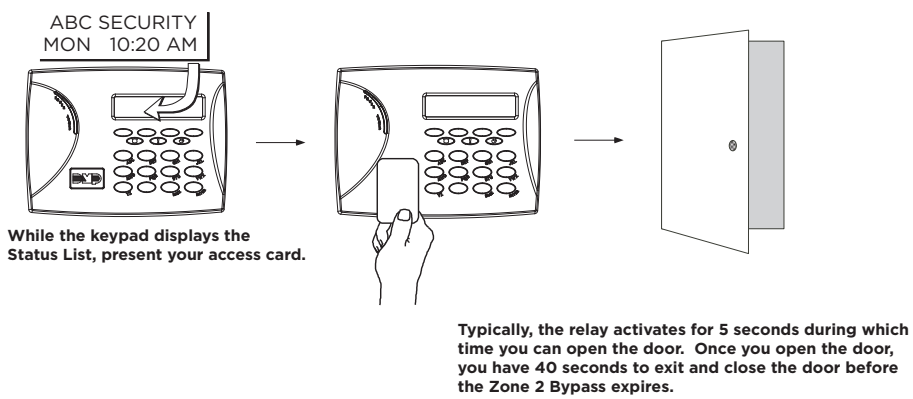


Figure 11: Present Access Card

Keypad Entry Delay

All Systems

Once the entry delay starts, the keypad sounds an entry tone and displays **ENTER CODE: -** . Present your card to the reader. Once validated, the system disarms all areas accessible by you and activates the 7073/7073A/7173 Door Strike relay. Area systems provide a delay to allow selected areas only to be disarmed. See Keypad Arming and Disarming.

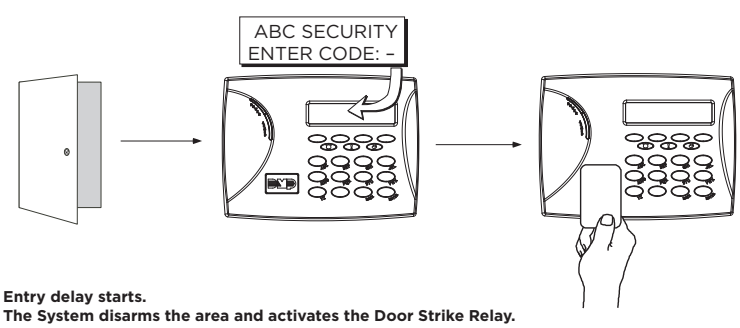


Figure 12: Present Access Card

REFERENCE

ULC Commercial Burglary

For XR150/XR550 Series panels, keypad zones cannot be used for ULC listed applications.

Keypad Bus 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.

Compatibility

- XT30/XT50 Series Panels
- XR150/XR550 Series Panels

Public Card Formats

CARD FORMAT	WIEGAND 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
DMP Bluetooth 56-Bit	56	1	16	17	34	10

Readers and Credentials

*Delta Proximity Readers and Credentials not evaluated by UL.

125 kHz WIEGAND 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
SR3	Bluetooth and 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

BLUETOOTH MOBILE CREDENTIALS
Mobile Credentials (SR3)

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

SPECIFICATIONS

Keypad Specifications

Operating Voltage	12 VDC
Dimensions	7” W x 5.25” H x 0.5” D

Model	Normal/Standby Current	Alarm Current	Four Zones	Internal Prox Reader	Wiegand Input	Internal Door Strike Relay
7060/A, 7160	72 mA	87 mA				
7063/A, 7163	85 mA	100 mA		✔		
7070/A, 7170	72 mA + 1.6 mA per active zone	87 mA + 2 mA per active zone	✔			
7073/A, 7173	85 mA + 1.6 mA per active zone	100 mA + 2 mA per active zone	✔	✔	✔	✔

CERTIFICATIONS

- California State Fire Marshall (CSFM)
- FCC Part 15 RFID Reader FCC ID: CCKPC0086—Thinline and Aqualite
- Industry Canada ID: 5251A-PC0086—Thinline and Aqualite
- New York City (FDNY)—Only for keypads with zones

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 1076	Proprietary Burglar
ANSI/UL 1610	Central Station Burglar
ANSI/UL 985	Household Fire Warning
ANSI/UL 864	Fire Protective Signaling (Zones may be used for fire initiating devices)
ULC 5545	Household Fire
ULC Subject-C1023	Household Burglar
ULC/ORD-C1076	Proprietary Burglar
ULC S304	Central Station Burglar

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.

This system has been evaluated for RF Exposure per RSS-102 and is in compliance with the limits specified by Health Canada Safety Code 6. The system must be installed at a minimum separation distance from the antenna to a general bystander of 7.87 inches (20 cm) to maintain compliance with the General Population limits.

L'exposition aux radiofréquences de ce système a été évaluée selon la norme RSS-102 et est jugée conforme aux limites établies par le Code de sécurité 6 de Santé Canada. Le système doit être installé à une distance minimale de 7.87 pouces (20 cm) séparant l'antenne d'une personne présente en conformité avec les limites permises d'exposition du grand public.

Designed, engineered, and manufactured in Springfield, MO using U.S. and global components.

LT-0883 1.04 22143

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