

Wiegand Mullion Keypad with Card Reader



INTRODUCTION

The DOLXMWIHIDEMX is a Wiegand output keypad, with integrated proximity reader. The keypad is of digital backlit, with built-in Light Dependent Resistor (LDR) sensor for anti-tamper.

Because it is IP66 rated, it can be mounted either indoor or outdoor in harsh environments.

SPECIFICATIONS

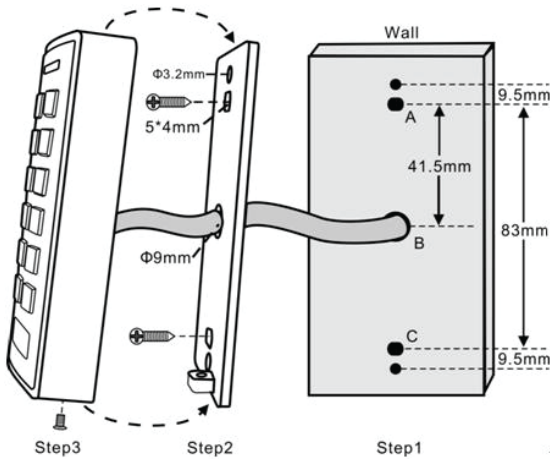
Frequency	125KHz & 13.56Mhz
Card Type	125KHz -EM & HID Cards/Fobs 13.56MHz - Mifare Cards/Fobs (ISO 14443A Compatible)
Read Range	3~6 cm
Standby Current	35mA
Operating Voltage	9~18V DC
Wiegand Output Format	Wiegand 26 bits (factory default) or Wiegand 34 bits
Keypad Transmission Format	4 bits (factory default) 8bits or virtual card number format can be set
Operating Temperature	-40 ~60
Operating Humidity	0% RH ~ 96% RH
Color	Black/Ivory
Index of Protection	IP66
Dimension	L122 x W50 x D21 mm
Net Weight	150g
Shipment Weight	200g

PACKING LIST

DOLXMWHIDEMX Reader	1
Manual	1
Screw Driver	1
Wall Fixing Plus	2
Self Tapping Screws	2

INSTALLATION

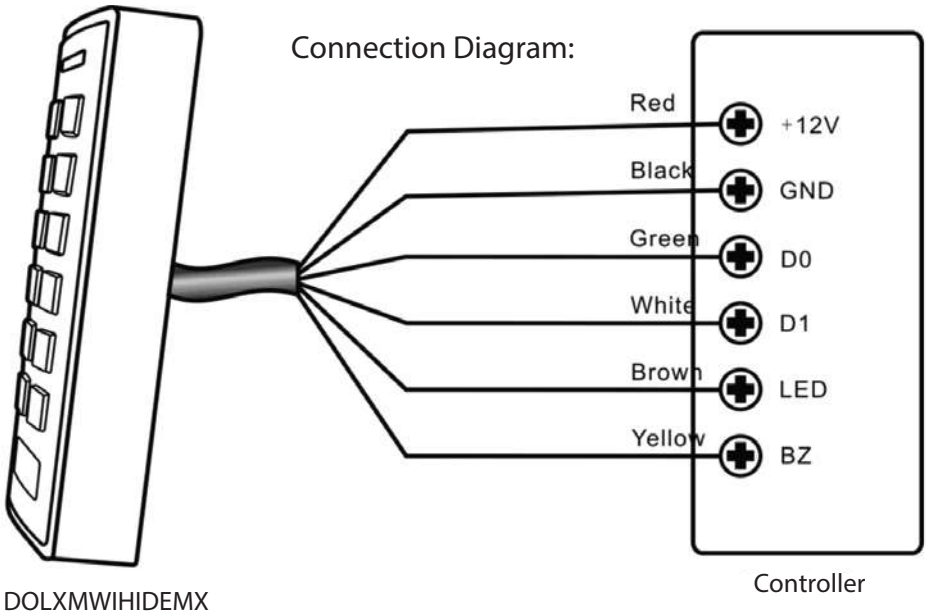
- Drill 2 holes (A, C) on the wall for the screws and one hole (B) for the cable
- Knock the rubber bungs to the holes (A, C)
- Fix the back cover on the wall with 2 screws
- Thread the cable through the cable hole (B)
- Attach the unit to the back cover



WIRING

Color	Function	Notes
Red	Power +	+ DC (9-18V DC)
Black	GND	Ground
Green	D0	Data 0
White	D1	Data 1
Brown	LED	Green LED Light Control
Yellow	Buzzer	Buzzer Control

(NOTE: Brown and Yellow wires are optional connections)

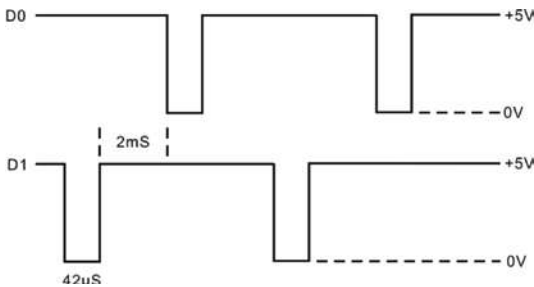


FUNCTION TABLE SHEET

Read Card	The LED light will turn into Green, and the buzzer sounds a beep, at the meantime, the reader outputs the Wiegand signal
External LED Control	When the input voltage for LED is low, the LED will turn into Green
External Buzzer Control	When the input voltage for Buzzer is low, the Buzzer will sound
Wiegand Data Output	Wiegand 26~37 bits range available for DOLXMWIHIDEMX reader, factory default setting is Wiegand 26 bits. HID card can output Wiegand 26~37 automatically, EM and Mifare cards are forced to output based on the reader setting

DATA SIGNAL

Pulse Times	
Description	DOLXMWIHIDEMX Typical Times
Pulse Width Time	42 μ s
Pulse Interval Time	2 ms



The above table shows the wave form of pulse width time (the duration of a pulse) and pulse interval time (the time between pulses) of the Wiegand data output from the readers. (Example 1010)

KEYPAD TRANSMISSION FORMAT

The default keypad transmission format is 4bits. 8 bits or virtual card number format can be customized.

4 BITS

The reader will transmit the PIN data after every key is pressed:

1 (0001), 2 (0010), 3 (0011)
4 (0100), 5 (0101), 6 (0110)
7 (0111), 8 (1000), 9 (1001)
* (1010), 0 (0000), # (1011)

8 BITS

The reader will transmit the PIN data after every key is pressed:

1 (1110 0001), 2 (1101 0010), 3 (1100 0011)
4 (1011 0100), 5 (1010 0101), 6 (1001 0110)
7 (1000 0111), 8 (0111 1000), 9 (0110 1001)
* (0101 1010), 0 (1111 0000), # (0100 1011)

VIRTUAL CARD NUMBER

The reader will transmit the PIN data when it receives the last key (#) after PIN code

Example: PIN code: 999999

Press 999999 #, then the output format will be: 0000999999

HOW TO CHANGE WIEGAND FORMAT AND PROGRAMING

Programming

Change the configure settings according to your application (optional). Multiple configuration settings can be changed at one time: enter program mode, change desired settings, then exit program mode.

Set Master Code

The 4-6 digit Master Code is used to prevent unauthorized access to the system. To interface with the keypad reader, the manager will need a Master Code (factory default code is 123456). We highly recommend immediately updating the default code and recording the new Master Code.

NOTE: when entering program mode please press * until the LED starts blinking and then press Master Code #.

Programming Step	Keystroke Combination
1. Enter Program Mode	Press * until LED blinks (Master Code) #
2. Update Master Code	0 (New Master Code) # (repeat Mster Code) #
3. Exit	*

Set Wiegand output format for EM Card

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Format Setting	1 (26~44) # (Factory default is 26bits)
3. Exit	*

Set Wiegand output format for HID Card

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Format Setting	2 (0) # (Auto output, factory default) 2 (26~37) #
3. Exit	*

Set Wiegand output format for Mifare Card

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Format Setting	3 (0) # (Auto output) 3 (26~44, 56, 58) # (Factory default is 34bits)
3. Exit	*

Set PIN output format

The keypad reader can be set to 4bits(factory default), 8 bits, or virtual card number format

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Format Setting Virtual Card Number 4Bits 8Bits	4 (0) # 4 (4) # 4 (8) #
3. Exit	*

Set Audible and Visual Response

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. LED Always ON LED Always OFF OR 2. Enable Sound Disable Sound OR Keypad Backlit Always ON Keypad Backlit Automatic OFF	5 (1) # (Factory default) 5 (2) # 5 (3) # (Factory default) 5 (4) # 5 (5) # (Factory default) 5 (6) # Automatic OFF after 20 seconds, it will go ON by pressing any key (this key isn't taken into consideration)
	*

Reset to Factory Default:

There are two methods to reset the device to factory default.

Method 1:

* (Master Code) # 5(0) #

Method 2 (This way is suitable for users forget the Master Code):

Power off, connect Yellow cable and GND cable, and then power on, hold it for 5 seconds, there will be a long beep, means reset to factory default successfully.

Data Signal

The below table shows the wave form of pulse width time (the duration of a pulse) and pulse interval time (the time between pulses) of the Wiegand data output from the readers.
(Example 1010)

TRANSMITTER SOLUTIONS WARRANTY

The warranty period of Transmitter Solutions keypad is twenty-four (24) months. This warranty shall begin on the date the keypad is manufactured. During the warranty period, the product will be repaired or replaced (at the sole discretion of Transmitter Solutions) if the product does not operate correctly due to a defective component. This warranty does not extend to (a) the keypad case, which can be damaged by conditions outside the control of Transmitter Solutions, or (b) battery life of the keypad. This warranty is further limited by the following disclaimer of warranty and liability:

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