Dolphin DOLXMWIHIDEM-X Plus Wiegand Mullion Keypad with Card Reader Instruction Manual

Contents

Dolphin Access Systems

Dolphin DOLXMWIHIDEM-X Plus Wiegand Mullion Keypad with Card Reader

Product Information

The DOLXMWIHIDEMX is a Wiegand Mullion Keypad with Card Reader. It is equipped with a digital backlit keypad and an integrated proximity reader. The keypad features a built-in Light Dependent Resistor (LDR) sensor for anti-tamper functionality. With an IP66 rating, it can be mounted both indoors and outdoors, making it suitable for harsh environments.

Specifications:

- Frequency Card Type: 125KHz & 13.56Mhz
- Read Range: 3~6 cm
- Operating Voltage: 9~18V DC
- Wiegand Output Format: Wiegand 26 bits (factory default) or Wiegand 34 bits
- Keypad Transmission Format: 4 bits (factory default), 8 bits, or virtual card number format
- 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

Product Usage Instructions

Installation
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 (optional)

Connection Diagram:

```
DOLXMWIHIDEMX          Controller
--------------------------------
Red                    Power +
Black                  GND
Green                  D0
White                  D1
Brown                  LED
Yellow                 Buzzer
```

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
The following table shows the waveform 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:

Description	Pulse Width Time	Pulse Interval Time
Example	1010	

Keypad Transmission Format
The default keypad transmission format is 4 bits. However, it can be customized to either 8 bits or virtual card number format.

4 BITS:
The reader will transmit the PIN data after every key is pressed, for example:

```
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, for example:

```
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. For example, if the PIN code is 999999, pressing 999999 # will output the format: 0000999999.

If you have any further questions or need assistance, please contact us at:

- **Phone:** PH 866.975.0101
- **Fax:** FX 866.975.0404
- **Website:** www.transmittersolutions.com

Please refer to the product manual for detailed instructions and information.

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
- 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 Humidity 0% RH ~ 96% RH
- Color Black/Ivory
- Index of Protection IP66
- Dimension L122 x W50 x D21 mm
- Net Weight 150g

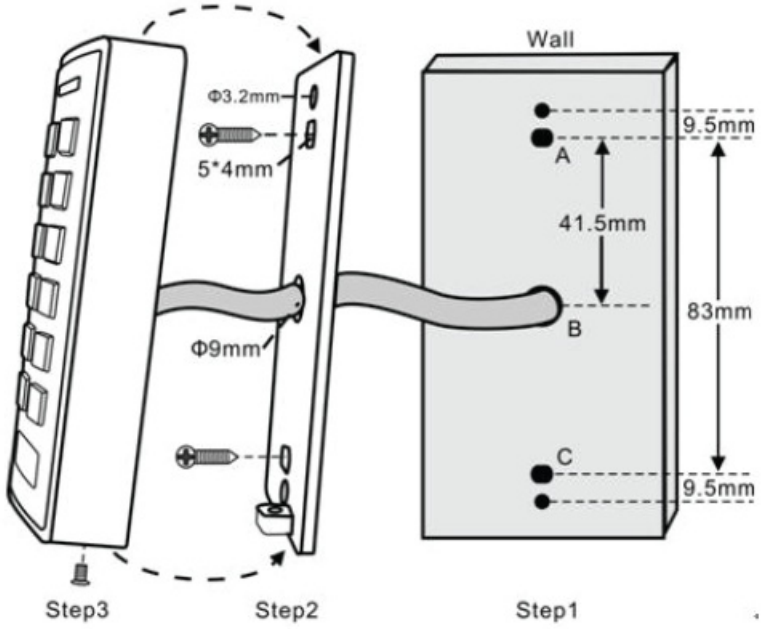
- Shipment Weight 200g

PACKING LIST

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

INSTALLATION

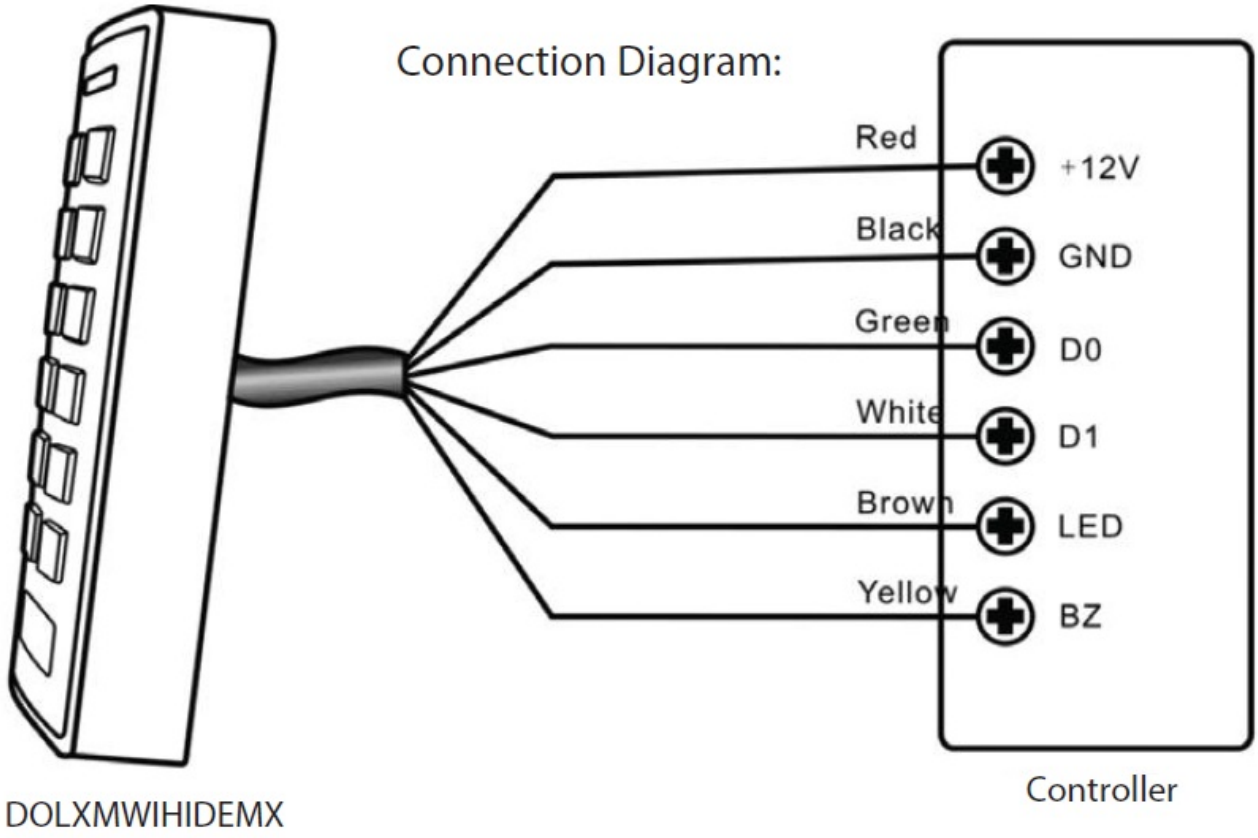
- Drill 2 holes (A, C) on the wall for the screws and one hol for the cable
- Knock the rubber bungs to the holes (A, C)
- Fix the back cover on the wall with 2 screws
- Thread the cable though the cable hole (B)
- Attach the unit to the back cover



WIRING

C olor	F unction	Notes
R ed	P ower +	+ DC (9-18V DC)
Black	G ND	G round
G reen	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)

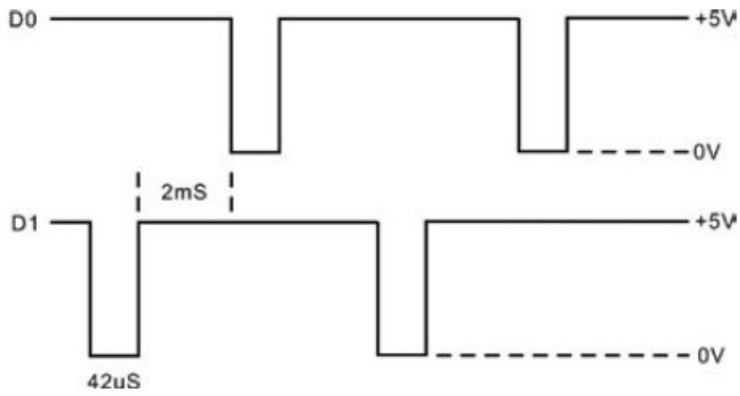


FUNCTION TABLE SHEET

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	DOLKXMWIHIDEMX Typical Times
Pulse Width Time	42 µs
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
E xample: 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 digits 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: 123456), we highly recommend immediately updating it and recording the New Master Code.Note: When enter program mode, please press* for 5 seconds, and then press Master Code #.

Programming Step	Keystroke Combination
1. Enter Program Mode	* **(Master Code) #**
2. Update Master Code	0（New Master Code）# （Repeat New Master Code）#
3. Exit	*

Set Wiegand output format for EM Card

	Programming Step	Keystroke Com	bination
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	4 (0) #
4Bits	4 (4) #
8Bits	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 a ny 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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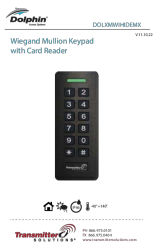
Documents / Resources

	[Dolphin DOLXMWIHIDEM-X Plus Wiegand Mullion Keypad with Card Reader](#) [pdf] Instruction Manual DOLXMWIHIDEM-X Plus Wiegand Mullion Keypad with Card Reader, DOLXMWIHIDEM-X, Plus Wiegand Mullion Keypad with Card Reader, Mullion Keypad with Card Reader, Keypad with Card Reader, Card Reader, Reader

References

- [Home » Transmitter Solutions](#)