

Application Note

UW / MW Netronix reader integration with Inner Range and SLAM controller using Wiegand

1) UW-R4G, UW-R4GB integration

Below example explain how to set Wiegand-26 in reader

1.1 Reader configuration

Reader in default configuration must be configured to sending ID over Wiegand protocol. It can be done using Framer tool:

https://netronix.pl/pl/index.php?controller=attachment&id_attachment=11 .

Reader must be connected do PC using RS485 (or USB<->RS485 converter), pinout is described at the end of this document.

After setting properly COM port (communication->set) and load FRM file(optional) below 3 frames must be sent to reader:

01	0A	0xB2 C_LoginUser	31 32 33 34 00
01	0C	0x58 C_SetAutoReaderConfig	02 14 01 02 01 01 03
01	08	0x54 C_SetInterfaceConfig	03 1A 01

* '1A' parameter in 3rd frame (0x1A = 26) is a Wiegand frame length in hex value and can be any.

1.2 Input output configuration. Below examples show how to control green led, red led and buzzer by low state on corresponding: IO2, IO3, IO4

01	0A	0xB2 C_LoginUser	31 32 33 34 00
01	06	0x74 C_AccesControllConfigWrite	00
01	0C	0x50 C_SetIOConfig	02 00 05 07 00 00 00
01	0C	0x50 C_SetIOConfig	03 00 05 08 00 00 00
01	0C	0x50 C_SetIOConfig	04 00 05 09 00 00 00

1.3 Connection with SLAM/other Wiegand controller

Wire color	Signal
PIN '5'	8-15V
PIN '6'	ground
PIN 'D'	Data0
PIN 'E'	Data1

2) MW-R7 / MW-D7 reader integration

2.1 Reader configuration

Reader in default configuration must be configured to sending ID over Wiegand protocol. It can be done using Frammer tool:

(https://netronix.pl/pl/index.php?controller=attachment&id_attachment=11) .

Reader must be connected do PC using RS232 (or USB<->RS232 converter) as below:

Wire color	signal
Red	8-15V
Blue	Ground
Green	Reader TX- to pin 2 DB9
Yellow	Reader RX- do pin 3 DB9

After setting properly COM port (communication->set) and load FRM file(optional) below 2 frames must be sent to reader:

For MW-D7 reader and Unique transponder:

01	0C	0x58 C_SetAutoReaderConfig	02 14 01 80 01 04 03
01	08	0x54 C_SetInterfaceConfig	03 1A 01

* '1A' parameter in 2nd frame (0x1A = 26) is a Wiegand frame length in hex value and can be any.

For MW-R7 and Mifare transponder:

01	0C	0x58 C_SetAutoReaderConfig	02 14 01 80 01 01 03
01	08	0x54 C_SetInterfaceConfig	03 1A 01

* '1A' parameter in 2nd frame (0x1A = 26) is a Wiegand frame length in hex value and can be any.

2.2 Connection with SLAM/other Wiegand controller

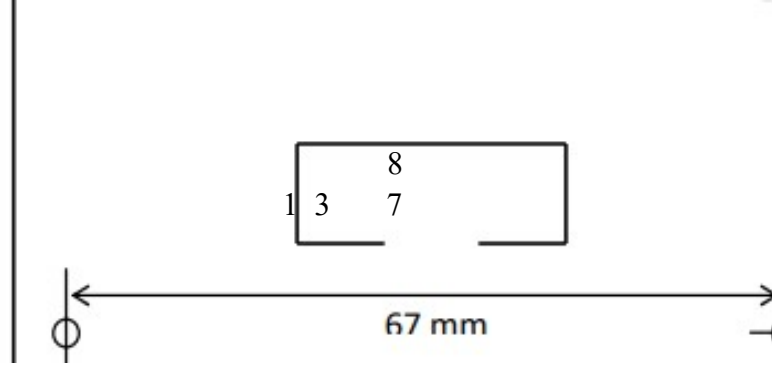
Wire color	signal
Red	8-15V
Blue	Masa
Green	Data0
Yellow	Data1

3 CTU-R5RM reader integration (FW at least 3.2)

3.1 Reader configuration:

Small button on reader must be pressed 9 times

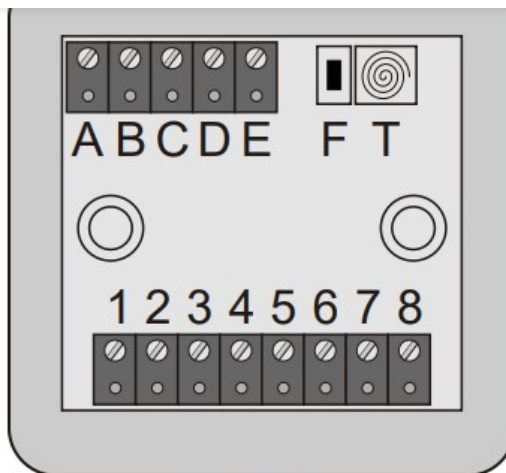
3.2 Reader connection:



Pin number	Description
1	Wiegand_1
3	Wiegand_0
7	Supply 9V-16V
8	Ground

4 Example InnerRange configuration for Wiegand-26

The screenshot shows the InnerRange software interface for configuring a Wiegand-26 card. The left sidebar displays site information: Site ID is CF29, Name is 26bit DEC, Last Changed By is Installer, Created is 14.01.2020, and Modified is 11.02.2021. The main right pane shows the configuration options for the card format, which is set to 26bit DEC. The configuration is divided into several sections: Options, Site Code Parameters, Card Programming, SIFER Options, and Configuration. The Site Code Parameters section includes Total Bits (26), Site Code Offset (0), Site Code Length (0), Card Number Offset (1), Card Number Length (24), Issue Number Offset (0), and Issue Number Length (0). The Card Programming section includes Wiegand Card Type (26 Bit), Alternate Card Format, and Direct Entry Ignore Mask (00 00 00 00 00 00 00 00 00 00). The Options section is currently expanded.



UW-R4G

Symbol on drawing	Function
1	IO 1
2	Synchronization of two readers, which are in-proximity
3	RS-485 pin A
4	RS-485 pin B
5	Module power supply
6	Ground and minus of supply voltage
7	Relay contacts outputs
8	
T	Tamper with spring
F	Push-button for reset to default settings
A	GPIO 2
B	GPIO 3

UW-R4 pinout description