

# 1 Scope

1.1 This procedure outlines the method instituted by Sure-Fi, Inc to provide external pullups to the Wiegand data inputs for use with Sure-Fi, Inc. Bridge products.

## 2 Summary:

2.1 When a Wiegand device that will be connected to the Remote Interface Bridge has an output condition where the data lines are not pulled up to 5VDC, it must be externally pulled up to this level to interface with the Bridge. This Application note describes how to use resistors to create voltage dividers to create these signals for use with the Bridge.

## 3 References (current version unless otherwise specified)

- 3.1 Transmitter Solutions 433MHz Wiegand receiver datasheet: RECTSWEI433
- 3.2 Transmitter Solutions Part Numbers: RECTSWEI433, SELWR18-L, SELWR433
- 3.3 Wiegand Bridge Operators Manual Doc #PI0026

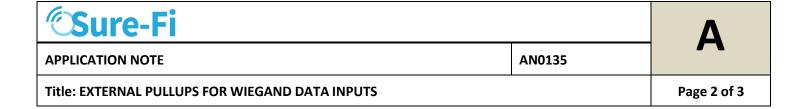
### 4 Procedure

- This example is to be used if the Wiegand data lines, D0 and D1, on the Remote Interface measure less than 3VDC with respect to ground when connected to the Wiegand device. Two voltage dividers will be added externally to the Remote Interface to pull up D0 and D1 to 3-5VDC. See Appendix 5.1 for wiring diagram.
  - **4.1.1** Wire the resistors and devices as shown in Appendix 5.1. This diagram assumes that 12VDC power is also applied to the 12V and GND of the Sure-Fi Wiegand Remote Interface.



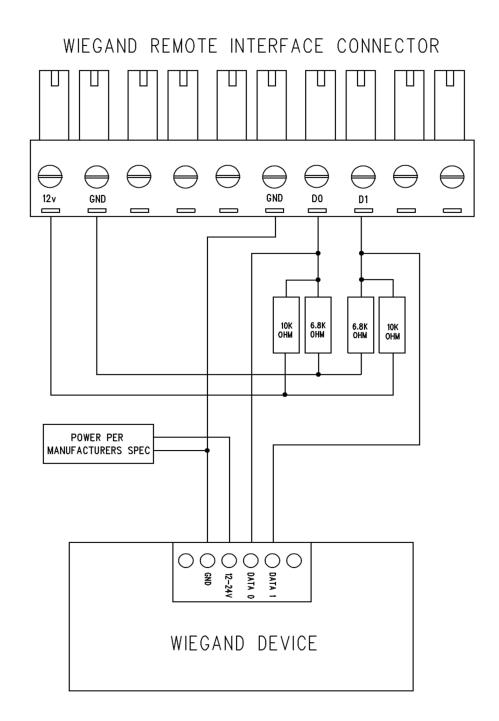
Ensure that the Wiegand device and the Remote Interface grounds are connected together as per Appendix 5.1.

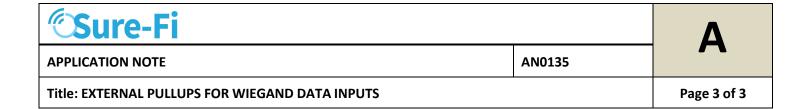
**4.1.2** Measure Wiegand data lines, D0 and D1, with respect to ground to ensure that they read in the range of 3-5VDC.



# 5 Appendix

**5.1** Wiring for external pullup voltage dividers:





Revision History		
Revision	Comment	Date
Α	Initial document release	February 2018

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