Proximity Reader MF7

The MF7 is a very high performance proximity reader featuring medium range and small dimensions. The unit will run from any voltage from 5~18 V (DC). The MF7 also features good read range at 5 Volts , making it ideally suited to a wide variety of applications, particularly access control.

Power Requirements	5~18 Volts regulated DC at 150 mA typical with a 12V supply. A linear regulator is recommended .
Interface	Wiegand
Typical Maximum Read In ideal conditions	Range 2~5 cm at 5~18V with Mifare card.
Frequency	13.56MHz band (47.48dBuA/m (1.2m))
Transponder	Read Only (For Unique Serial Number / Unique Identifier) Read Only (Mifare Ultralight MF0 ICU1) Read Only (Mifare Standard MF1 ICS50) Read Only (Mifare 4k MF1 ICS70) Read Only (Mifare DESFire MF3 ICD40)
Audio/Visual Indication	Internal LED and Buzzer
Dimensions	7.8 x 4.3 x 1.6 cm
Operating Temperature	-10 to 60 Deg C.
Interface Cable	90 cm

Output Assignment

Red	Power	5-18 Volts
Black	Power	0 Volt
White	Wiegand 1 , with internal 4k7 pull up	
Green	Wiegand 0 , with internal 4k7 Pull up	
Orange	GREEN LED (External source Connect to GND 0 Volts)	
Yellow	NC	
Blue	NC	
Brown	RED LED (External source Connect to GND 0 Volts)	

Data out internal circuit configuration
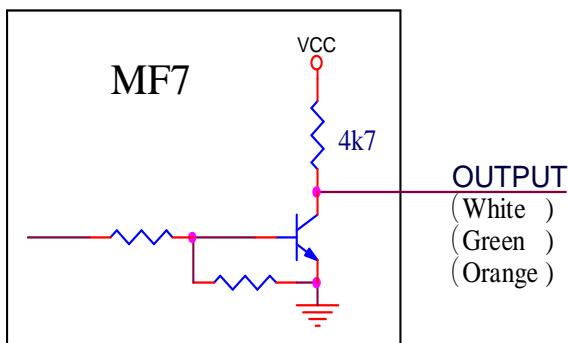
Data Structure (Mifare 1K / 4K For Wiegand Format-37 Bit)
(Ultralight / DESFire For Wiegand Format-61 Bit)

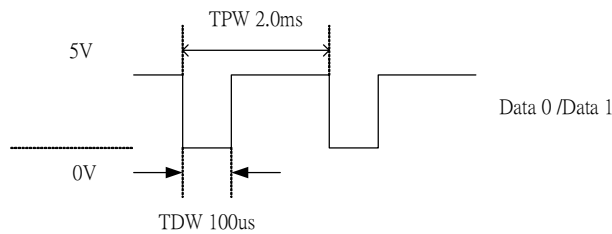| 0	1~3	4~17	17~35	36
0	1~3	4~30	30~59	60
P	S	C	C	P
SUMMED FOR EVEN PARITY (E)				
			SUMMED FOR ODD PARITY (O)	

Note :

P	Parity (Even or Odd) Start Bit and Stop Bit
S	Preamble Code
C	Card Data

Wiegand Data Timing Specification

Pulse Interval　　(TPW)=2.0mS +/- 3%

Pulse Width　　(TDW)=100uS +/- 3%

PROGRAMMING THE OUTPUT FORMAT

The programming input may be connected in the following ways to choose between the available output formats.

1)	Serial ASCII	Leave Program Input Open CIRCUIT
2)	Wiegand	Connect Program Input to Clock Output
3)	Clock Data**	Connect Program Input to Data Output
4)	Magnetic Emulation	Connect Program Input to Card Present

**(To special order only – Minimum order 1K)