Proximity Reader GP20 (5~13.5 Volts Version)

Power Requirements	5~13.5 Volts regulated DC @ 65 mA typical with a 12V supply. A linear regulator is needed.
Output Interface	Wiegand, Magstripe, 9.6K Baud Serial ASCII (RS232)
Maximum Read Range	20cm @ 13.5 VDC and 13cm @ 5V in ideal conditions
Frequency	125KHz standard
Dimensions	7.8 x 4.3 x 1.5cm
Temperature Range	-10 to 60 Deg C

Output Assignment

Red	Power + VDC
Black	Ground
White	Magstripe clock & Wiegand1, with internal 4K7 pull up
Green	RS232 data, Magstripe data & Wiegand0, with internal 4K7 pull up (pull up only for Wiegand and Magstripe)
Orange	Card Present output with internal 4K7 pull up
Yellow	Program Input
Blue	No Connection
Brown	No Connection

Output Format

he output format can be customer programmed. The available formats are Wiegand, Magstripe and Serial ASCII (RS232)

Wiegand (26 bits)		**Magstripe (ABA TK2)**		**Serial ASCII (RS232)**	
Red	Power + V	Red	Power + V	Red	Power + V
Black	Ground	Black	Ground	Black	Ground
White	Data1	Green	Data	Green	TX Data
Green	Data0	White	Clock(Strobe)	Yellow	No Connection
Yellow	Connect to White	Orange	Card Present	White	No Connection
Orange	No Connection	Yellow	Connect to Orange	Orange	No Connection

Data Structure

Serial ASCII (RS232): Baud 9600, No Parity, 8 data bits,1 stop bit

STX (02 HEX)	DATA (10 HEX CHARACTERS)	CR	LF	ETX(03 HEX)

Magstripe Emulation:(ABA Track 2)

Speed : Simulated to 40 IPS (Inch per Second)

10 LEADING ZEROS	SS	DATA (14 DIGITS)	ES	LRC	10 TRAILING ZEROS

Wiegand : 26 bits