

Wiegand to RS485 Converter (MA1404)

MaCaPS MA1404 is a Wiegand to RS485 converter supporting multi-drop. The converter can read two Wiegand Card Readers and convert Wiegand input from 24-bit up to 40-bit to a formatted ASCII string. The converters can be daisy chained together, up to 16 converters, and then polled by a host device. In addition, commands can be used to control the reader's LED and Buzzer.

1 Specification:

1.1 Communications:

9600 BPS ASYNC, 8 bits, 1 Stop, No Parity.

1.2 Transmission Distance:

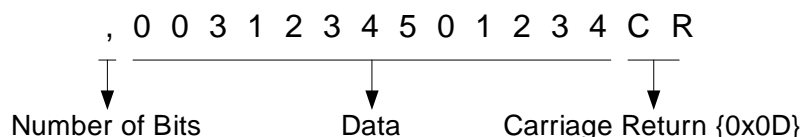
Maximum 4,000 ft. (1.2Km)

1.3 Number of Connections

Maximum 16 connections

1.4 Output Format:

The output of the converter is in the form of 15-byte ASCII string as follow:



1.5 Representation of number of bits:

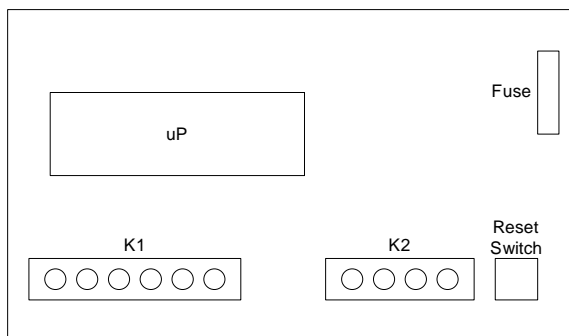
Character	SP	!	“	#	\$	%	&	‘	(
Number of bits	24	25	26	27	28	29	30	31	32
Character)	*	+	,	-	.	/	0	
Number of bits	33	34	35	36	37	38	39	40	

1.6 Command Data:

4 Bytes Hex Value	Description
02H31H30H03H	Turn on Reader LED
02H31H31H03H	Turn off Reader LED
02H31H32H03H	Toggle LED (Bi-Color LED Turns Orange)
02H32H30H03H	Turn on Reader Buzzer
02H32H31H03H	Turn off Reader Buzzer

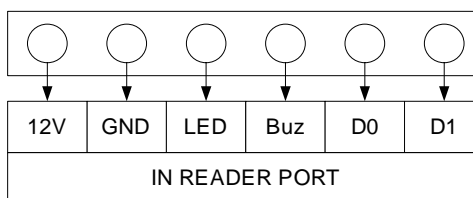
2 Pin Connectors:

The converter has two pin connectors, namely K1 and K2, which are described in the following paragraphs.



2.1 Connector K1

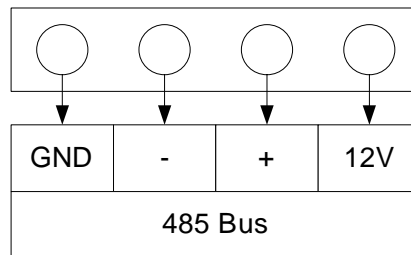
Connector K1 is used for Wiegand input.



- 12V: Power Supply +12V
- GND: Power supply ground
- LED: Reader green LED
- Buz: Reader Buzzer
- D0: Wiegand Data 0
- D1: Wiegand Data 1

2.2 Connector K2

Connector K2 is used for RS485 output.



- 12V: Power Supply +12V
GND: Power supply ground
+: RS485 +
-: RS485 -