

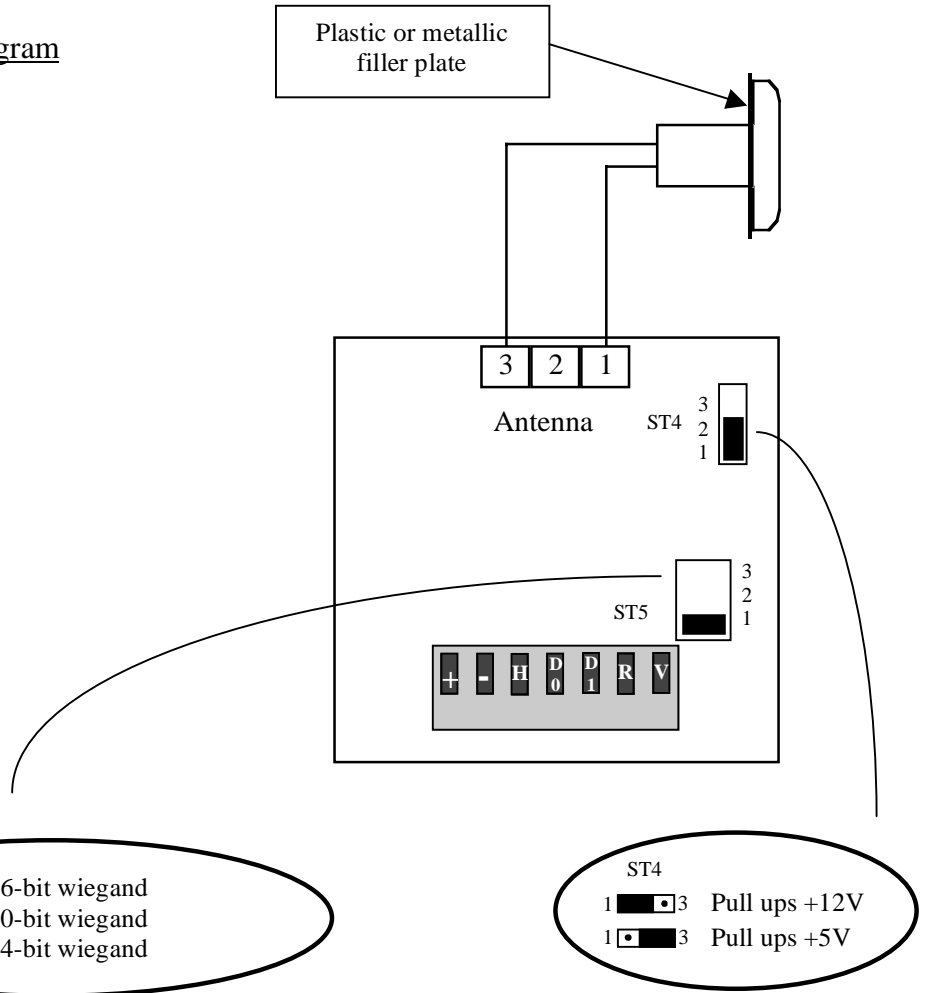


DGLP/TW Mushroom Proximity Reader

Wiring diagram

Warning

Do not use a switching power supply because of the interference radiation that may disturb the reading of the badges



Wiring diagram

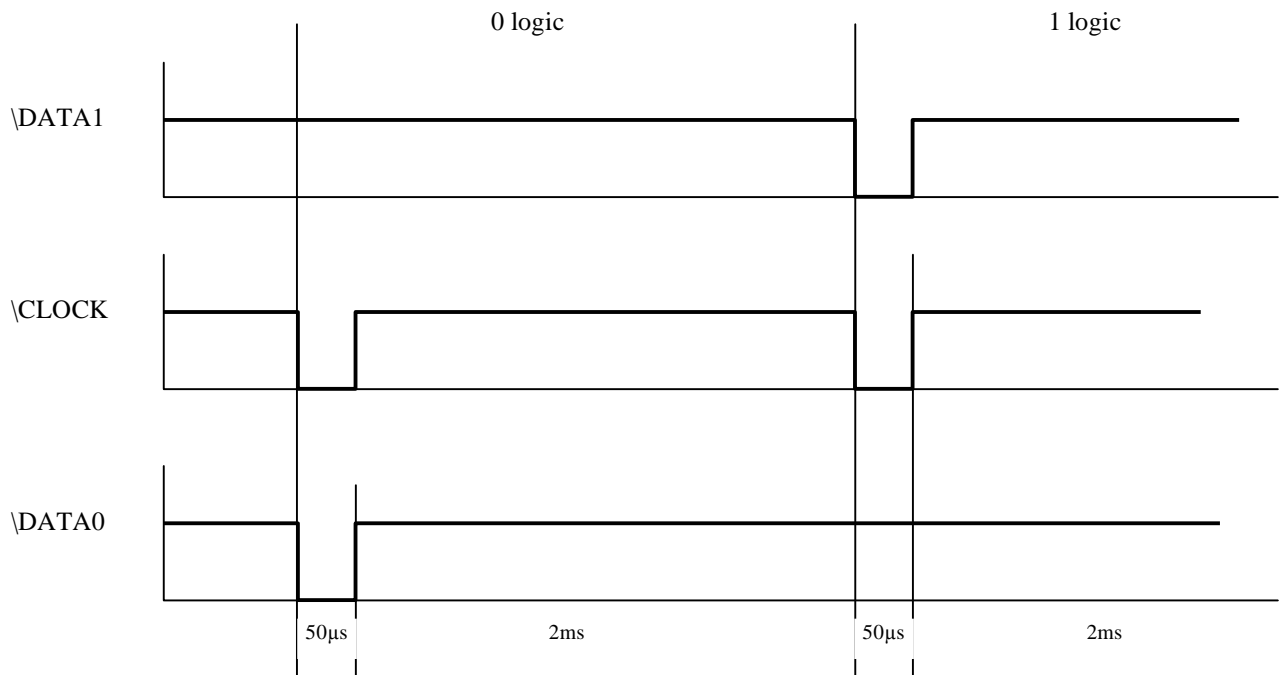
+ ----- Input voltage 12VAC or DC
 - ----- Input voltage 12V AC or DC
 H ----- Clock
 D0 ----- Data 0

D1 ----- Data 1
 R ----- Red LED
 V ----- Green LED

Wiring diagram reader

1 and 2 ----- Wiring of the antenna with a plastic filler face
 1 and 3 ----- Wiring of the antenna with a metallic filler face

Chronograms



26-bit Wiegand Output

Place the ST5 jumper on 1

Structure and description of the code

Format 26-bit hexadecimal

The output format is 26-bit **Wiegand** (Signals: DATA1, DATA0 and CLOCK)

The frame is made of 26-bit and built as follow:

First parity: 1-bit – even parity for the first 12-bit

Code of the badge: 6 half byte represent the last 6 digit of the code (4bit = 1 digit of a code)
Each byte is transferred from bit 7 to bit 0.

Second parity: 1-bit – odd parity for the last 12-bit

| | | |
|------------------------------|------------------|--------------------------------|
| Bit 1 | Bit 2 ... bit 25 | bit 26 |
| Even Parity on bit 2...bit13 | Data (24 bit) | Odd Parity on bit 14... bit 25 |

Example: code of the badge is 0100166A37

| | | | | | | | |
|----------|------|------|------|------|------|------|----------|
| 1 | 0000 | 0000 | 0001 | 0011 | 0101 | 0000 | 1 |
| Parity 1 | 0 | 0 | 1 | 3 | 5 | 0 | Parity 2 |

The code transmitted is in hexadecimal format 166A37

Parity 1: 0 if the number of 1 in bit 2 to bit 13 is even
1 if the number of 1 in bit 2 to bit 13 is odd

Parity 2: 0 if the number of 1 in bit 14 to bit 25 is odd
1 if the number of 1 in bit 14 to bit 25 is even

LRC: 4 bit = or restricted in between the digit of the data, MSBit first

The frame is made of 44 bit and built as follow:

| | |
|-------------------|-------------------|
| bit 1 Bit 40 | Bit 41 ... bit 44 |
| Data MSBit first | LRC |

44 bit, hexadecimal format

Example:

Length Code of 40 bit

| | | | | | | | | | | |
|---------|------|------|------|------|------|------|------|------|------|-------|
| digit 1 | | | | | | | | | | digit |
| 10 | LRC | | | | | | | | | |
| 0000 | 0001 | 0000 | 0000 | 0001 | 1001 | 0101 | 0000 | 1100 | 0011 | 0011 |
| 0 | 1 | 0 | 0 | 1 | 9 | 5 | 0 | C | 3 | 3 |

The code number of the card is: 01001950C3 an hexadecimal code