



CDVI

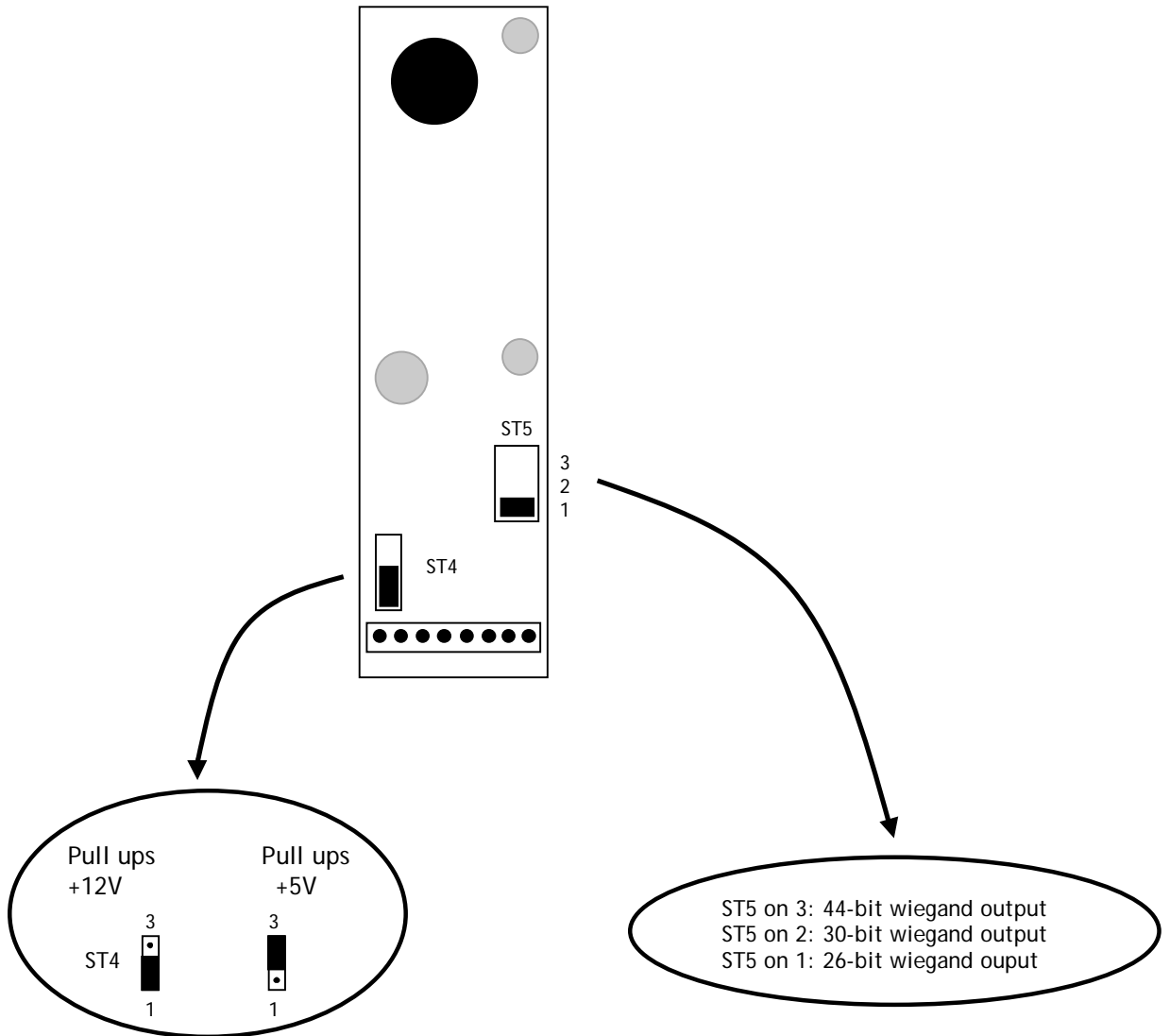
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ELPROX/W - DGLP/FW - DGLI/FW26

Proximity Readers
 26, 30 and 44-bit wiegand output

IP 65

WIRING DIAGRAM AND TECHNICAL SPECIFICATIONS

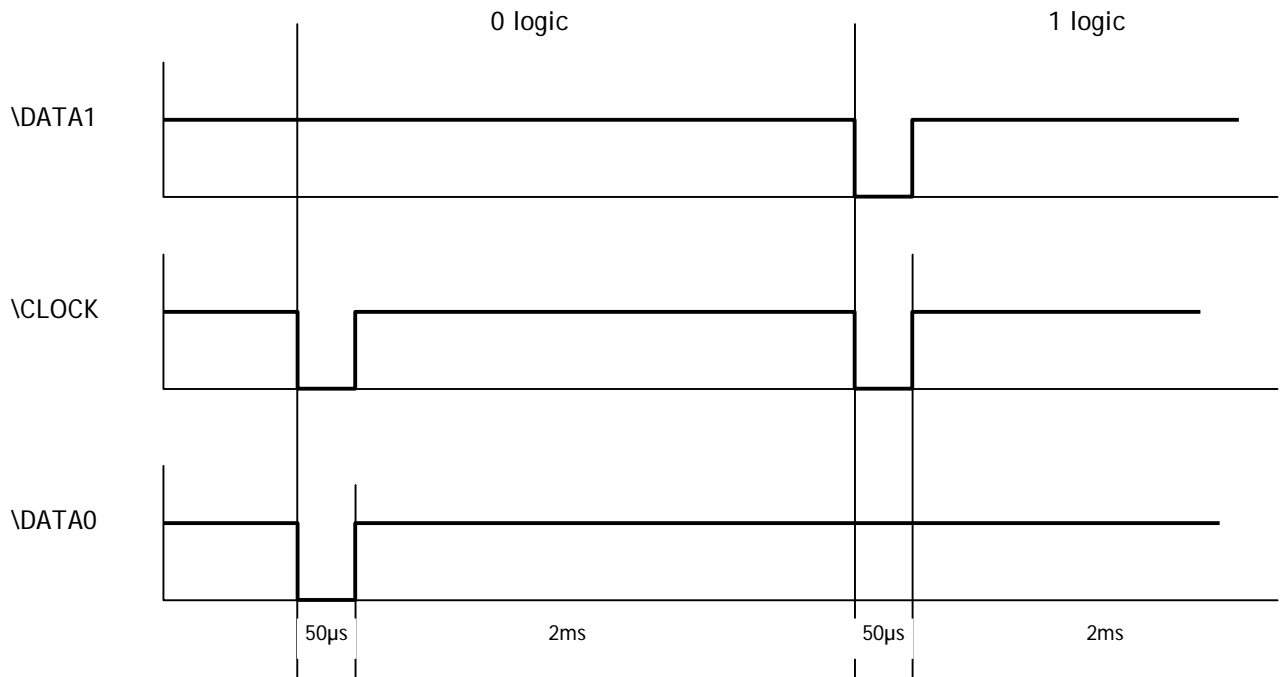


Wiring diagram

Red + ----- Input voltage 12V DC
 Black - ----- Input voltage 12V DC
 Blue ----- Clock
 Green ----- Data 0

White ----- Data 1
 Brown ----- Buzzer
 Orange ----- Red LED
 Yellow ----- Green LED

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		3	5		Parity 2
	1			0			

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

30-bit Wiegand Output

Put the ST5 jumper on 2

Structure and description of the code

The output format from the proximity reader is 30-bit wiegand (Signal: DATA1 and DATA0) and is structured as follow:

Signals output in open collectors with pull up in

30-bit hexadecimal format.

First parity : 1 bit - even parity for the first 14-bit

Code : A code is formed from 7 half byte.
Each byte is transferred from bit 7 to bit 0.

Second parity: 1 bit - odd parity for the last 14-bit

Bit 1	Bit 2 ... bit 29	bit 30
Even Parity from bit 2...bit 15	Data (28-bit)	Odd Parity from bit 16... bit 29

Example: Temic card decimal code: 689905

in hexadecimal: A86F1

1	0000	0000	1010	1000	0110	1111	0001	0
Parity 1	0	0	A	8	6	F	1	Parity 2

The code number of the card is 00A86F1 in hexadecimal

Example: EM badge hexadecimal code: 0100166A37

1	0000	0000	0001	0001	0110	1011	0110	1
Parity 1	0	1	6	6	A	3	7	Parity 2

The code transmitted is in hexadecimal format 0166A37

Parity 1: 0 if the number of 1 in bit 2 to bit 15 is even
1 if the number of 1 in bit 2 to bit 15 is odd

Parity 2: 0 if the number of 1 in bit 16 to bit 29 is odd
1 if the number of 1 in bit 16 to bit 29 is even

44- bit Wiegand Format Output

Put the ST5 jumper on 3

Structure and description of the code

44-bit hexadecimal format

The output format from the proximity reader is 44-bit (Signal: DATA1, DATA0 and CLOCK) and is structured as follow:

Data: 10 digit code number hexadecimal MSByte first
Each hexadecimal digit = 4 bit, MSBit first

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.