LEC-BL-WDT

Lecteur Bluetooth + proximité MIFARE sécurisé
bus Wiegand Data&Clock

❶ TECHNICAL SPECIFICATIONS AND APP

- **Power supply:** 12/24v CC
- **Consumption:** 95 mA
- **Maximum range of reading tags:** 5 cm
- **Type of tag:**
  - Mifare Clasic, Ultralitgh, Plus,
  - Mifare Desfire (EV1,EV2),
  - TYPB,
  - NFC (ISO 15693),
  - Sony Felica
- **Operating temperature:** -30°C a +50°C
- **Tightness:** IP65
- **Built-in metal housing + high-resistance glass:** 90x90x11mm
- Recessed with standard flush-mounting box not included
- Bluetooth reader
- Possibility of identification with telephone or proximity tag
- **3 Bluetooth reading modes:**
  - Remote control + hands-free TAG mode
  - Exclusive remote control mode
  - Exclusive hands-free TAG mode
- **8 levels of mobile phone detection distance:** From 0.5m to 15m approximately
- **Blue indicator light:** operations in progress
- Indicator light available *(red)*
- Indicator light available *(green)*
- Indicator light *(yellow)* and sound of operations in progress
- LP input to activate the reading on the mobile phone in hands-free or free access mode
- Different output formats selectable by APP
- Programming the playback format and output format by APP available on Playstore and Applestore
- **App available in IOS and ANDROID**

Technique

Android APP

iOS APP

❷ PROGRAMMABLE LED LIGHTS

- Red Led → phone not read or phone not present
- Green Led → phone read and phone present

❸ HANDS FREE READER

The reader has a proximity detector to activate the Bluetooth reading. Therefore, to activate the reading of the phone, the user will have to touch the glass front of the reader.

ATTENTION! The pulsation is not instantly detected (it is necessary to hold the hand close to the sensor for a short time)

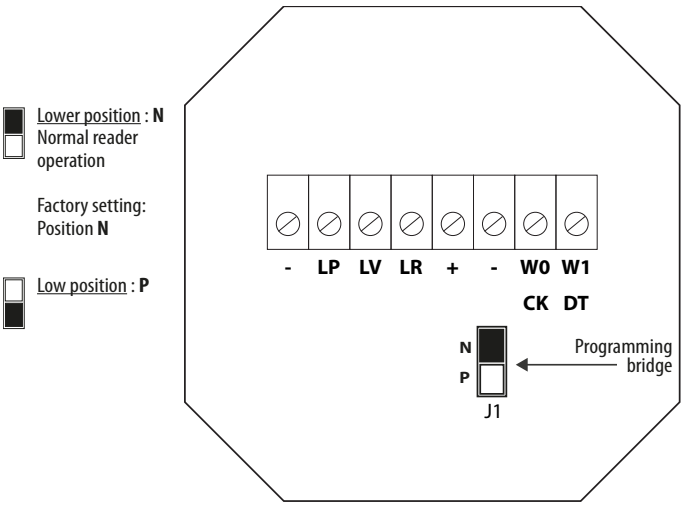
❹ MONTAGE

At the bottom of a standard electrical box - Between axes: 60

The same MIFARE TAG cannot be read again unless 3 seconds have elapsed.

❸ CONNECTION

The reader is designed to operate with up to 50 meters of cable. In the case of an extension, we can not guarantee the optimal functioning of the product.



WARNING! Do not instal 2 proximity readers within 0,5 m of each other

Bounds	Connections
+ / -	Power Supply 12v CC
W0 / W1 CK / DT	Wiegand / Datac&Clock *(W44 factory outlet)*
LV	- GREEN LED *(lights up with - power supply)*
LR	- RED LED *(lights up with - power supply)*
LP	- Triggers phone reading or free access *(if contact is closed with - power supply)*

❻ READER SETTINGS

Enter programming mode without having a programming card:
1) Disconnect the power supply and wait 5 seconds,
2) Place the programming jumper in the low position **P**
3) Reconnect the power supply *(beep, beep, beep)*,
4) Place the programming jumper in the high position **N**
The yellow indicator light comes on.

Create a schedule card. Then we can enter the programming mode using this card:
1) Disconnect the power supply and wait 5 seconds,
2) Place the programming jumper in the low position **P**
3) Reconnect the power supply *(beep, beep, beep)*,
4) Place the programming jumper in the high position **N**
The yellow indicator light comes on,
5) Present the desired programming card *(beep, beep)*

- To enter programming mode using this card, present the programming card *(beep beep) The yellow indicator light turns on.*
-To exit programming mode using this card, present the programming card *(beep, beep)*.

Once the reader is in programming mode, it can be configured from the AC-BL application *(after 4 minutes, the reader exits programming mode)*

Hereby, ACIE AUTOMATISMES SARL, declares that product is in compliance with the essential requirements and other relevant provisions of directive 2014/53/ UE (DER).

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• PARAMETER

All parameters are configurable from the APP AC-BL. For this we have to put the device in programming. This APP communicates via Bluetooth with the reader and allows setting:

Parameter	Commentary
Name	
Bluetooth reading format	MIFARE standard and securised, securised only, exclusive reading of UID
Output protocol	Wiegand or Data-Clock
Sensing distance	
Bluetooth reading mode	TAG + Tel reading, TAG only, Tel only
Rereading time	Retrigger time for TAG mode
Code Site	
Indicator light settings	
Audible beep	Possibility to activate or not
Free access	
New unique code	

❼ FACTORY DELETED

1) Disconnect power supply
2) Put the programming bridge in position **P** and reconnect power supply *(beep,beep,beep…)*
3) Put the programming bridge in position **N** *(end of beeps)*
4) Put the programming bridge in position **P** *(5s to do it) (beep,beep,beep…)*
5) Put the programming bridge in position **N** *(end of beeps)*
6) Put the programming bridge in position **P** *(5s to do it) (beep,beep,beep…)*
7) Put the programming bridge in position **N** *(end of beeps)*
8) Put the programming bridge in position **P** *(5s to do it) (beep,beep,beep…)*
9) Put the programming bridge in position **N** *(end of beeps)*
10) Put the programming bridge in position **P** *(5s to do it) (beep,beep,beep…)*
11) Put the programming bridge in position **N** *(br, br, br) (beep, beep to finish)*

❽ FORMATS OUTPUT DATA/CLOCK

• DATA/CLOCK FORMAT

PROTOCOL : R11-2B - Transmission frecuency : 1000bits/s
FORMAT
1) 8 bits at zero
2) Start code SS *(B)* + odd parity bit.
3) 10 or 13 reverse BCD nibbles , corresponding to the ID code + odd parity bit
4) Transmission end code ES *(F)* + odd parity bit.
5) Linear redundancy code of previous nibbles, except start zeros + odd parity bit.
6) 8 bits at zero
LCR = SS N1 ⊕ N2 ⊕ N3 ⊕ N4 ⊕ N5 ⊕ N6 ⊕ N7 ⊕ N8 ⊕ N9 ⊕ N10 ⊕ N11 ⊕ N12 ⊕ N13 ⊕ ES *(⊕ = Function O exclusive)*

TIME	DESCRIPTION	MIN.	TYP.	MAX.	UNIT
Tset	Data stup time	5	1/6 Tclock		µS
Trm	Data hold time	0	8	2/3 Tclock	µS
Twhite	Clock pulse width	-	1/3 Tclock	-	µS
Tclock	Clock pulse rate	80	1000	1500	µS
Ttotal	Time out read operation	-	76	-	Tclock

STARTING	SS	P	N°1	P	N°2	P	…	P	ES	P	LRC	P	FINAL
00000000	1101	0	0000	1	1000	0	…	0	1111	1	XXXX	Y	00000000
0	B		0		1		…		F				0

❾ FREE ACCESS MODE

A unique code is sent for each reader when touching the glass if the LP terminal contact is closed *(between LP and C)*. That is, the reader works as a simple push-button when the LP contacts closes.

You can change the unique code that the reader sends each time the glass is touched, using the "New Unique Code" option.

To schedule; put the reader in programming mode by means of the P-N jumper or by means of the programming card, then enter the AC-BL App, go to the Installation menu and activate the "Free Access" option

❿ FORMATS WIEGAND

• WIEGAND 26 BITS FORMAT

PROTOCOL : 3B - Transmission frecuency: 1000bits/s
FORMAT
1) Bit N°1 even parity in bits 2 to 13
2) Bit N°2 to N°25 corresponding to the ID code in 6 hexadecimal *(3 bytes)*
3) Bit N°26 odd parity in bits 14 to 26

• WIEGAND 34 BITS FORMAT

FORMAT
1) Bit N°1 even parity in bits 2 to 17
2) Bit N°2 to N°33 corresponding to the ID code in 8 hexadecimal *(4 bytes)*
3) Bit nº34 odd parity in bits 18 to 33

Examples for a Standard card MIFARE with code FC9EF779
WIEGAND 26 format: 9EF779
WIEGAND 34 format: FC9EF779
WIEGAND 44 format: 10FC9EF779
WIEGAND 34 inverted format : 79F79EFC

• WIEGAND 44 BITS FORMAT

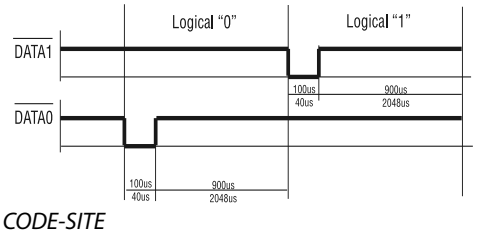
PROTOCOL : 3C - Standard
FORMAT
1) Bit N°1 to n°40 corresponding to the ID code in 10 hexadecimal *(5 bytes)*
2) Bit N°41 to N°44 XOR function of previous numbers

EXAMPLE PROTOCOL : *3C - Standard*
FORMAT
The string composed of 44 bits or 40 depending on the tag.
Data : 10 hexadecimal numbers, MSByte in first position. Each hexa-decimal number at 4 bits, MSBIT in first position.

NOTE: For standard tags, the first two digits are 1Ø and tags for Owners are: 11

bit 1…bit 40	bit 41…bit 44
Data MSBit in first position	LRC

0000	0000	0000	0000	0000	0000	0000	1001	1101	0010	0110
0	0	0	0	0	0	0	9	D	2	6



Example CODE-SITE
Code site = 12
Code identifier = 3AFB5C3E

Code transmitted in WIEGAND 26: 125C3E
Code transmitted in WIEGAND 44: 123AFB5C3E