



PROXEM+



INSTALLATION MANUAL

1. INDEX

1. INDEX.....	2
2. INTRODUCTION.....	3
3. SPECIFICATIONS.....	3
4. PRODUCT CONTENT.....	3
5. INSTALLATION.....	4
6. CONNECTION.....	4
7. BASIC PROGRAMMING.....	5
8. PROGRAMMING BY CARD COLLECTION.....	5
9. ADVANCED PROGRAMMING.....	6
9.1. PROGRAMMING.....	6
9.1.1. CHANGE MASTER CODE.....	6
9.1.2. CARD REGISTRATION (AUTO ID).....	6
9.1.3. CARD REGISTRATION (SPECIFIC ID).....	6
9.1.4. DELETE CARDS (BY CARD READING).....	6
9.1.5. DELETE CARDS (SPECIFIC ID).....	6
10. OTHER SETTINGS.....	7
10.1. RELAY SETTINGS.....	7
10.1.1. PULSE MODE.....	7
10.1.2. LATCHING MODE.....	7
10.2. ALARM SETTINGS (TAMPER).....	7
10.2.1. ACTIVATE TAMPER.....	7
10.3. LOCKOUT ALARM (FAILED ATTEMPTS).....	7
10.3.1. LOCKOUT DISABLED.....	7
10.3.2. 10-MINUTE ACCESS LOCKOUT.....	7
10.3.3. ALARM.....	7
10.4. OPEN DOOR DETECTION.....	8
10.4.1. OPEN DOOR DETECTION ACTIVATED.....	8
10.4.2. OPEN DOOR DETECTION DEACTIVATED.....	8
10.5. OPERATING MODE.....	8
10.5.1. STANDALONE.....	8
10.5.2. WIEGAND.....	8
10.6. WIEGAND OUTPUT FORMAT SETTINGS.....	8
10.6.1. SET WIEGAND FORMAT FOR EM CARDS.....	8
10.6.2. SET WIEGAND FORMAT FOR MIFARE CARDS.....	8
10.6.3. ENABLE PARITY BIT.....	8
10.6.4. DISABLE PARITY BIT.....	8
10.7. BUZZER SETTINGS.....	9
10.7.1. BUZZER ACTIVE.....	9
10.7.2. BUZZER DEACTIVATED.....	9
10.8. LED SETTINGS.....	9
10.8.1. LED ACTIVE.....	9
10.8.2. LED DEACTIVATED.....	9
10.9. RESET TO FACTORY SETTINGS.....	9
10.10. DELETE ALL THE USERS.....	9
11. STATUS DISPLAYS.....	9
12. OTHERS.....	10
12.1. TRANSFER USER INFORMATION.....	10
13. CONNECTION DIAGRAMS.....	10
13.1. STANDALONE OPERATION DIAGRAM WITH DC LOCK RELEASE.....	10
13.2. STANDALONE OPERATION DIAGRAM WITH AC LOCK RELEASE.....	11
13.3. CONNECTION DIAGRAM WITH INTERCOM.....	11
13.4. CONNECTION DIAGRAM WITH AUXILIARY ELEMENTS.....	12
13.5. CONNECTION DIAGRAM WITH WCONTROL MINI CONTROLLER.....	12
13.6. CONNECTION DIAGRAM WITH iP-OPENER.....	12
14. PROGRAMMING IN WIEGAND SYSTEMS.....	13
14.1. PROGRAMMING IN WCONTROL CONTROLLER.....	13
14.2. PROGRAMMING IN iP-OPENER.....	13

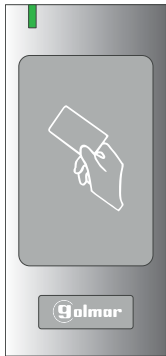
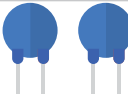
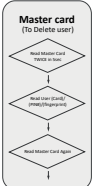
2.INTRODUCTION

Installation manual for the PROXEM+ reader, a proximity reader that can operate in standalone mode or as a slave reader, equipped with a dual antenna compatible with 125 kHz and 13.56 MHz frequencies. In its standalone configuration, it offers advanced features compared to the basic version, such as card collection mode and information transfer.

3.SPECIFICATIONS

Material	Zinc alloy
Protection degree	IP-66
Input voltage	12/18Vdc
Current	35mA
Capacity	987 users
Reading frequency	EM 125KHz MF 13.56MHz
Reading range	2-6cm
Relay	NO, NC, common 2A max.
Transmission format	Wiegand 26~44bits
Dimension (H x W x D):	48(W) x 103(H) x 19(D)mm
Working temperature range:	-40 ~60° C
Working humidity range:	0-98% (non-condensing)

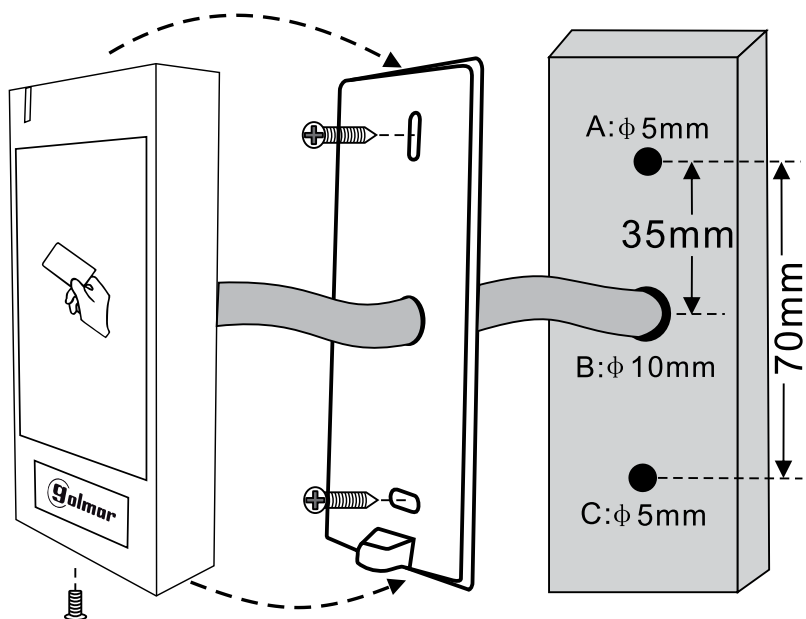
4.PRODUCT CONTENT

 Lector PROXEM+		Diode.
		Varistors.
		Fixing blocks.
		Screws.
		Allen key for fastening screws.
		Remote control for programming.
		MASTER programming card.

IMPORTANT:

Once the reader has been programmed, keep the master cards and the remote control in a safe place for future programming.

5.INSTALLATION



- 3

Attach the reader to the mounting rail from top to bottom. Once attached, fix the reader to the fixing base using the Allen key provided.
- 2

Pass the cable hose through the Φ 10mm hole in the central part of the fixing base and fix it to the wall with the screws provided.
- 1

Drill the fixing holes in the wall (A and C) and the cable hole (B), then fit the fixing blocks supplied.

IMPORTANT: The reader is equipped with an anti-tampering LDR sensor on the rear side:  . It is light-sensitive, so if light shines on the sensor after placing the reader, the tamper alarm will be triggered.

6.CONNECTION

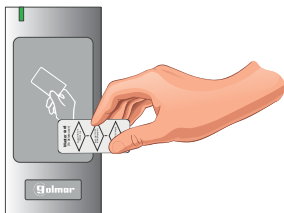
WIRE COLOR	FUNCTION	DESCRIPTION
Red	12Vdc	Input 12-18V DC current
Black	GND	GND
Blue	NO	Normally open relay output
Purple	Common	Common contact for relay output
Orange	NC	Normally closed relay output
Yellow	Opening	Exit pushbutton
Green	D0	Wiegand Data 0 output
White	D1	Wiegand Data 1 output
Grey	Alarm	Alarm negative
Brown	Input contact	Door contact input (NC)

7. BASIC PROGRAMMING

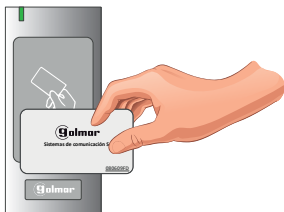
Basic programming (adding/deleting users) using the “Master” supplied with the product.

USER REGISTRATION

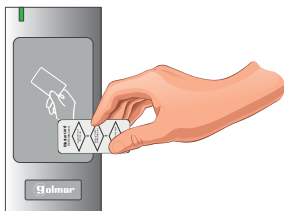
- 1) Approach the ‘Master’ card to the reader.



- 2) Approach the user card or user cards to be registered.

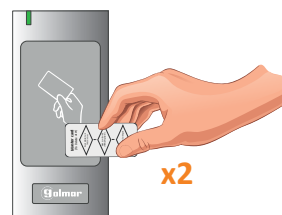


- 3) Approach the ‘Master’ card to the reader.

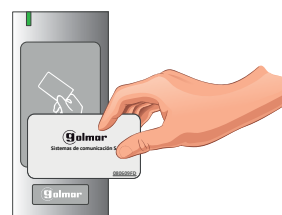


USER DELETION

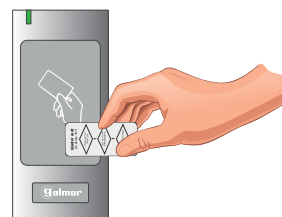
- 1) Approach the ‘Master’ card to the reader twice within an interval of less than 5 seconds.



- 2) Approach the user card or user cards to be deleted.



- 3) Approach the ‘Master’ card to the reader.



8. PROGRAMMING BY CARD COLLECTION

The reader supports card programming in pick-up mode. This means that once activated, any card approaching the reader will open the door and will be programmed, once the pick-up mode is deactivated, the programming will be completed (new cards will not open the door and will not be encoded).

COLLECTING MODE **ON**



* (MASTER CODE) # 93

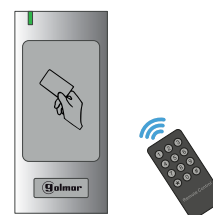


DOOR IS UNLOCKED



USER IS REGISTERED

COLLECTING MODE **OFF**



* (MASTER CODE) # 92

CARD COLLECTION MODE DEACTIVATED

Enter administrator mode			
*	MASTER CODE	#	92 (factory setting) #

Example: * 987654 # 92 #

CARD COLLECTION MODE ACTIVATED

Enter administrator mode			
*	MASTER CODE	#	93 #

Example: * 987654 # 93 #

This mode is intended for installers as it simplifies the work, as they can deliver the credentials to the installation administrator and deactivate the collection mode after a few days (once all the delivered credentials have been used).

9.ADVANCED PROGRAMMING

Advanced programming will require the use of the remote control:

- Remove the protective plastic from the battery before starting to use the remote control.
- Use the remote control in a position close to the reader and pointing at the LED (infrared receiver is located next to the LED).



9.1. PROGRAMMING

Perform the following sequence to enter programming:

Enter administrator mode		
*	MASTER CODE (By default: 123456)	#

IMPORTANTE

The reader will indicate access to programming when the “green” LED lights up and then the LED will flash “red”. At the start of the programming sequence (function to be programmed) the led will be shown in “orange”.

To exit programming, press “*” and the reader will go to standby mode, status LED will be shown in “steady red”. In the case that no key presses are made, the reader automatically exits programming after 30 seconds.

Once in programming, carry out the desired programming sequence. The different system programming sequences are detailed below.

9.1.1.CHANGE MASTER CODE

It is advisable to modify the master code for this purpose:

Enter administrator code								
*	MASTER CODE	#	0	NEW MASTER CODE (6 DIGITS)	#	NEW MASTER CODE (6 DIGITS)	#	

Example: * 123456 # 0 987654 # 987654 #

9.1.2.CARD REGISTRATION (AUTO ID)

Registration of cards with automatic registration.

Enter administrator code					
*	MASTER CODE	#	1	APPROACH CARD	#

Example: * 987654 # 1 APPROACH CARD #

9.1.3.CARD REGISTRATION (SPECIFIC ID)

Maximum number of records is 987. User IDs from 0 to 986.

Enter administrator code								
*	MASTER CODE	#	1	USER ID (0-986)	#	APPROACH CARD	#	

Example: * 987654 # 1 1 # APPROACH CARD #

IMPORTANT: do not type user IDs with zeros before the ID value.

9.1.4.DELETE CARDS (BY CARD READING)

Erasing cards by approaching the card to be deleted.

Enter administrator code					
*	MASTER CODE	#	2	APPROACH CARD	#

Example: * 987654 # 2 APPROACH CARD #

9.1.5.DELETE CARDS (SPECIFIC ID)

Enter the ID corresponding to the user to be deleted.

Enter administrator code					
*	MASTER CODE	#	2	USER ID (0-986)	#

Example: * 987654 # 2 1 #

10. OTHER SETTINGS

10.1. RELAY SETTINGS

10.1.1. PULSE MODE

Enter administrator code					
*	MASTER CODE	#	3	1-99	#

Example: * 987654 # 3 15 #

The pulse can be active from 1 to 99 seconds. In the example, the value 15 has been entered, so it would be active for 15 seconds.
Factory setting: 5 seconds.

10.1.2. LATCHING MODE

Enter administrator code					
*	MASTER CODE	#	3	0	#

Example: * 987654 # 3 0 #

The relay is switched to ON/OFF mode.

10.2. ALARM SETTINGS (TAMPER)

10.2.1. ACTIVATE TAMPER

Enter administrator code					
*	MASTER CODE	#	5(0-3)		#

Example: * 987654 # 52 #

The tamper alarm activation time is from 0 to 3 minutes. In the example, the value 52 has been entered, so it would be active for 2 minutes.
Factory setting: 51 (1 minute).

10.3. LOCKOUT ALARM (FAILED ATTEMPTS)

The lockout alarm will be activated after 10 unsuccessful attempts. The factory default is OFF, but can be set to deny access for 10 minutes or to activate the alarm after it is triggered.

10.3.1. LOCKOUT DISABLED

Enter administrator code					
*	MASTER CODE	#	60 (factory setting)		#

Example: * 987654 # 60 #

10.3.2. 10-MINUTE ACCESS LOCKOUT

Enter administrator code					
*	MASTER CODE	#	61		#

Example: * 987654 # 61 #

The LED will start blinking and the equipment will be blocked for 10 minutes. To return to the normal state, wait 10 minutes or restart the controller.

10.3.3. ALARM

Enter administrator code					
*	MASTER CODE	#	62		#

Example: * 987654 # 62 #

The alarm will be activated, in case of 10 unsuccessful attempts the alarm will sound for the time defined in chapter '10.2. ALARM TIME SETTING (TAMPER)'. In case to approach a user card, enter user PIN code or approach MASTER card, the alarm will stop.

10.4. OPEN DOOR DETECTION

In case a magnetic contact is connected (input contact wire (brown), GND wire (black)), when the door remains open for more than one minute, the reader buzzer will start to sound to warn that the door is open. The alarm will remain activated and will sound for the time defined in section '10.2. ALARM TIME SETTING (TAMPER)'. In case to approach a user card, a MASTER card or close the door the alarm will stop.

10.4.1.OPEN DOOR DETECTION ACTIVATED

Enter administrator code				
*	MASTER CODE	#	64	#

Example: * 987654 # 64 #

10.4.2.OPEN DOOR DETECTION DEACTIVATED

Enter administrator code				
*	MASTER CODE	#	63 (factory setting)	#

Example: * 987654 # 63 #

10.5. OPERATING MODE

10.5.1.STANDALONE

Enter administrator code				
*	MASTER CODE	#	77 (factory setting)	#

Example: * 987654 # 77 #

10.5.2.WIEGAND

Enter administrator code				
*	MASTER CODE	#	78	#

Example: * 987654 # 78 #

10.6. WIEGAND OUTPUT FORMAT SETTINGS

In case using Golmar readers it is not necessary to perform any of the following programming.

10.6.1.SET WIEGAND FORMAT FOR EM CARDS

By default the output format for EM card reading is Wiegand 26bits. In case third-party readers are used, it is possible to change the output format using the following sequence:

Enter administrator code				
*	MASTER CODE	#	8	26~44 (Wiegand bits to be set)

Example: * 987654 # 8 34 #

10.6.2.SET WIEGAND FORMAT FOR MIFARE CARDS

By default the output format for MIFARE card reading is Wiegand 26bits. In case third-party readers are used, it is possible to change the output format using the following sequence:

Enter administrator code				
*	MASTER CODE	#	80	26~44, 56, 58 (Wiegand bits to be set)

Example: * 987654 # 80 26 #

10.6.3.ENABLE PARITY BIT

Enter administrator code				
*	MASTER CODE	#	8	0

Example: * 987654 # 8 0 #

10.6.4.DISABLE PARITY BIT

Enter administrator code				
*	MASTER CODE	#	8	1 (factory setting)

Example: * 987654 # 8 1 #

10.7. BUZZER SETTINGS

10.7.1. BUZZER ACTIVE

Enter administrator code				
*	MASTER CODE	#	71 (factory setting)	#

Example: * 987654 # 71 #

10.7.2. BUZZER DEACTIVATED

Enter administrator code				
*	MASTER CODE	#	70	#

Example: * 987654 # 70 #

10.8. LED SETTINGS

10.8.1. LED ACTIVE

Enter administrator code				
*	MASTER CODE	#	73 (factory setting)	#

Example: * 987654 # 73 #

10.8.2. LED DEACTIVATED

Enter administrator code				
*	MASTER CODE	#	72	#

Example: * 987654 # 72 #

10.9. RESET TO FACTORY SETTINGS

The reset restores the reader to factory defaults, resetting the configuration and the master code. User information will be preserved.

1. Turn off the power.
2. Press and hold the exit button*.
3. Turn on the power.
4. When 2 beeps are heard, release the output button*.
5. The LED will light up **orange**.
6. Approach a card to the reader.
7. The light will illuminate **red** and the equipment will be reset to factory defaults..

*It requires to have connected the output push button, the **yellow** (OPEN) and the **black** wire (GND).

NOTE

- This process generates a Master card replacing the previous one

-In case it is not desired to replace the current master card, skip step 6 and wait for the reader to return to standby mode (**red led**).

10.10. DELETE ALL THE USERS

Enter administrator code				
*	MASTER CODE	#	2	MASTER CODE
				#

Example: * 987654 # 2 987654 #

IMPORTANT: Before performing this function, make sure that it is OK to REMOVE all previously registered users.

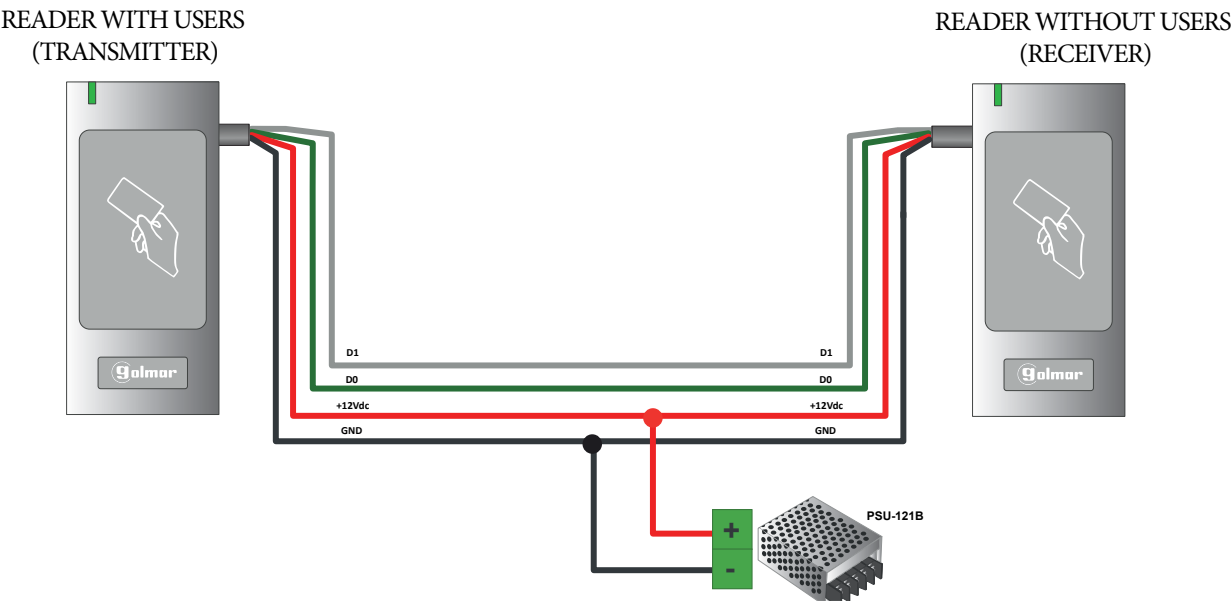
11. STATUS DISPLAYS

OPERATING STATUS	COLOR LED	BUZZER
Stand by	Red	-
Enter programming mode	Flashing red	Short beep
In programming mode	Orange	Short beep
Operation error	-	3 beeps
Exit programming mode	Red	Short beep
Door open	Green	Short beep
Alarm	Flashing red	Beeps

12.OTHERS

12.1. TRANSFER USER INFORMATION

It is possible to transfer registered user information from one unit to another. To do this, make the following connection between readers:



Then perform the following sequence on the reader that contains the registered users (transmitter):

Enter administrator code				
*	MASTER CODE	#	98	#

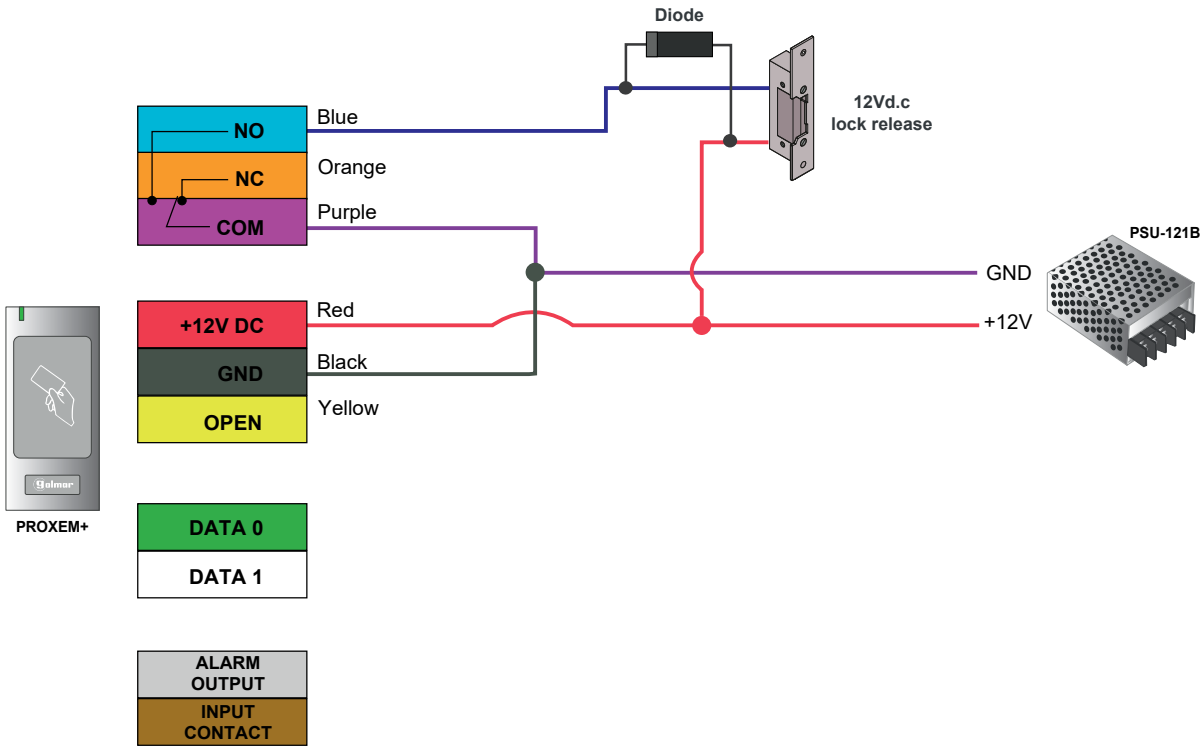
Example: * 987654 # 98 #

At an interval of 30 seconds, the green led flashes, after a beep, the led will turn red, which means that the user information has been transferred successfully. Once the transfer is completed press “*” or wait for the reader to return to the standby state.

IMPORTANT: The master code set in the sending and receiving readers has to be the same. In case the receiving reader has registered users, these will be deleted.

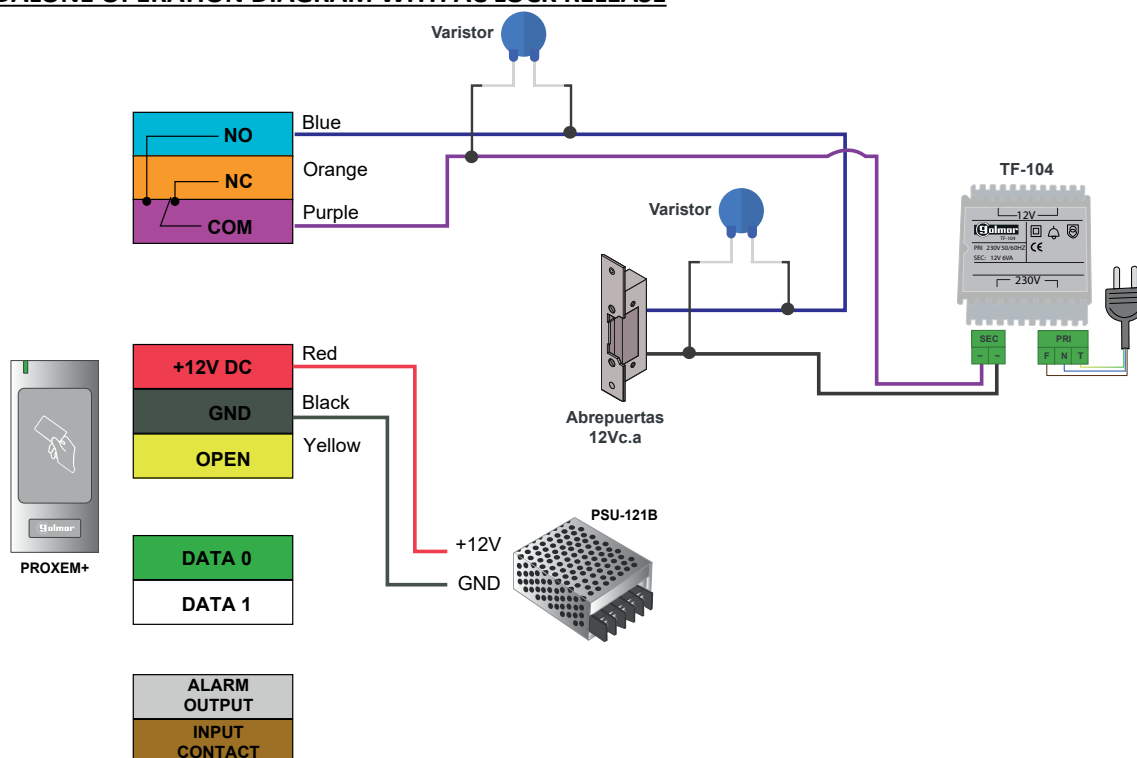
13.CONNECTION DIAGRAMS

13.1. STANDALONE OPERATION DIAGRAM WITH DC LOCK RELEASE



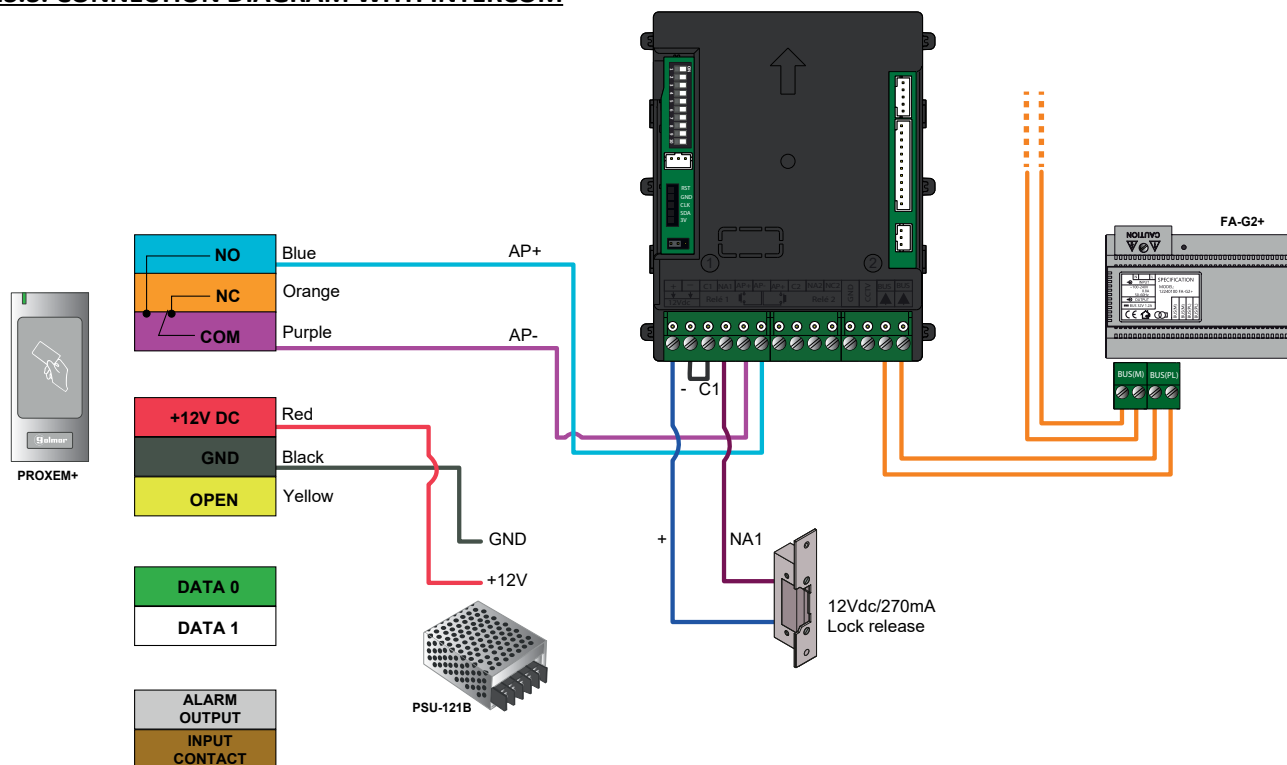
IMPORTANT: Do not forget to connect the supplied diode in parallel to the door opener to protect the equipment.

13.2. STANDALONE OPERATION DIAGRAM WITH AC LOCK RELEASE



IMPORTANTE: Golmar recommends using direct current door openers, as connecting an alternating current door opener can generate high voltage spikes that damage the device or cause it to malfunction. If you do so, protect the equipment by placing a varistor at the relay contact output and another in parallel with the door opener.

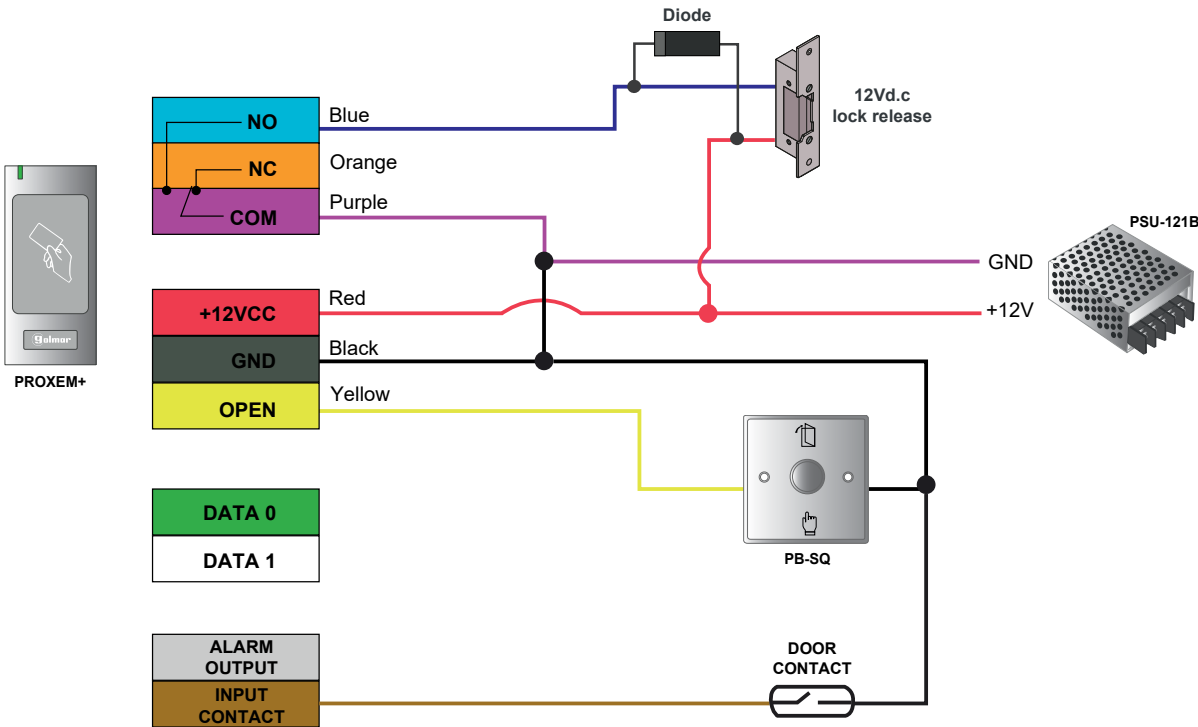
13.3. CONNECTION DIAGRAM WITH INTERCOM



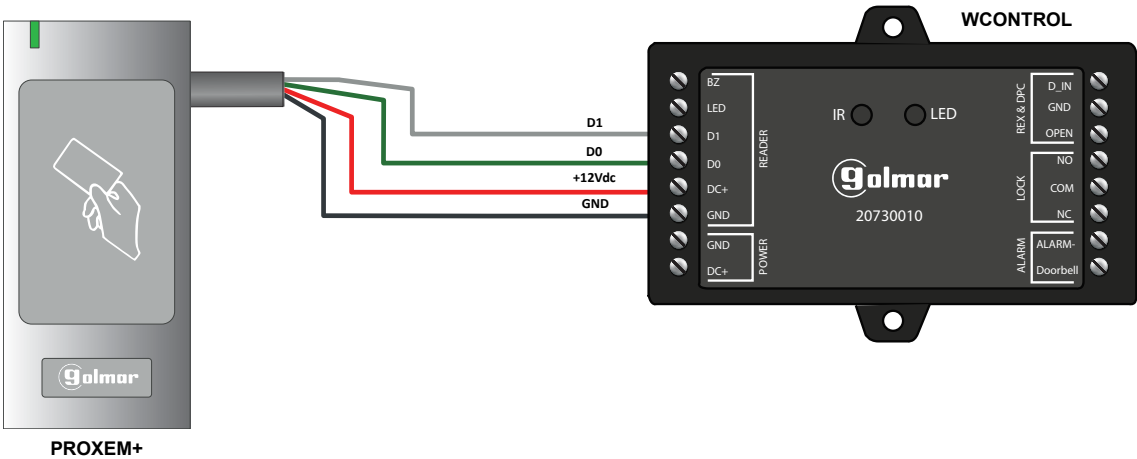
NOTE: The AP (door release) of the intercom does not activate the lock release until the pulse provided by the reader has finished. To avoid opening delays, set the minimum pulse time to 1 second at the controller:

Enter administrator code				
*	MASTER CODE	#	3	1
				#

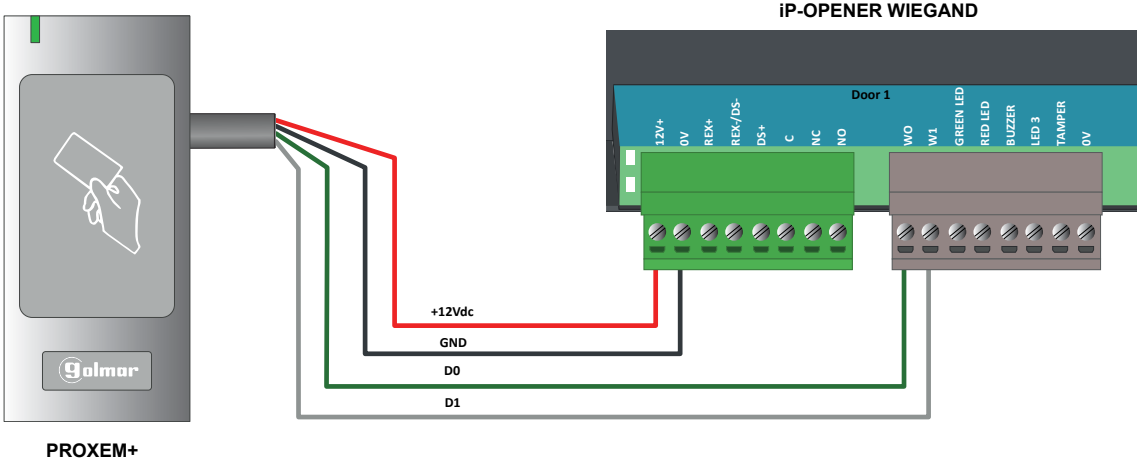
13.4. CONNECTION DIAGRAM WITH AUXILIARY ELEMENTS



13.5. CONNECTION DIAGRAM WITH WCONTROL MINI CONTROLLER



13.6. CONNECTION DIAGRAM WITH iP-OPENER



14.PROGRAMMING IN WIEGAND SYSTEMS

The use of the reader as a slave connected to a controller requires it to operate in Wiegand mode. To do this, perform programming sequence 78# on the reader:

Enter administrator code				
*	MASTER CODE	#	78	#

Example: * 987654 # 78 #

14.1. PROGRAMMING IN WCONTROL CONTROLLER

Below is an overview of how to proceed with the registration of credentials in WCONTROL, for more detailed information please refer to the manual 'IM_ENG_REV0125_WCONTROL'

Perform the following sequence using the programming remote control to register credentials in the WCONTROL controller:

CARD REGISTRATION (SPECIFIC ID)

Maximum number of records is 990. User IDs from 0 to 989.

Enter administrator mode				
*	MASTER CODE	#	1	USER ID (0-989)
		#	APPROACH CARD	

Example: * 987654 # 1 1 # APPROACH CARD

IMPORTANT: do not enter user IDs with zeros before the ID value.

14.2. PROGRAMMING IN iP-OPENER

Below is an overview of how to proceed with the registration of credentials in iP-Opener, for more detailed information, please refer to the manual 'USM_ENG_REV0124_IPOP_END_USER_MANAGEMENT'.

EM CARD REGISTRATION

Create a user with 'Third-party credential (decimal)' credential and register the ID of the TAGKEY ID keyfob or PROKEY ID card. In case you have the GM-USB-125 programmer, pass the identification through it after creating the 'Third-party credential (decimal)' credential.

Type	Third-party credential (decimal)
Code (numeric)	0013413891
Colour	



MIFARE CLASSIC CARD REGISTRATION

Create a user with 'MIFARE Classic® FDI keyfob' credential and register the ID of the KEYPROX SE key fob or ISOPROX card. In case you have the GM-USBIPOP programmer, pass the identification through it after creating the 'MIFARE Classic® FDI keyfob' type credential.

Type	MIFARE Classic® FDI keyfob
Code	701368A6
Colour	



MIFARE PLUS CARD REGISTRATION

Create a user with 'MIFARE Plus® FDI keyfob' credential and register the ID of the TAGDOOR MF+ or CARDDOOR MF+ card. In case you have the GM-USBIPOP programmer, pass the identification through it after creating the 'MIFARE Plus® FDI keyfob' type credential.

Type	MIFARE Plus® FDI keyfob
Code	8077477A934404
Colour	



This image shows a full page of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page, typical of notebook or legal stationery. There are no margins, text, or other markings on the page.

NOTES

[illegible]



C/ Silici 13. Poligon Industrial Famadas
08940 – Cornellà del Llobregat – Spain
golmar@golmar.es
Tel: 93 480 06 96
www.golmar.es



Golmar deserves the right for any modification without prior notice.