

User manual

NÜO SWIP
41908

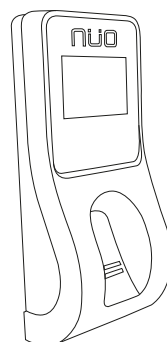




GENERAL FEATURES

NÜO SWIP (Ref. 41908)

- NÜO SWIP high-end biometric reader with capacitive sensor.
- Display with events and time.
- High resolution 508 dpi capacitive fingerprint sensor.
- Maximum security proximity reader for 13.56 MHz contactless MIFARE Plus®, MIFARE® DESFire EV1, MIFARE® Classic and MIFARE Ultralight® cards.
- Identifies fingerprint in less than 0.5 seconds when operating at 1:1, less than 1s at 1:20, and less than 1.5s at 1:100.
- Capacity for up to 100 fingerprints.
- Integrated door controller with digital output supplied for 24VDC / 250mA maximum locks.
- Wear-resistant surface finish with antibacterial treatment.
- Input for magnetic signal or door status sensor.
- Surface mounted for indoor use.



REGULATIONS

ISO/IEC 14443 A and B.

AES128 NIST FIPS PUB 197 MIFARE Plus EAL4+ Common Criteria certification.

NFC MIFARE emulation compliant.

EN 60950-1 2001 and A1: 2004.

EN 300 330-2 v1.3.1.





TECHNICAL SPECIFICATIONS

NÜO SWIP:

INPUT VOLTAGE	24VDC (11 - 28 VDC)
MAXIMUM POWER	2 W without lock - 8 W lock activated
READING DISTANCE	3 - 5 cm
FINGERPRINT SENSOR TYPE	Capacitive sensor
SENSOR RESOLUTION	508 dpi
MAX. NO. FINGERPRINTS	100 Fingerprints
COMMUNICATIONS	BYBUS RS-485 By Protocol: BYBUS high security communications.
INPUTS	1 Door sensor input
OUTPUTS	1 lock control output with 24 VDC power supply (250 mA maximum)
ILLUMINATION	Automatically regulated according to environmental lighting conditions. Colours according to status: - Red/White: Terminal offline. - Degraded Red/Pink: Terminal in card enrolment mode. - Flashing blue: Terminal in firmware update mode. - Blue: Normal security level. - Purple: High security level. - Light pink: Very high security level. - Flashing yellow: Connected but not configured. - Green: Access granted or Unrestricted. - Red: Access denied or Door blocked. - White: Card or fingerprint identification operation. - Flashing white: Fingerprint enrolment. - Green/Yellow: Door in emergency mode.
AUDIO	Differentiated sound indicators for granted and denied access with two volume levels.
MATERIALS	Manufactured in high-quality, wear-resistant polycarbonate with antibacterial treatment.
INSTALLATION	Surface mounted
OPERATING TEMPERATURE	-10 °C to 50 °C
DIMENSIONS	130 x 50 x 36 mm (height x width x depth)

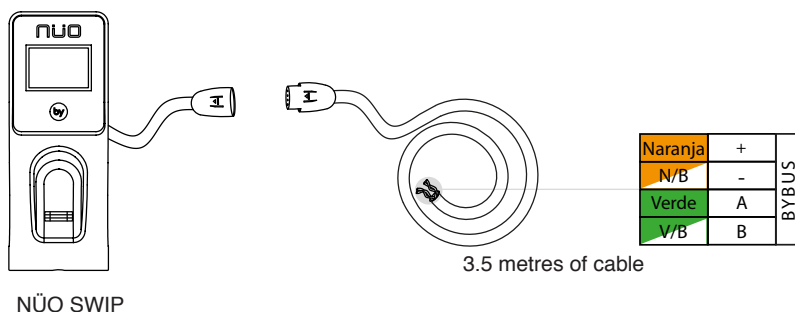


TYPE OF WIRING AND WIRING DISTANCE:

The NÜO SWIP incorporates a male overhead connector.

NÜO SWIP is supplied with a 3.5 metre piped cable with 4 wires (2 twisted pairs) and a female connector at one end to correctly connect it.

The other end of the piped cable is connected to a single door controller or to the corresponding Wili following the simple colour coding.



The wiring distance from the reader and the single door controller or Wili should not exceed 25 metres in length under any circumstances.

WIRING SPECIFICATIONS:

The built-in piped cable used to connect the reader has the following technical characteristics:

- Gauge: 0.22 mm
- Arrangement: 2 twisted pairs
- Resistance: < 2 Ohms
- Capacitance, core to earth: < 160 pF/m
- Capacitance, core to core: < 100 pF/m

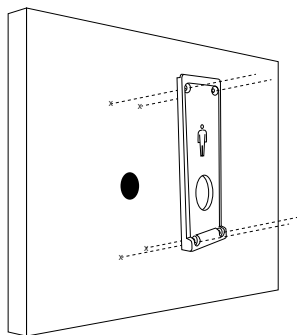
DISTANCE BETWEEN READERS:

A minimum distance of 12 cm must be maintained if installations are made with doors with 2 input/output readers or with 2 readers that are very close together.



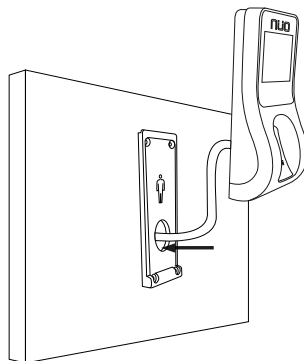
- TERMINAL MOUNTING:

1) Anchor the base piece to the wall using the screws and wall plugs provided. Make an opening for the cable.



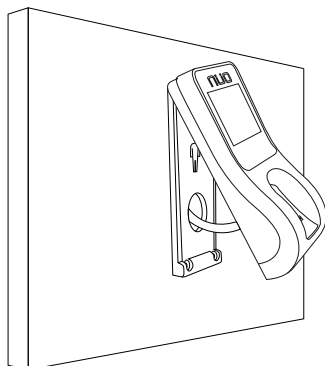
The head of the figure in the drawing should be pointing upwards.

2) Pass the reader connection cable through the hole in the base piece.

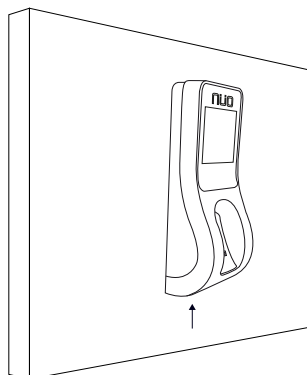


Recommended height for installation: 1.2 - 1.5 m.

3) Place the reader by inclining it at an angle of about 45 °C for the tabs on the base to hook together.



4) Screw the lower part using an allen key to secure it.

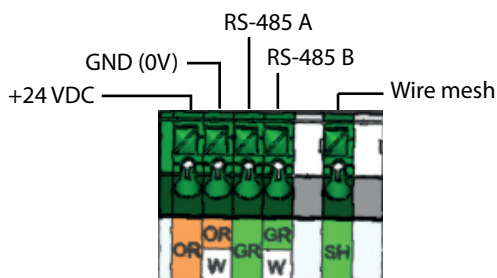




NÜO SWIP readers can be directly connected to two types of devices depending on the architecture of the installation:

- Connection to a Wili.
- Connection to a single door controller.

The connection to be made for both types of devices is exactly the same. The colour code must be followed. For more detailed information, consult the equipment manuals referenced earlier.



READER WIRING:

COLOUR	SIGNAL	BYBUS
Orange	+ 24VDC	
Orange/White	0V / GND	
Green	RS-485-A	
Green/White	RS-485-B	



Install and connect the reader before powering the system.



NÜO readers use the 24 VDC input voltage corresponding to the controller equipment to which they are connected, the power sources of which are rigorously prepared for such purpose.



These signals must be perfectly isolated in order to prevent damaging the equipment or installation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC ID: 2ARQ3-MTA41908

By TechDesign SL

Model name: Door control system

Model No.: MTA 41908

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.