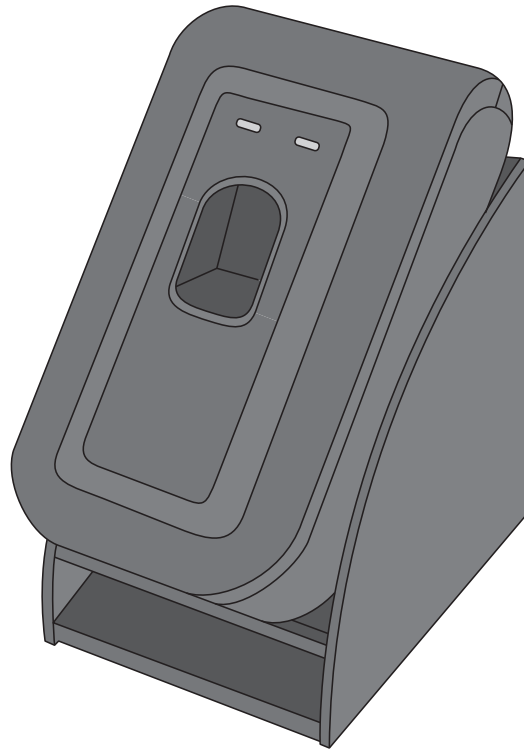




MFM800

USER AND INSTALLER MANUAL









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01. SAFETY INSTRUCTIONS

	This product is certified in accordance with European Community (EC) safety standards.
	This product complies with Directive 2011/65/EU of the European Parliament and of the Council, of 8 June 2011, on the restriction of the use of certain hazardous substances in electrical and electronic equipment and with Delegated Directive (EU) 2015/863 from Commission.
	(Applicable in countries with recycling systems). This marking on the product or literature indicates that the product and electronic accessories (eg. Charger, USB cable, electronic material, controls, etc.) should not be disposed of as other household waste at the end of its useful life. To avoid possible harm to the environment or human health resulting from the uncontrolled disposal of waste, separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources. Home users should contact the dealer where they purchased this product or the National Environment Agency for details on where and how they can take these items for environmentally safe recycling. Business users should contact their vendor and check the terms and conditions of the purchase agreement. This product and its electronic accessories should not be mixed with other commercial waste.
	This marking indicates that batteries should not be discarded like other household waste at the end of their useful life. Batteries must be delivered to selective collection points for recycling.
	The different types of packaging (cardboard, plastic, etc.) must be subject to selective collection for recycling. Separate packaging and recycle it responsibly.
	This marking indicates that the product and electronic accessories (eg. charger, USB cable, electronic material, controls, etc.) are susceptible to electric shock by direct or indirect contact with electricity. Be cautious when handling the product and observe all safety procedures in this manual.

01. SAFETY INSTRUCTIONS

GENERAL WARNINGS

- This manual contains very important safety and usage information. Read all instructions carefully before beginning the installation/usage procedures and keep this manual in a safe place that it can be consulted whenever necessary.
- This product is intended for use only as described in this manual. Any other enforcement or operation that is not mentioned is expressly prohibited, as it may damage the product and put people at risk causing serious injuries.
- This manual is intended firstly for specialized technicians, and does not invalidate the user's responsibility to read the "User Norms" section in order to ensure the correct functioning of the product.
- The installation and repair of this product may be done by qualified and specialized technicians, to assure every procedure are carried out in accordance with applicable rules and norms. Nonprofessional and inexperienced users are expressly prohibited of taking any action, unless explicitly requested by specialized technicians to do so.
- Installations must be frequently inspected for unbalance and the wear signals of the cables, springs, hinges, wheels, supports and other mechanical assembly parts.
- Do not use the product if it is necessary repair or adjustment is required.
- When performing maintenance, cleaning and replacement of parts, the product must be disconnected from power supply. Also including any operation that requires opening the product cover.
- The use, cleaning and maintenance of this product may be carried out by any persons aged eight years old and over and persons whose physical, sensorial or mental capacities are lower, or by persons without any knowledge of the product, provided that these are supervision and instructions given by persons with experienced in terms of usage of the product in a safe manner and who understands the risks and dangers involved.

- Children shouldn't play with the product or opening devices to avoid the motorized door or gate from being triggered involuntarily.
- If the power cable is damaged, it must be replaced by the manufacturer, after-sales service or similarly qualified personnel to avoid danger.
- The device must be disconnected from the electrical network when removing the battery.
- Ensure that blocking is avoided between the actuated part and its fixed parts due to the opening movement of the actuated part.

WARNINGS FOR TECHNICIANS

- Before beginning the installation procedures, make sure that you have all the devices and materials necessary to complete the installation of the product.
- You should note your Protection Index (IP) and operating temperature to ensure that is suitable for the installation site.
- Provide the manual of the product to the user and let them know how to handle it in an emergency.
- If the automatism is installed on a gate with a pedestrian door, a door locking mechanism must be installed while the gate is in motion.
- Do not install the product "upside down" or supported by elements do not support its weight. If necessary, add brackets at strategic points to ensure the safety of the automatism.
- Do not install the product in explosive site.
- Safety devices must protect the possible crushing, cutting, transport and danger areas of the motorized door or gate.
- Verify that the elements to be automated (gates, door, windows, blinds, etc.) are in perfect function, aligned and level. Also verify if the necessary mechanical stops are in the appropriate places.
- The control board must be installed on a safe place of any fluid (rain, moisture, etc.), dust and pests.
- You must route the various electrical cables through protective tubes, to protect them against mechanical exertions, essentially on

01. SAFETY INSTRUCTIONS

the power supply cable. Please note that all the cables must enter the control board from the bottom.

- If the automatism is to be installed at a height of more than 2,5m from the ground or other level of access, the minimum safety and health requirements for the use of work equipment workers at the work of Directive 2009/104/CE of European Parliament and of the Council of 16 September 2009.
- Attach the permanent label for the manual release as close as possible to the release mechanism.
- Disconnect means, such as a switch or circuit breaker on the electrical panel, must be provided on the product's fixed power supply leads in accordance with the installation rules.
- If the product to be installed requires power supply of 230Vac or 110Vac, ensure that connection is to an electrical panel with ground connection.
- The product is only powered by low voltage safety with control board (only at 24V motors).
- Parts/products weighing more than 20 kg must be handled with special care due to the risk of injury. It is recommended to use suitable auxiliary systems for moving or lifting heavy objects.
- Pay special attention to the danger of falling objects or uncontrolled movement of doors/gates during the installation or operation of this product.

WARNINGS FOR USERS

- Keep this manual in a safe place to be consulted whenever necessary.
- If the product has contact with fluids without being prepared, it must immediately disconnect from the power supply to avoid short circuits, and consult a specialized technician.
- Ensure that technician has provided you the product manual and informed you how to handle the product in an emergency.
- If the system requires any repair or modification, unlock the automatism, turn off the power and do not use it until all safety

conditions have been met.

- In the event of tripping of circuits breakers or fuse failure, locate the malfunction and solve it before resetting the circuit breaker or replacing the fuse. If the malfunction is not repairable by consult this manual, contact a technician.
- Keep the operation area of the motorized gate free while the gate in in motion, and do not create strength to the gate movement.
- Do not perform any operation on mechanical elements or hinges if the product is in motion.

RESPONSABILITY

- Supplier disclaims any liability if:
 - Product failure or deformation result from improper installation use or maintenance!
 - Safety norms are not followed in the installation, use and maintenance of the product.
 - Instructions in this manual are not followed.
 - Damaged is caused by unauthorized modifications
 - In these cases, the warranty is voided.

MOTORLINE ELECTROCELOS SA.

Travessa do Sobreiro, nº29
4755-474 Rio Côvo (Santa Eugénia)
Barcelos, Portugal

SYMBOLS LEGEND:



• Important safety notices



• Useful information



• Programming information



• Potentiometer information



• Connectors information



• Buttons information

02. THE PRODUCT

PRODUCT DESCRIPTION

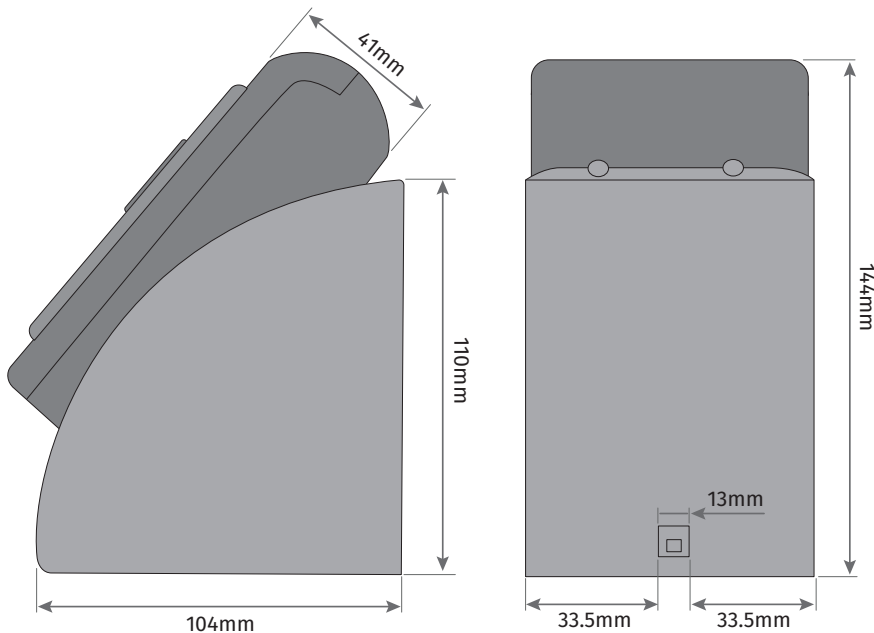


The **MFM800** is a serial fingerprint recorder, ideal for all industries that manage access control through fingerprint.

TECHNICAL CHARACTERISTICS

• Fingerprint Sensor	Optics
• Identification time	1 second
• Interface	Full Speed USB 2.0
• Operating Temperature	-10°C to 50°C
• Weight	335g
• Dimension	104x144x80 mm (WxHxD)

DIMENSIONS

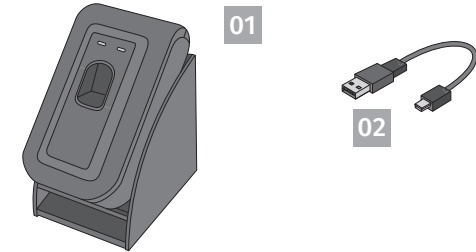


02. THE PRODUCT

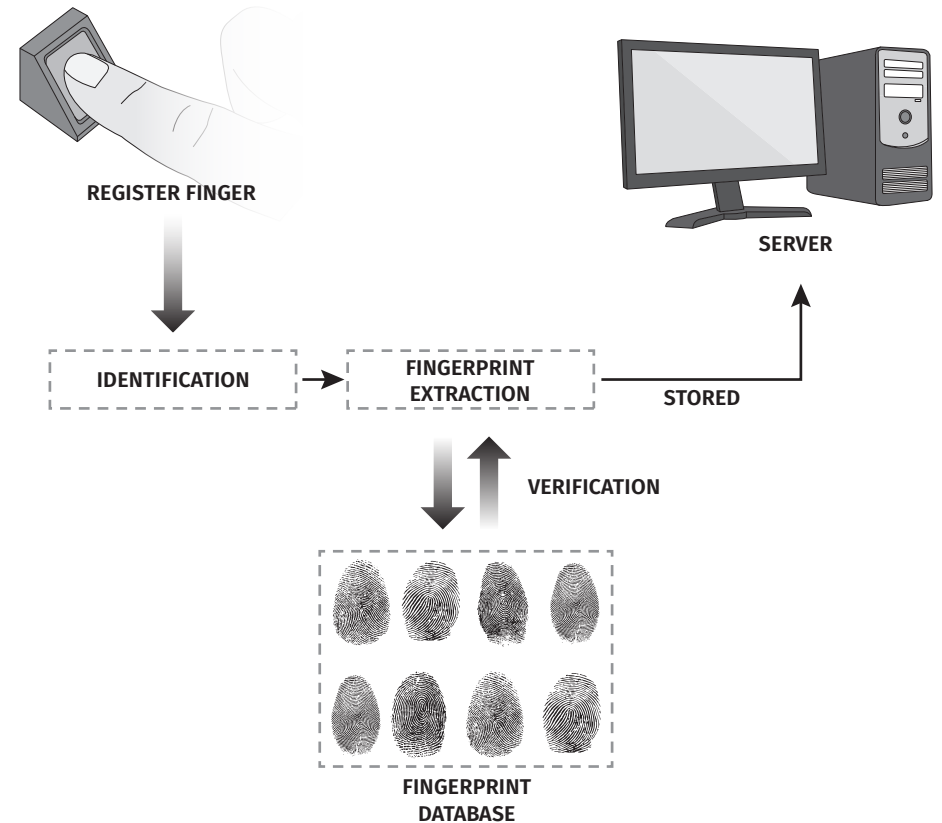
PACKING

Inside the package you will find:

- 01 • 01 MFM800
- 02 • 01 USB cable



HOW DOES THE MFM800 WORK

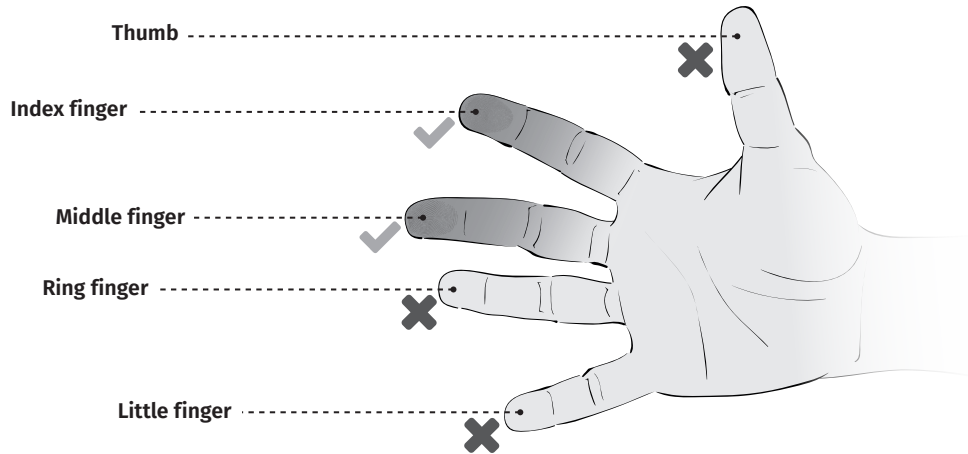


02. THE PRODUCT

FINGERPRINT READER

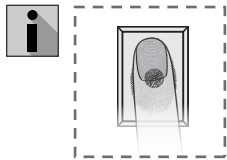
• CHOOSE A FINGER TO ADD

- It is recommended to use the index or middle finger.
- Thumb, ring, or little finger are relatively difficult to get in the right position.

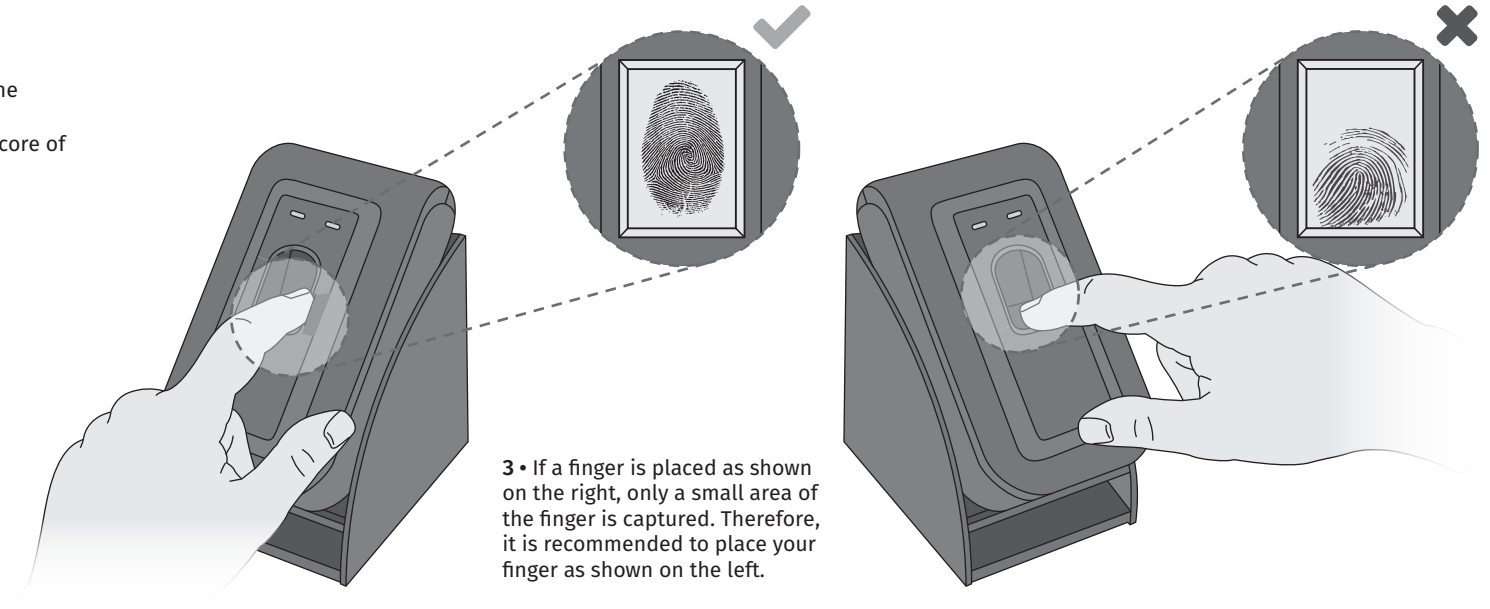


• HOW TO PUT YOUR FINGER ON THE SENSOR

- 1 • Place your finger in such a way that it completely covers the sensor area with maximum contact.
- 2 • Place the fingerprint core in the center of the sensor. The core of a fingerprint is a center where the spiral of ridges is dense.



- i** • Normally, the fingerprint core is aligned with the joining line of the the nail with the finger, so as a general rule, you should place the finger so that the tip of the nail is aligned with the center of the sensor.



- 3 • If a finger is placed as shown on the right, only a small area of the finger is captured. Therefore, it is recommended to place your finger as shown on the left.



Tips for different fingerprint conditions

These fingerprint products are designed to verify fingerprints more securely regardless of finger skin conditions. However, if a fingerprint is not read from the sensor, please refer to the following tips:

- If your finger is stained with sweat/water or covered with dust/dirt, clean it and try again.
- If your finger is too dry, blow some warm air from your mouth onto the tip of your finger.

Tips for inserting fingerprints

In fingerprint recognition, the registration process is very important. When enrolling a fingerprint, please try to place your finger correctly with utmost care.

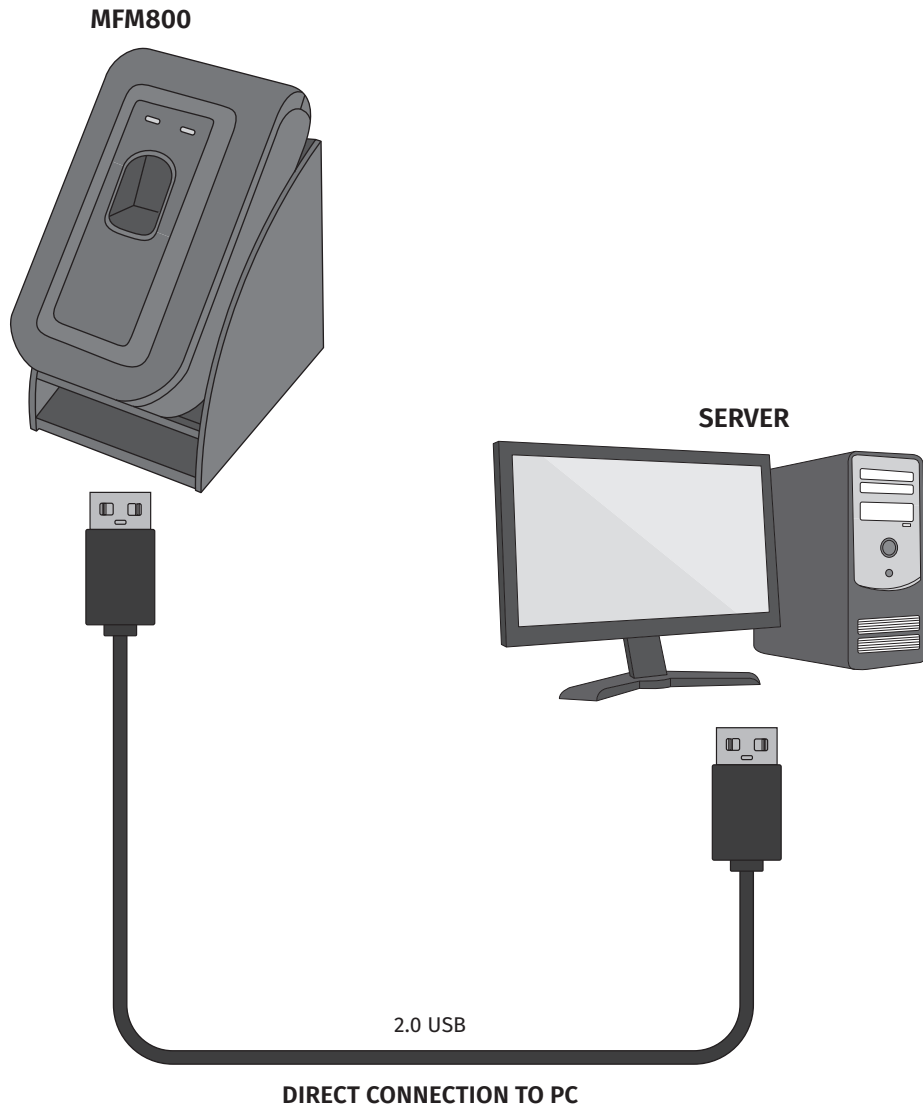
In case of low acceptance rate, the following actions are recommended:

- Delete the registered fingerprint and register your finger again.
- Enroll the same fingerprint again.
- If your finger has scars or cuts that make recording difficult, try another finger.

It is recommended to register 2 fingers per user of different hands, to be easier to use in the event that the hand is occupied or injured.

03. CONNECTION SCHEME

ETHERNET CONNECTION



04. SOFTWARE

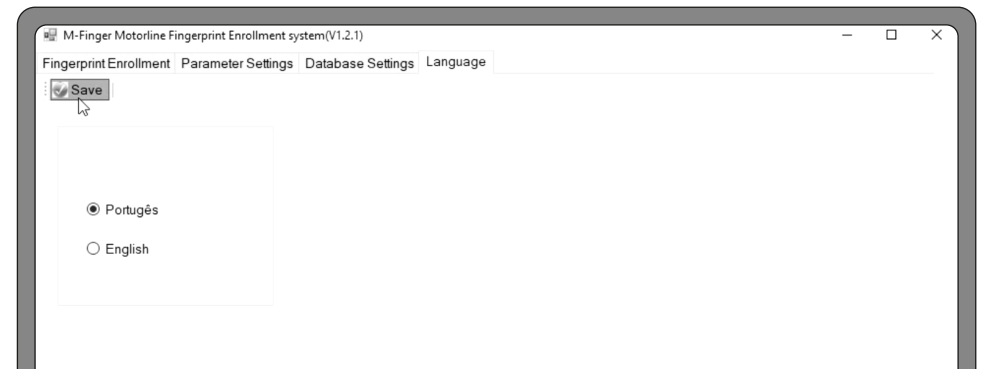
SOFTWARE SUPPORTED SYSTEM OPERATION

OPERATING SYSTEM: *Windows 7* or higher

ENCODER CONFIGURATION



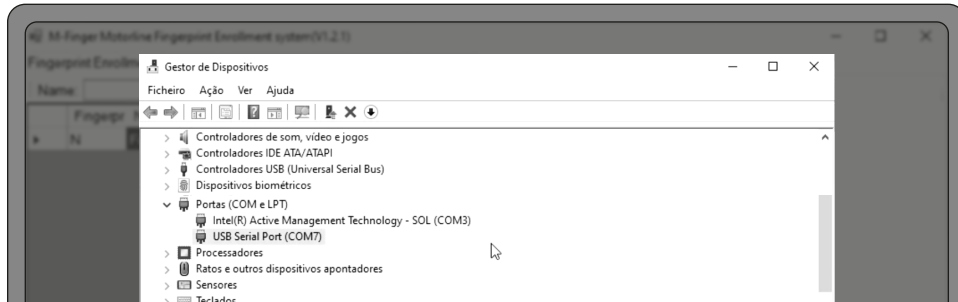
- 01 • Download the **M-Finger Motorline** software from motorline.pt. Run the "setup.exe" application and follow the supplier's manual to page 10 to proceed with the installation.
- 02 • Open the application icon on the desktop to start **M-Finger Motorline**.



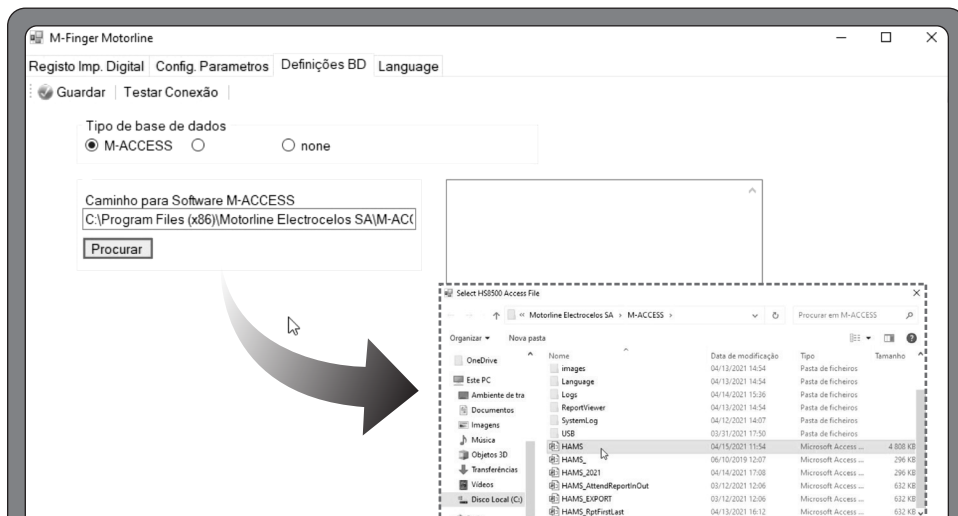
- 03 • Select the desired language in the *Language* tab.

04. SOFTWARE

ENCODER CONFIGURATION



04 • Check in Device Manager which Communication Port refers to the MFM800. In the example above it is COM7 port.



05 • Configure the connection to the Database referring to the **M-ACCESS** software:



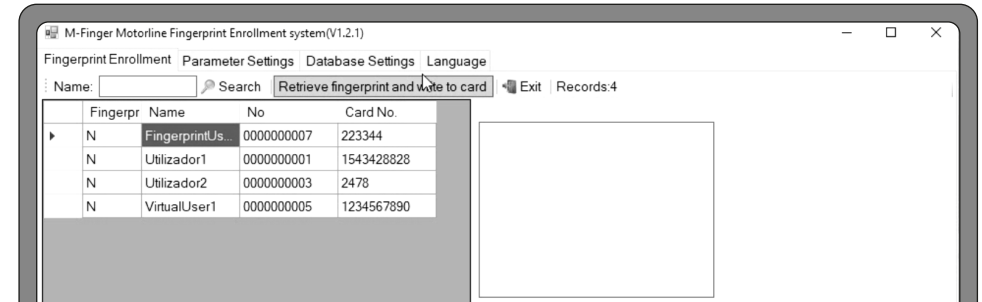
The Database will only have data if users have already been created in the **M-ACCESS** software.

The database is located in the **software folder normally at C://Program Files (x86)\Motorline Elctrocelos SA\M-ACCESS/HAMS.mdb**

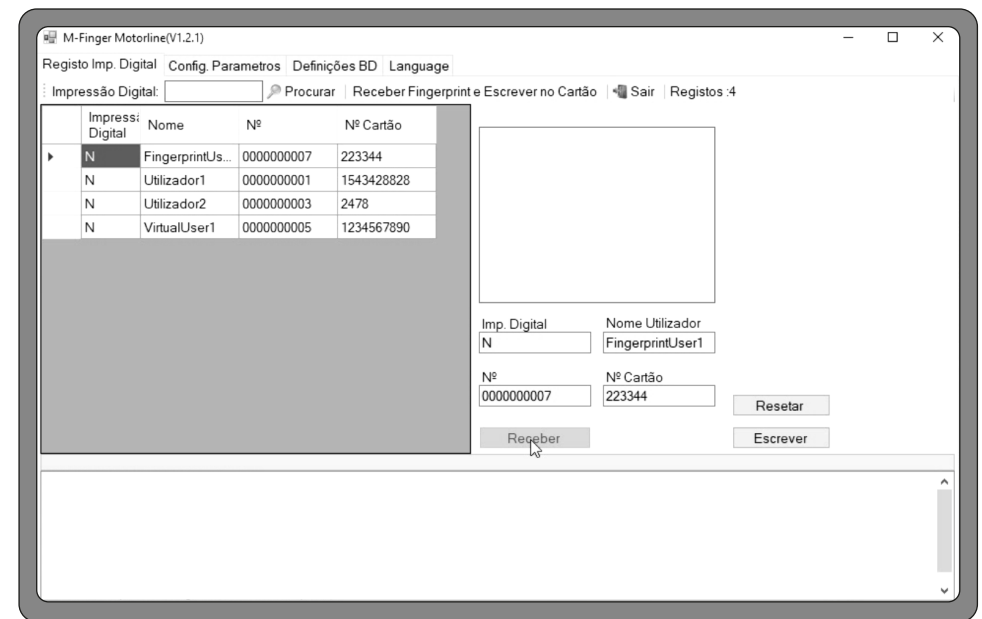
After adding the Database path, it is necessary to test the connection to it.

04. SOFTWARE

ENCODER CONFIGURATION



06 • After all the steps, the user menu should show the data that is in the database of the **M-ACCESS** software.



07 • Now it is necessary to select the user who will register the Fingerprints. And then click on [Receive] to start the registration process.

04. SOFTWARE

ENCODER CONFIGURATION

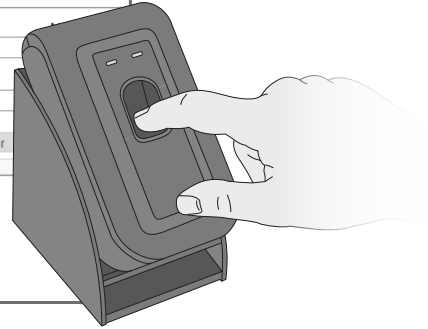
N	FingerprintUs...	000000007	223344
N	Utilizador1	000000001	1543428828
N	Utilizador2	000000003	2478
N	VirtualUser1	000000005	1234567890

Imp. Digital
N

Nº
000000007

Receber

Por favor, coloque o dedo no leitor.1
Por favor, coloque o dedo no leitor.(1-1)
Por favor, coloque o dedo no leitor.(1-2)
Leitura de Impressão Digital com Sucesso. (No.1)
Por favor, coloque o dedo no leitor.2
Por favor, coloque o dedo no leitor.(2-1)
Por favor, coloque o dedo no leitor.(2-2)
Leitura de Impressão Digital com Sucesso. (No.2)



08 • Lift and back down your finger with each step forward until the message reads "Successfully Acquired Fingerprint (No.2)".



To confirm the Fingerprint update, check the value in the "Fingerprint" field (Y=Fingerprint assigned / N=Fingerprint not assigned).

M-Access Motorline | MRAC 2.3.19

Definições **Configurações** Controlo de Acesso Parques Estacionamento Relógio de ponto Elevador Patrulha Relatórios Sistema Programas Externos Ajuda

Sair Utilizadores Configuração Mifare Utilizadores M-RAC Biométrico M-RAC Biométrico Abrir porta Remotamente Monitoramento Fechar

Novo Modificar Apagar Guardar Cancelar Advance Procurar Primeiro Regist Anterior Próximo Último Regist Update Registo na Aplicação Móvel

Selecionar Registos:4

Nome	Nº Empregado	Departamento	Nome	FingerprintUser1
1 Utilizador1	01	M-ACCESS ..	Departamento	M-ACCESS ..
2 Utilizador2	02	M-ACCESS ..	Nº de empregado:	04
3 VirtualUser1	03	M-ACCESS ..	Segundo Nome:	
4 FingerprintUs	04	M-ACCESS ..	Data de começo:	
			Data de Fim:	
			Nº do cartão:	223344
			Password:	
			Nome do turno:	
			Só Passagem de Cartão	
			Nº Cartão	Tipo
			223344	Cartão... O
				Biométrico
				Tipo de ca.
				Grupo do c.

Definições da foto
Apaçar foto

Adicionar
Apagar
BlackList

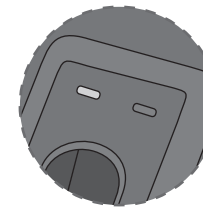


If an "O" is displayed in the "Biometric" list, in the "User" window, the registration is done.

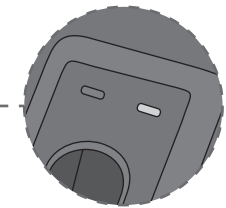
05. COMPONENT TEST

DEVICE TEST

- 01 • When the power is on, the red LED on the reader Will flash, confirming it is ready.
- 02 • Register the fingerprint in the controller.
- 03 • When reading fingerprint, it will show green LED continuously.
- 04 • Will show green LED when confirming fingerprint reading.
If not, it will show a red LED.



Red LED



Green LED

