



**FN HERSTAL**

**OPERATOR'S MANUAL**

**FN<sup>®</sup> SAM App on  
FN SmartCore<sup>®</sup> Reader**

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### **NOTE**

The descriptions and illustrations in this Operator's Manual may differ slightly from the present configuration of the product.

This reflects the constant evolution of the product during its industrial life.

Data in this manual is technical only and of no contractual value.

FN HERSTAL S.A. reserves the right to modify them at any time without prior notice.

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# 1. INTRODUCTION

## 1.1. Introduction to the manual

### Description

This manual offers you a description of the key elements of the FN SmartCore<sup>®</sup> Reader and the FN<sup>®</sup> SAM App, and provides procedures so you can work efficiently.

### Warnings, cautions and notes

Three types of safety terms are used to attract your attention. The meaning of each safety instruction is as follows:

#### WARNING

Risk of serious injuries or significant damage to the material.

#### CAUTION

Risk of performance loss or minor damage to the material.

#### NOTE

No physical or material risk.

## 1.2. Introduction to the FN SmartCore<sup>®</sup> Reader

The FN SmartCore<sup>®</sup> Reader can retrieve the record of shots fired from a weapon equipped with an FN SmartCore<sup>®</sup> module. Additional accessories may be required depending on the FN SmartCore<sup>®</sup> module, such as the add-on or the USB-B cable. The record of shots fired can be displayed in the FN<sup>®</sup> SAM App and, if available, transferred to the FN<sup>®</sup> SAM software.

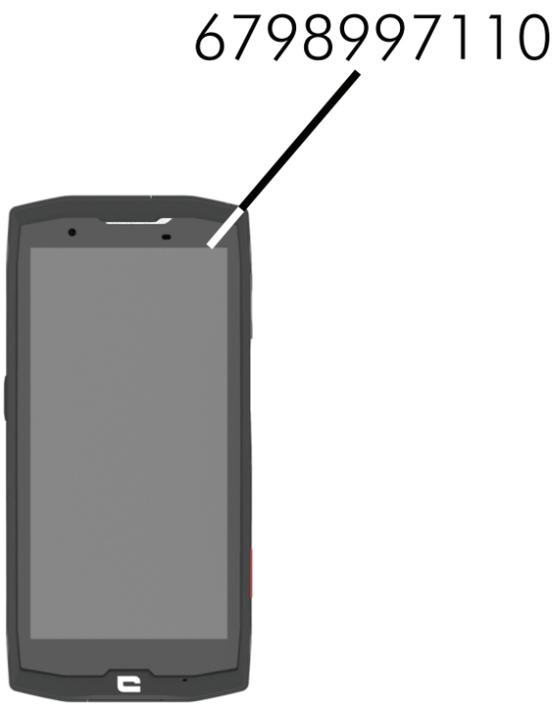
## 2. SAFETY INFORMATION

### WARNING

Before any intervention on a weapon, ensure to be familiar with the safety information given in its Operator's Manual or Maintenance Manual.

# 3. TECHNICAL INFORMATION

## 3.1. Parts list



Part number	Description
6798997110	FN SmartCore <sup>®</sup> Reader Kit MK3 (including USB-C charging cable and EU charger)
6791001630	Smartphone add-on for FN SmartCore <sup>®</sup> Reader
3530750320	USB-B cable for FN <sup>®</sup> M3M and deFNder <sup>®</sup>
6791000720	USB adapter for deFNder <sup>®</sup>

## 3.2. Technical specifications

### FN SmartCore<sup>®</sup> Reader

Refer to the packaging of the FN SmartCore<sup>®</sup> Reader or the Crosscall website for more information.

### Add-on

The add-on uses the Crosscall X-LINK<sup>™</sup> technology. This innovative system allows users to connect several devices with an ergonomic magnetic connector. For more information, refer to the Crosscall X-LINK<sup>™</sup> documentation.

## 4. GETTING STARTED

### 4.1. Preparing the FN SmartCore® Reader

If the FN SmartCore® module requires the add-on, make sure to install the add-on first. Refer to **§ 5.2** for a list of applicable weapons.

To install the add-on on the FN SmartCore® Reader, proceed as follows:

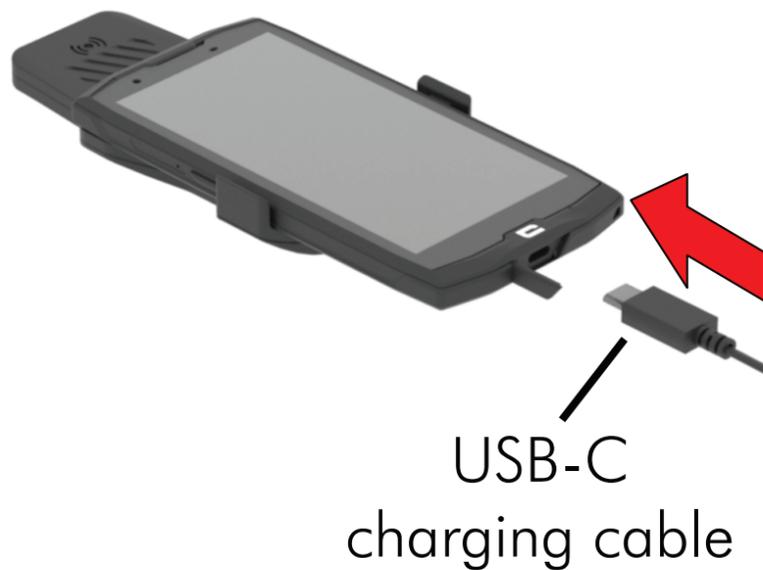
- Make sure the X-LINK™ connectors are correctly aligned, and attach the add-on to the FN SmartCore® Reader.

Verify if the add-on is firmly attached to the FN SmartCore® Reader.



*It is recommended to leave the add-on permanently installed on the FN SmartCore® Reader.*

- Connect the USB-C charging cable, and fully charge the FN SmartCore<sup>®</sup> Reader.



*When FN SmartCore<sup>®</sup> Reader is charging, it cannot be used for FN SmartCore<sup>®</sup> reading.*

- Press the power button of the FN SmartCore<sup>®</sup> Reader for 1 second to power it on.



*When the FN SmartCore<sup>®</sup> Reader is not used for a long time, it is recommended to completely power it off.*

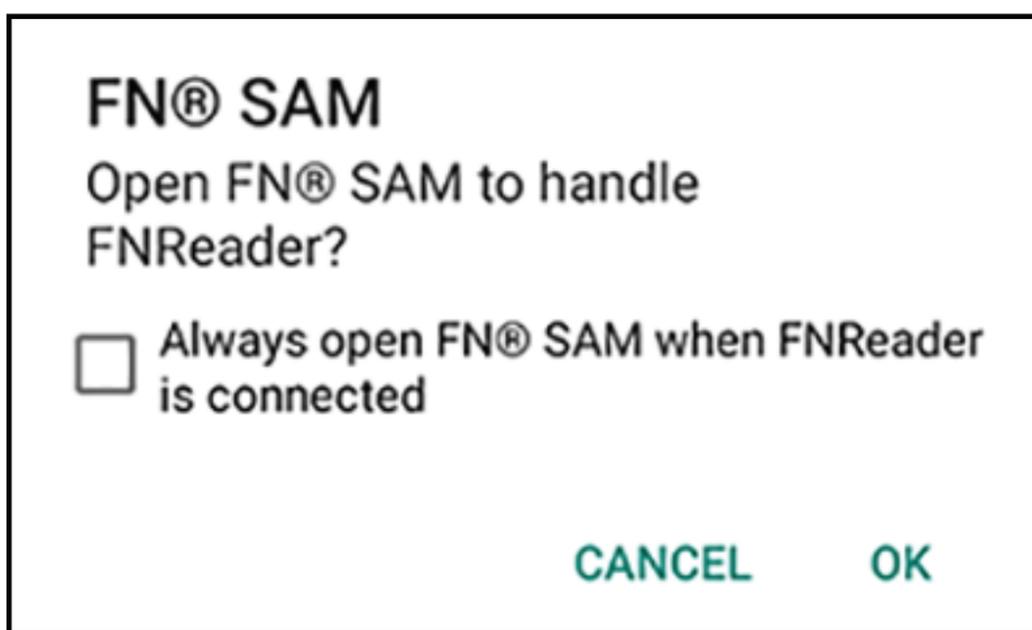
## 4.2. Opening the FN<sup>®</sup> SAM App

The FN<sup>®</sup> SAM App is pre-installed on the FN SmartCore<sup>®</sup> Reader.

- Tap the icon of the FN<sup>®</sup> SAM App.



If the add-on is connected to the FN SmartCore<sup>®</sup> Reader, the FN<sup>®</sup> SAM App asks for authorization to communicate with the add-on.



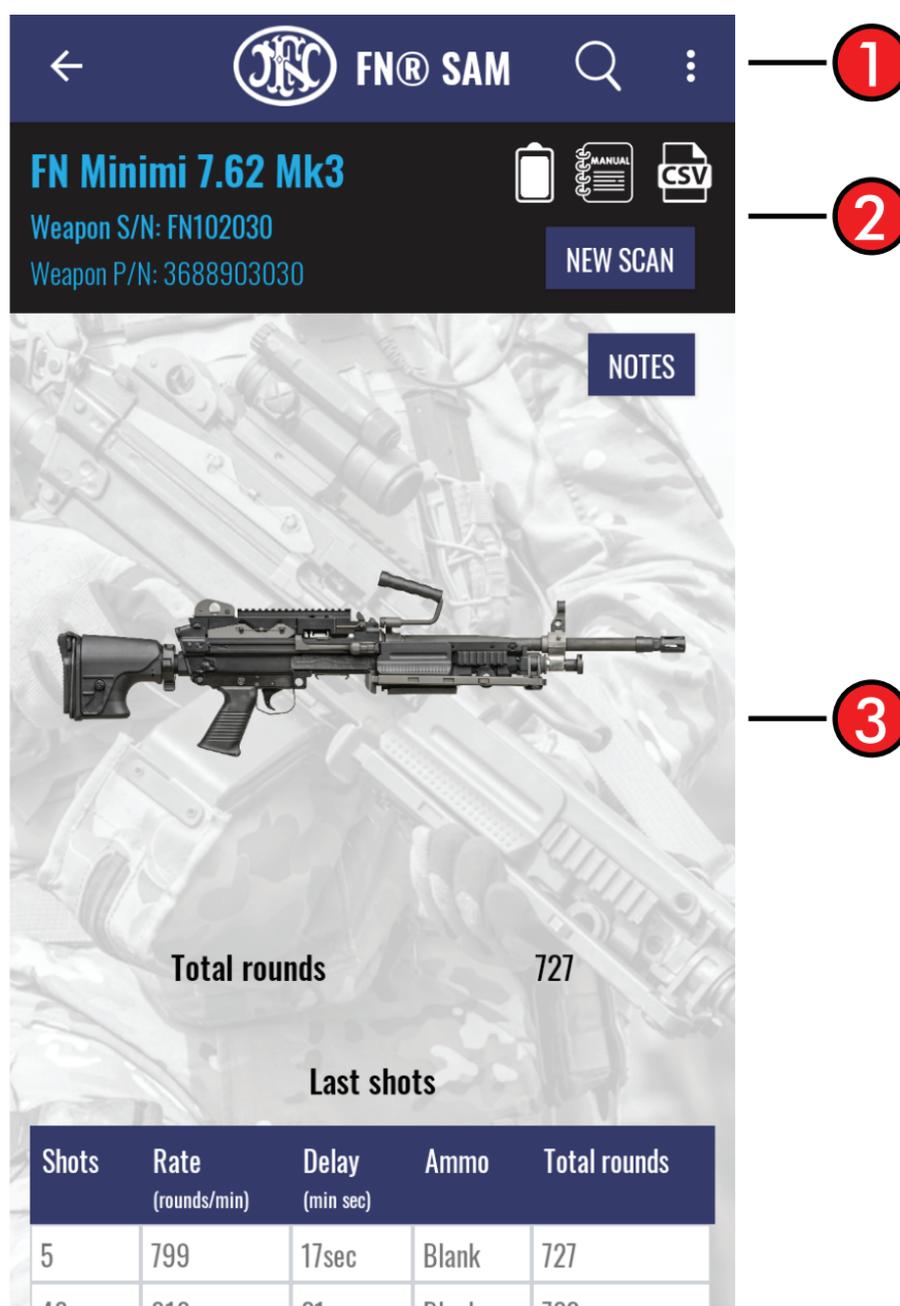
### NOTE

The add-on is referred to as FNReader in the FN<sup>®</sup> SAM App.

- Select the checkbox, and tap **OK**.

## 4.3. FN® SAM App user interface

The user interface of the FN® SAM App consists of 3 main parts. The functionality and the information provided depends on the weapon and the context.



- |   |   |
|---|---|
| 1 | The <b>top bar</b> allows you to do searches, clear the read history, and to add part numbers, images and manuals of the weapons.   |
| 2 | The <b>information bar</b> is shown when an FN SmartCore® module is read or a reading is selected from the read history. It is used to show information about the weapon, the battery level of the FN SmartCore® module, gives access to manuals and a CSV file, and allows you to start a new reading. |
| 3 | The <b>main section</b> allows you to start a reading, view the image of the weapon, view the record of shots fired from an FN SmartCore® module, add notes, and scan a QR code for connecting with the FN® SAM software.   |

## 5. READING THE FN SMARTCORE®

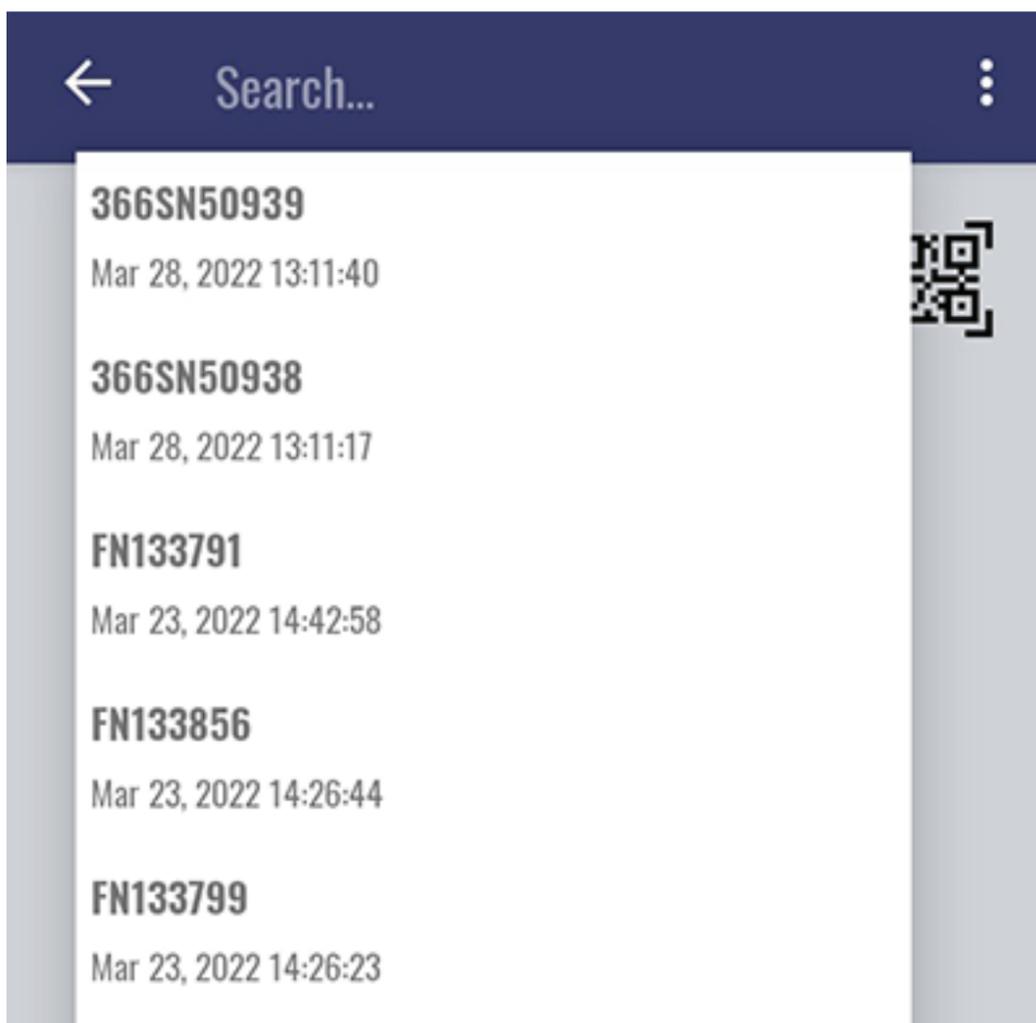
### 5.1. The basics

Depending on the FN SmartCore® module, additional accessories may be required in combination with the FN SmartCore® Reader, such as the add-on or the USB-B cable.

Refer to **§ 3.1** for the parts list.

It is possible to do multiple readings in a row. The FN® SAM App will save each record of shots fired in memory.

Use the search function in the **top bar**, and tap a search result to open the record of shots fired.



## 5.2. Wireless reading

### Requirements

FN SmartCore<sup>®</sup> Reader  
or FN SmartCore<sup>®</sup> Reader equipped with the add-on.

### Applicable weapons

Whether the add-on is required for wireless reading depends on the type of FN SmartCore<sup>®</sup> module.

The add-on is mandatory for the FN SCAR<sup>®</sup> family, the deFNder<sup>®</sup> family in wireless mode, and the FN MINIMI<sup>®</sup> with the first-generation FN SmartCore<sup>®</sup>.

The add-on is optional for the FN SmartCore<sup>®</sup> Mk3 family (FN SmartCore<sup>®</sup> Mk3 for FN<sup>®</sup> M2HB, FN SmartCore<sup>®</sup> Mk3 for FN MAG<sup>®</sup>, FN SmartCore<sup>®</sup> Mk3 for FN MINIMI<sup>®</sup>, ...), the FN<sup>®</sup> M3M, and the deFNder<sup>®</sup> family in wired mode.

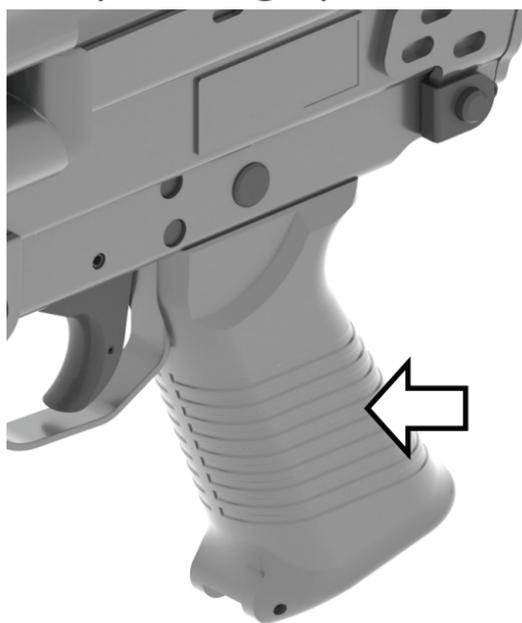
### Read location

The FN SmartCore<sup>®</sup> module is always read via the left side of the weapon (barrel to the front), at the location of the FN SmartCore<sup>®</sup> module. The read location depends on the weapon type.

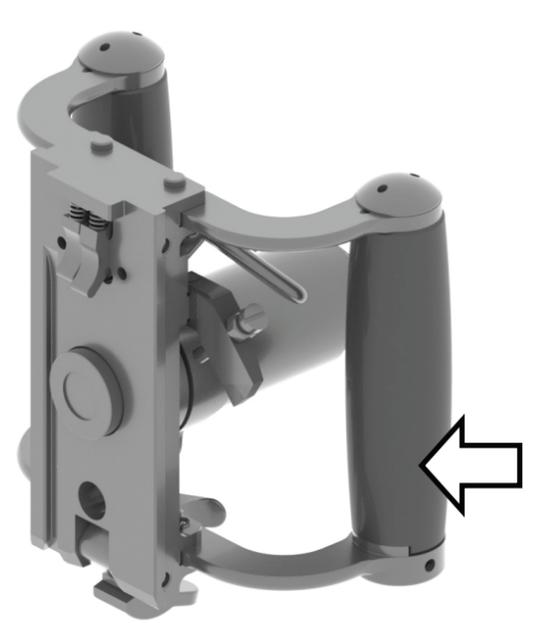
Some examples of read locations are: the rear left end of the trigger module, the left side of the pistol grip, or the left-hand side handle.



**Trigger module**



**Pistol grip**



**Handle**

## Instructions

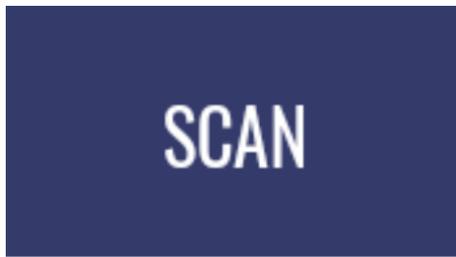
- Make sure the FN SmartCore<sup>®</sup> Reader is powered on and the FN<sup>®</sup> SAM App is open.
- **With add-on:** hold the flat protruding part of the add-on close to the location of the FN SmartCore<sup>®</sup> module.



**Without add-on:** hold the rear of the FN SmartCore<sup>®</sup> Reader close to the location of the FN SmartCore<sup>®</sup> module.



- Press the **SCAN** button on the home page of the FN<sup>®</sup> SAM App.



By default, you can also press the red button on the bottom right of the FN SmartCore<sup>®</sup> Reader for 1 second.



### **NOTE**

If the FN<sup>®</sup> SAM App is not yet open, the red button will first launch the FN<sup>®</sup> SAM App and then start the reading.

### **NOTE**

If Bluetooth<sup>®</sup> is not enabled on the FN SmartCore<sup>®</sup> Reader, the FN<sup>®</sup> SAM App will request to enable it.

- Once the FN SmartCore<sup>®</sup> module is awake, the data is transmitted via Bluetooth<sup>®</sup>.

*The FN SmartCore<sup>®</sup> Reader will vibrate when the data is retrieved.*

## 5.3. Wired reading

### Requirements

FN SmartCore® Reader equipped with the USB-B cable.  
If necessary, also attach the USB adapter.

#### NOTE

If the add-on is installed on the FN SmartCore® Reader, it is not required to remove it.

### Applicable weapons

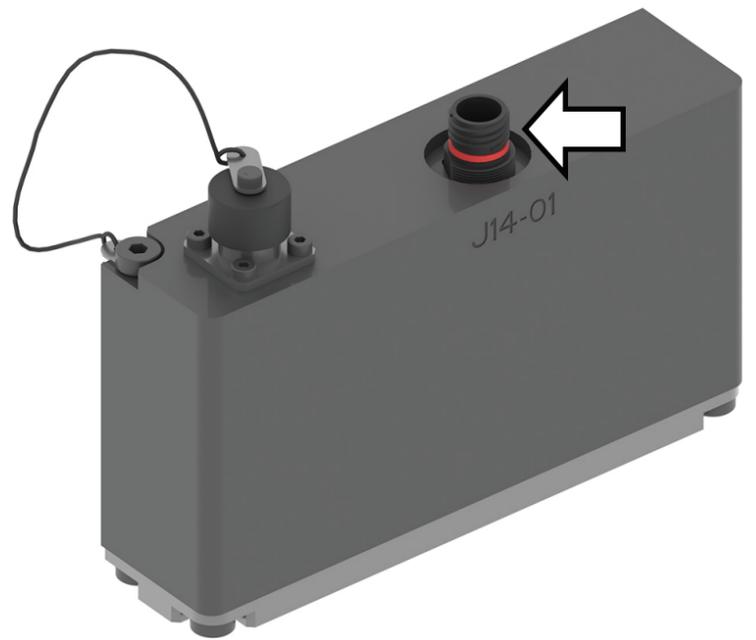
The USB-B cable is required for the FN® M3M.

The USB-B cable and the USB adapter are required for the deFNder® family.

### USB-B or USB adapter port location



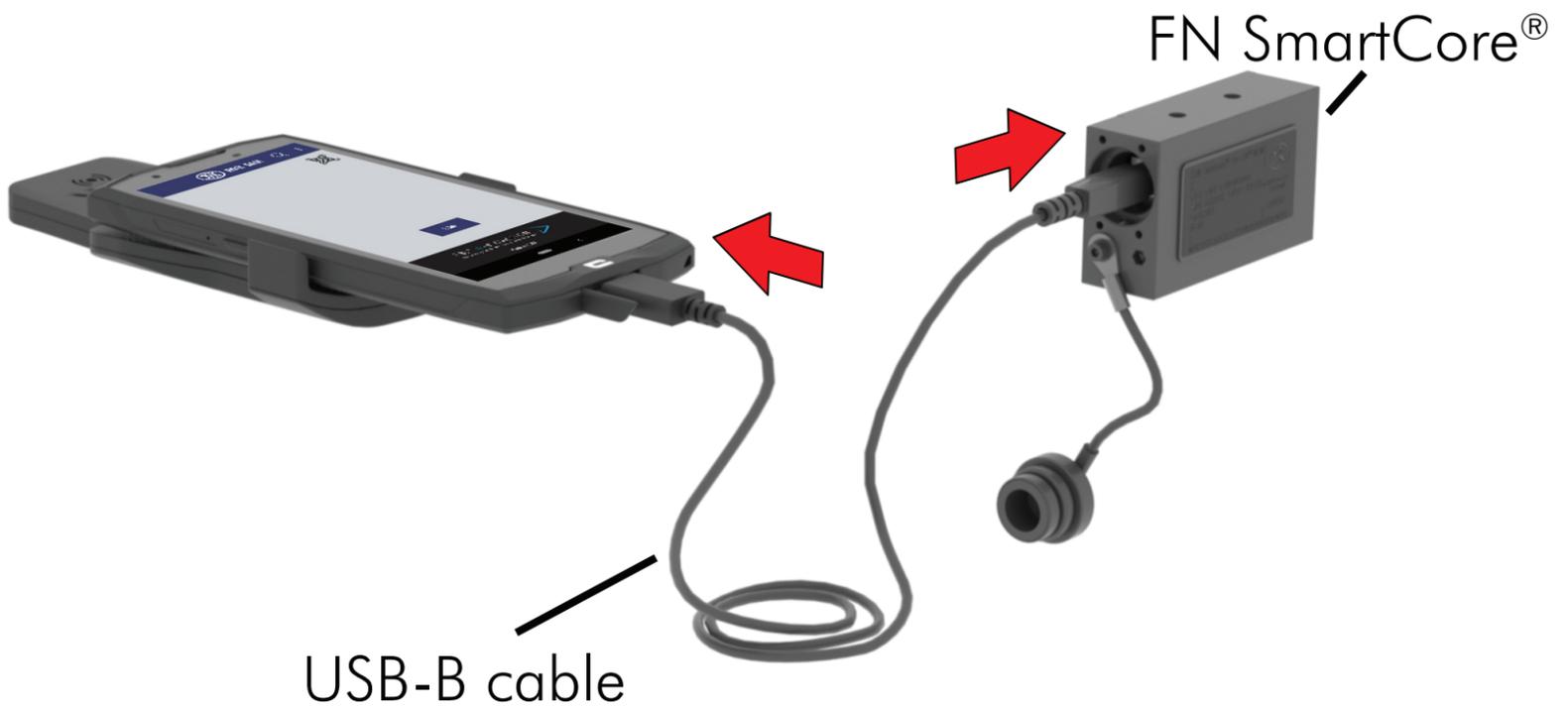
**FN® M3M**



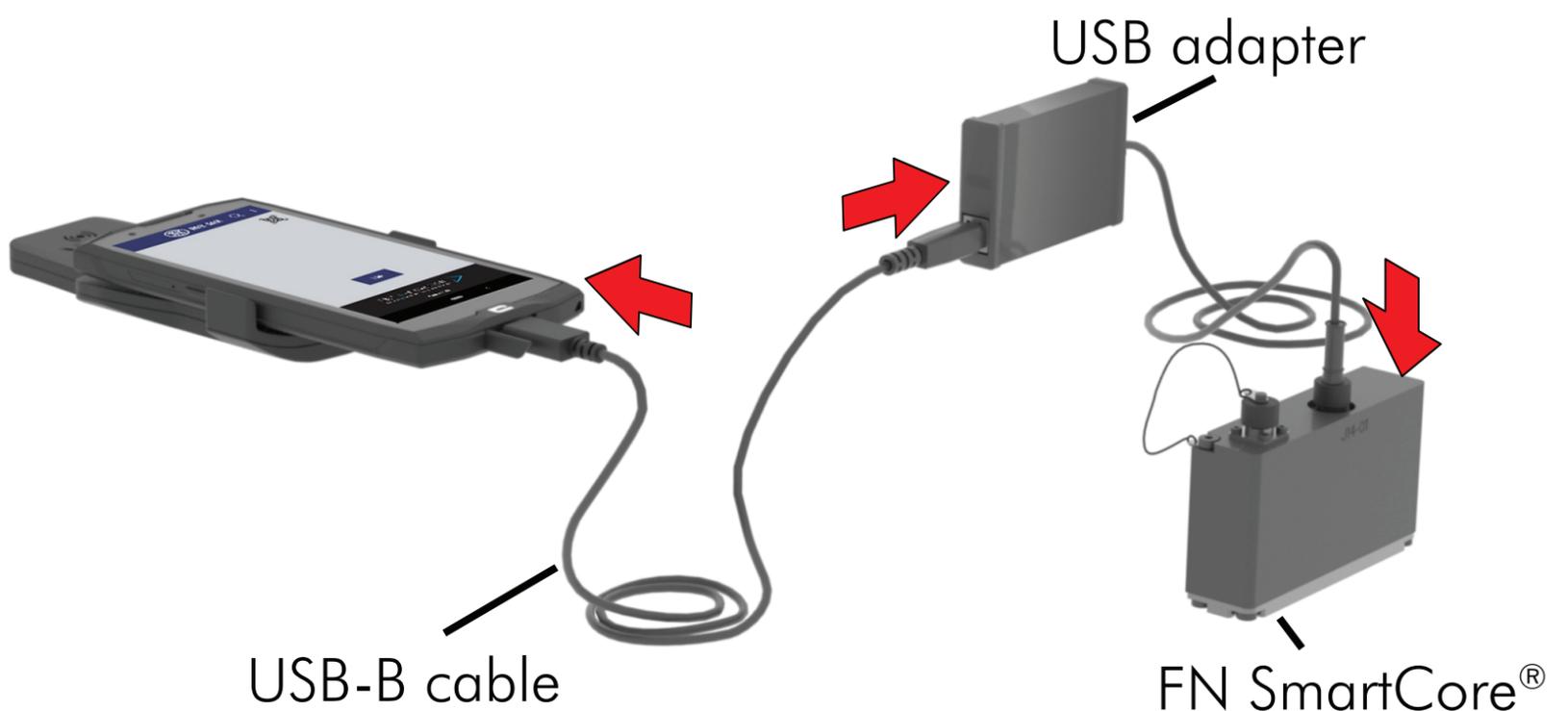
**deFNder®**

## Instructions

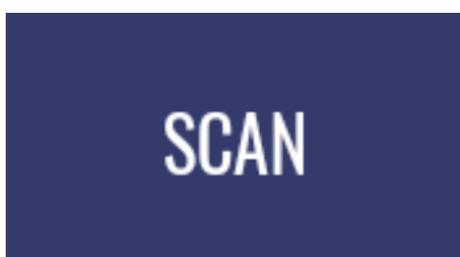
- Make sure the FN SmartCore<sup>®</sup> Reader is powered on and the FN<sup>®</sup> SAM App is open.
- **FN<sup>®</sup> M3M**: connect the USB-C connector of the USB-B cable to the USB-C port of the FN SmartCore<sup>®</sup> Reader, and connect the USB-B connector to the USB-B port of the FN SmartCore<sup>®</sup>.



**DeFNder<sup>®</sup> family**: connect the USB adapter to the USB adapter port of the FN SmartCore<sup>®</sup>. Connect the USB-C connector of the USB-B cable to the USB-C port of the FN SmartCore<sup>®</sup> Reader, and connect the USB-B connector to the USB-B port of the USB adapter.



- Press the **SCAN** button on the home page of the FN<sup>®</sup> SAM App.



*The FN SmartCore<sup>®</sup> Reader will vibrate when the data is retrieved.*

## 6. CONSULTING THE DATA

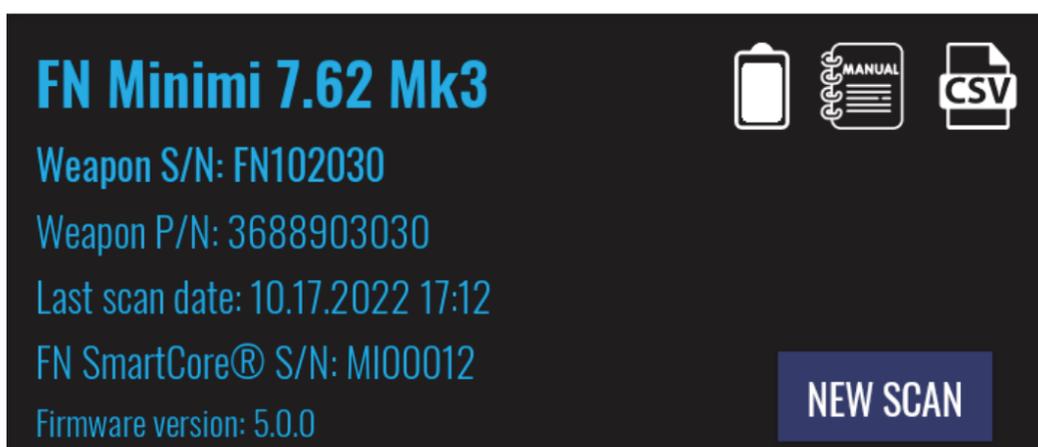
After reading the FN SmartCore<sup>®</sup> module, the record of shots fired is displayed in the FN<sup>®</sup> SAM App.

Depending on the type of FN SmartCore<sup>®</sup> module, a table with the last shots fired and a pie chart is shown in addition to the total rounds.

If a weapon is registered in the FN<sup>®</sup> SAM App, the associated data, such as weapon name, part number, or image is shown as well.

To register a new weapon, refer to chapter **8**.

Tap the **information bar** to show more detailed information about the reading.



**FN Minimi 7.62 Mk3**

Weapon S/N: FN102030

Weapon P/N: 3688903030

Last scan date: 10.17.2022 17:12

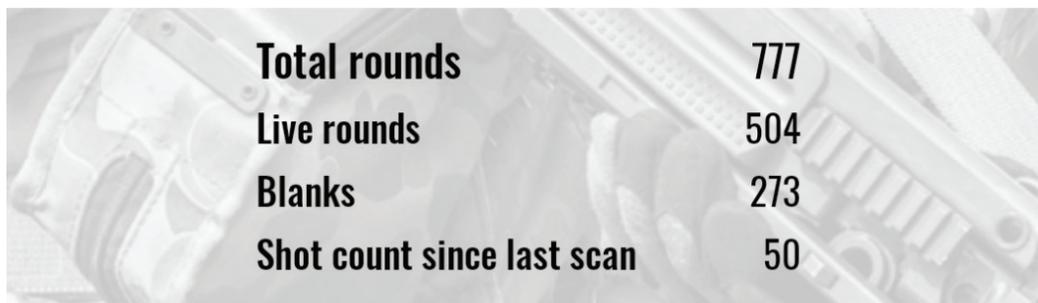
FN SmartCore<sup>®</sup> S/N: MI00012

Firmware version: 5.0.0

NEW SCAN

Icons: Battery, Manual, CSV

Tap **Total rounds** in the **main section** to view the distinction between live rounds, blanks, and dry shots.



<b>Total rounds</b>	777
<b>Live rounds</b>	504
<b>Blanks</b>	273
<b>Shot count since last scan</b>	50

### NOTE

Dry shots are listed only when reading an FN SmartCore<sup>®</sup> of the FN SCAR<sup>®</sup> family.

Tap the table with last shots fired in the **main section** to view the full shot history (newest to oldest) and access charts for shooting regime, burst rate, and burst length.

Shot history				
SHOT HISTORY	SHOOTING REGIME	BURST RATE	BURST LENGTH	
Shots	Rate (rounds/min)	Delay (min sec)	Ammo	Total rounds
1	0	> 60min	Blank	729
1	0	> 60min	Live	728
5	799	17sec	Blank	727
48	816	21sec	Blank	722

Tap the pie chart below the table with last shots fired in the **main section** to directly open the shooting regime tab in the shot history.

SHOT HISTORY      **SHOOTING REGIME**      BURST RATE      BURST LENGTH

### Shooting regime

Effective shooting regime percentage corresponding to the number of rounds really fired during 1min timeframes

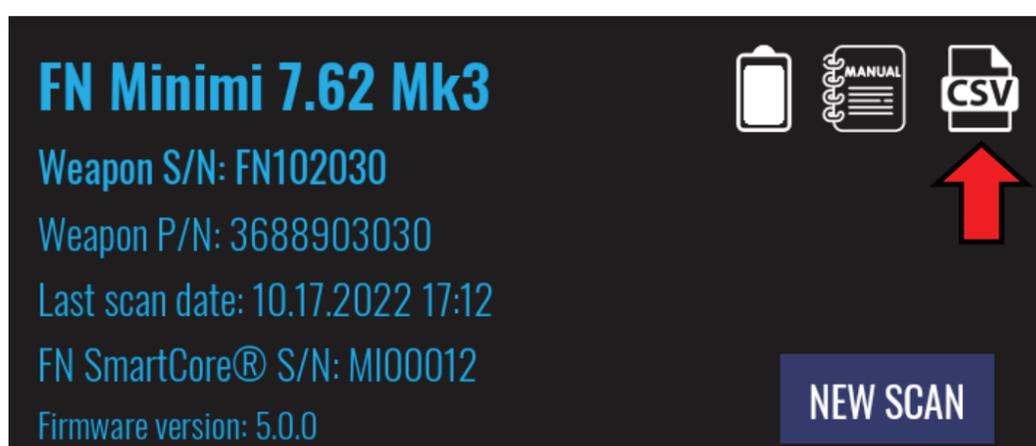


## 7. EXPORTING THE DATA

### 7.1. Exporting a CSV file

To export a record of shots fired as a CSV file to a PC, proceed as follows:

- Make sure the correct record of shots fired is currently open. If this is not the case, either start a new reading of the required FN SmartCore® module, or open the required reading via the search function in the **top bar**.
- Tap the **CSV** icon in the **information bar**.



*The CSV file is exported to a folder on the FN SmartCore® Reader. A pop-up message with the location will appear briefly.*

- Connect the FN SmartCore® Reader to a PC.
- Change the USB computer connection type on the FN SmartCore® Reader to **File transfer**.
- Use the file explorer of the PC to navigate to the export folder on the FN SmartCore® Reader.
- Copy or move the CSV file to the PC.

## 7.2. Connecting with the FN<sup>®</sup> SAM software

The FN<sup>®</sup> SAM App can be used in combination with the FN<sup>®</sup> SAM software.

The FN<sup>®</sup> SAM software is a web-based platform which can, among other things, process the information read by the FN<sup>®</sup> SAM App and display it on a computer screen.

The information can then be consulted anytime and anywhere.

To connect the FN<sup>®</sup> SAM App with a session of the FN<sup>®</sup> SAM software, proceed as follows:

- Make sure the FN SmartCore<sup>®</sup> Reader is powered on and the FN<sup>®</sup> SAM App is open.
- Make sure the FN<sup>®</sup> SAM session is open on the PC.
- Make sure the FN SmartCore<sup>®</sup> Reader and the PC are both connected to the internet.
- Generate a QR code for the FN<sup>®</sup> SAM session on the PC.
- Tap the QR icon in the **main section** of the home page of the FN<sup>®</sup> SAM App, and scan the QR code.



As long as the internet connections are active on the FN SmartCore<sup>®</sup> Reader and on the PC, the FN SmartCore<sup>®</sup> module readings will also be opened in the FN<sup>®</sup> SAM session.

### NOTE

The read history of the FN<sup>®</sup> SAM App can be imported into the FN<sup>®</sup> SAM software.

To know more about this function, and for more information about the FN<sup>®</sup> SAM software, refer to its documentation.

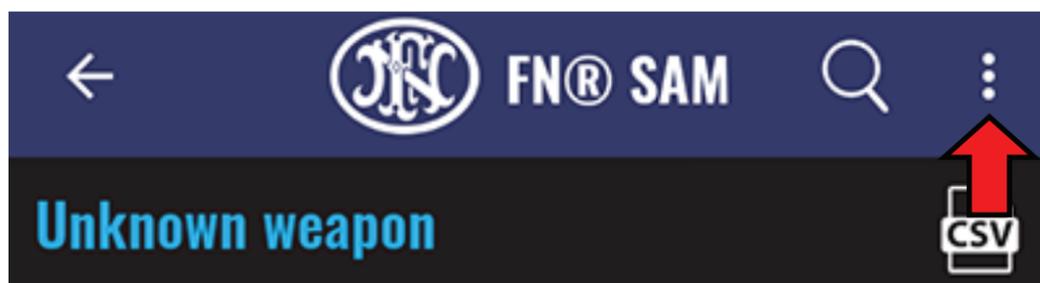
## 8. REGISTERING A NEW WEAPON

If a weapon is not registered in the FN<sup>®</sup> SAM App, it will only display the record of shots fired, as this is the information that can be read from an FN SmartCore<sup>®</sup> module.

Other information, such as weapon names and images, is not known by default. The FN<sup>®</sup> SAM App will display placeholder text and images.

To register a new weapon, proceed as follows:

- If required, place the image and the manual on the FN SmartCore<sup>®</sup> Reader.
- Read the FN SmartCore<sup>®</sup> module as described in chapter **5**.
- Tap the vertical ellipsis in the **top bar**.



- Select **Register weapon part number**.

- Enter the mandatory name and part number of the weapon, and, if required, browse for the optional image and/or manual on the FN SmartCore® Reader.

Register new weapon

Model name\*

---

Part number\*

---

Model image

---

Model manual

---

- Tap the **SAVE** button.



*The registered information of the weapon will now be available every time the FN SmartCore® module is read.*



# **FN HERSTAL**

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