iP1 SmartSystem

Operating Manual



EN



Pistol iP1 Calibre .22lr



Masthead

Should you require further information on our products or technical support, please do not hesitate to contact us.

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1 Introduction

Dear Customer,

You have chosen the iP1 SmartSystem from Armatix. We wish to thank you for your choice. Not only because you have thereby confirmed to us that we are on the right path with our idea of a "safe weapon", but more importantly because with your decision you are making a crucial contribution to fighting misuse of firearms.

Only an intrinsically safe weapon is effectively protected against misuse. In this respect, the Smart-System from Armatix represents a trendsetting innovation. No-one other than the identified user of the weapon who has the matching lock (the wrist watch) and key (the PIN) can use the weapon.

But it is more than this revolutionary safety concept that makes the SmartSystem a real innovation. The SmartGun belonging to the system is a modern, high-precision handgun developed in accordance with the latest weapon technology and ergonomic principles and guidelines.

This weapon system is not futuristic – it is the future. We are convinced of that.

We wish you a great deal of enjoyment with the Armatix SmartSystem.

Your Armatix Team

2 Safety Precautions

2.1 About this operating manual

This operating manual describes the design, functions and handling of the iP1 SmartSystem from Armatix. It contains additional information on troubleshooting, storage, transport and disposal, as well as on the ordering of spare parts.

The operating manual forms part of the weapon and of the operating concept. It must therefore always be stored with the weapon in order to be available for consultation at any time before using the weapon.

This operating manual is intended for persons authorised to own and handle handguns such as the SmartGun.

In addition to this operating manual, a quick-start guide is also included with the SmartSystem. It describes the fundamental steps for using the SmartSystem. It is intended only as a brief overview and is no substitute for thorough reading and understanding of this operating manual.

2.1.1 Conventions and symbols

Dangers are associated with the handling of any weapon; particular attention is drawn to these in this operating manual. The hazard warnings are depicted as follows:

DANGER!

This symbol with the word "DANGER!" draws attention to an imminent hazard that can result in immediate death or serious injury if not avoided.



> This arrow directs you to the appropriate measure for avoiding this imminent hazard.

CAUTION!



This symbol with the word "CAUTION!" draws attention to an imminent hazard that can result in minor or moderate injury or material damage if not avoided.

> This arrow directs you to the appropriate measure for avoiding this imminent hazard.

Information of particular importance at specific points or which simplifies the handling steps described for the user of the weapon are highlighted as follows:

INFO



This symbol "INFO" gives you tips and recommendations for the use and handling of the SmartSystem.

2.2 Safety Precautions

The Armatix SmartSystem has been developed in accordance with the latest standards of weapons technology and with the recognised guidelines for safety and protection of the user.

Furthermore, the system sets new standards in protection against misuse of the weapon.

Nevertheless the SmartGun is a weapon, and for this reason may only be used by authorised persons who have read and understood this operating manual completely, with the due care and attention and in observance of the safety precautions described in this operating manual.

DANGER!

Mortal danger!



The use of the weapon can create acute dangers for the life and limb of the user, and for third persons and the immediate surroundings.

In order to avoid these dangers, please read the following precautions carefully and observe them when handling the SmartGun system.

2.2.1 General safety precautions

- Do not use the weapon before you have read and understood this operating manual completely.
- Store this operating manual together with the weapon at all times.
- Also keep any supplements or additions to this operating manual together with the weapon.
- The operating manual must always be handed over when giving the weapon to another user or owner.
- Only allow persons access to the weapon who have read and understood this operating manual completely.
- The batteries included with the system are not rechargeable. Never try to recharge non-rechargeable batteries. They may explode or catch fire.
- Never try to dismantle batteries. Battery fluids can cause serious injuries.
- Never expose batteries to high temperatures (direct sunlight, heaters or fire). They may explode.
- Never use mixed batteries in the weapon. Type, manufacturer and residual capacity must be identical.
- Observe the instructions in <u>Chapter 9</u> when disposing of the batteries.

2.2.2 Observe the following when handling the weapon

- The handling of a handgun demands a great deal of attention, as direction and position of the weapon can change very easily and quickly.
- · Always regard the weapon as loaded until such time as you have ascertained the real load condition.
- Use the weapon only when you have assured yourself of its safe technical condition.
- Ensure that the weapon is unloaded during any handling of the weapon not related to loading or firing of the weapon.
- Use the weapon only in accordance with its intended use (see <u>Chapter 2.3</u>), never as a cutting weapon, striking tool, breaking tool, etc. Use of the weapon for other than its intended purpose can lead to unintentional firing or to damage to the weapon.
- A weapon is not a toy! Playing with the weapon is therefore inappropriate and should be avoided.
- Never point the weapon towards persons or animals during loading, cleaning, dismantling or practice.
- Do not touch the trigger during loading or unloading of the weapon, during aiming or other
 operations with the weapon. Always place your trigger finger on the outside of the trigger guard
 and move it onto the trigger only immediately before firing.
- Do not exert force during handling, cleaning or dismantling of the weapon.
- Frequent hammer strikes with the weapon empty will result in premature wear. Therefore avoid unnecessary striking of the hammer with the weapon empty.
- Weapon and ammunition must be stored separately and protected from access by unauthorised persons, in particular children (see <u>Chapter 7</u>).
- Faults that may impair the functional safety of the weapon must be addressed and remedied immediately (see <u>Chapter 6</u>).
- Exceptional loads on the weapon such as hard impacts or dropping can impair its functional safety. Following exceptional loads, the weapon must be inspected by the manufacturer or an authorised dealer before use.
- Never rely completely on the safety devices. They are in no way a substitute for careful and correct handling of the weapon.
- The manufacturers' specifications for accessories and ammunition must be observed during their use.



2.2.3 Note when firing

- Remove the oil from the weapon before firing.
- · Load the weapon only with properly machined, undamaged ammunition of the specified calibre.
- · Wear safety goggles when firing.
- Wear ear protectors when firing.
- · Keep your hands out of the way of the slide when firing.
- Keep the muzzle area of the weapon free when firing.
- Do not fire at flat surfaces such as stones, concrete, walls, doors, windows or even water. The
 projectile can pass through these or be deflected in an unpredictable direction.
- Press the trigger only when the weapon is aimed at the target and there are no endangered objects or persons behind or around the area of the target.

2.2.4 Note after firing

- After firing, uncock and unload the weapon as described in Chapter 4.6.6.
- Weapon and ammunition must be stored in accordance with the specifications in Chapter 7.

2.2.5 Shipping and / or handing over the weapon

- Hand over the weapon only in unloaded condition and with the slide open (visual inspection of the unloaded condition).
- The specifications for transport and shipment in Chapter 8 must be observed.

2.3 Intended use

The Armatix SmartSystem contains a calibre .22lr handgun protected by special measures against misuse and a wrist watch into which the function for unlocking the weapon is integrated. It is designed for accurate firing at targets at ranges of up to 25 m.

The danger range of the weapon is 1800 m!

Criminal activities using the gun do not constitute an intended use!



2.4 Liability and warranty

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
- this device must accept any interference received, including interference that may cause undesired operation.

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

Armatix GmbH assumes no liability or warranty for incidents arising due to:

- Failure to observe this operating manual,
- · Incorrect use of the SmartSystem,
- · Improper handling,
- · Negligence,
- Use of accessories and spare parts from other manufacturers without the express written approval of Armatix GmbH, or
- Modifications or conversions to the weapon without the express written approval of Armatix GmbH.

3 Description

3.1 The iP1 SmartSystem

The concept of the Armatix SmartSystem is based on the splitting of weapon and access control into two separate components that together form the weapon system.

The SmartGun

The calibre .22lr pistol is a modern precision handgun with an integrated mechatronic safety device. This safety device is normally active and can only be deactivated using the wrist watch so that the weapon can be used.

The wrist watch

In its normal condition, the weapon is locked and must be unlocked for firing. This is effected with the wrist watch when the following conditions have been satisfied:

- System times of wrist watch and weapon are synchronised.
- The valid PIN has been entered on the wrist watch.
- Wrist watch and weapon have a common "code" for the communication.
- Wrist watch and weapon are within the communication radius (normally wristwatch on wrist of firing hand, weapon in the firing hand).
- Weapon with correctly inserted magazine in the hand (backstrap switch on the weapon is actuated (see <u>Chapter 3.2</u>)).

The enabled status of the weapon is signalled by the LED on the backstrap lighting up green.

Enabling of the weapon by the wrist watch after entering the PIN ends

- When the weapon is no longer held in the hand (backstrap switch no longer actuated (see <u>Chapter 3.2</u>)),
- · When the magazine is removed,
- On expiry of the set remaining time (see <u>Chapter 4.4.2.2</u>),
- By manual deactivation of the wrist watch (see Chapter 4.4.2.5).



Operating states of the system

· Weapon function of the wrist watch activated

After input of the correct PIN at the wrist watch, the receiver in the wrist watch is active and waits for a signal from the weapon.

- The large weapon symbol appears on the display of the wrist watch.

Weapon activated

Actuation of the backstrap switch when the weapon is picked up activates its transmitter and the weapon waits for an enable signal from the wrist watch.

- The LED lights up red.

The wrist watch checks the signal from the weapon; if the check is successful, the wrist watch enables the weapon for firing.

Magazine safety device tripped

If the magazine is not correctly inserted, the integral magazine safety device prevents the weapon from being enabled.

- The LED lights up blue.

Weapon enabled

If the check of the signal by the wrist watch and of the magazine safety device was successful, the unlocking mechanism is activated and the weapon enabled for firing.

- The LED lights up green.

3.2 The SmartGun

3.2.1 Design and operating elements

The SmartGun is a calibre .22lr handgun. It has been developed in accordance with the latest ergonomic principles and criteria. The parts and operating elements of the SmartGun are identified in the figure below.



- 1 Front sight
- 2 Rear sight
- 3 Hammer
- 4 Slide
- 5 LED
- 6 Slide release lever
- 7 Backstrap with backstrap switch
- 8 Trigger
- 9 Cover
- 10 Magazine release lever
- 11 Magazine

3.2.2 Functions

The components shown in **Chapter 3.2.1** have the following functions:

Slide

When the slide is pulled back and moves forward again, a cartridge is transported from the magazine into the chamber. This is only necessary when there is no cartridge in the chamber before firing (e.g. when a magazine has been emptied and a newly filled magazine has been inserted).

When the pistol is fired, the slide automatically moves back and ejects the empty cartridge case. As the slide moves forward again, a new cartridge is transported from the magazine into the chamber.

• LED

The LED on the backstrap signals the operating condition of the weapon by lighting up in different colours:

- Red

The red LED that lights up when the weapon is picked up signals that the weapon is not enabled for firing.

- Blue

The blue LED that lights up when the weapon is picked up signals that the magazine has not been inserted or has not been inserted correctly.

- Green

The green LED that lights up when the weapon is picked up signals that the weapon is enabled for firing.

Slide release lever

The slide release lever holds the slide in the rear position when the magazine is empty. This signals to the user that the magazine is empty.

For handling over the weapon with open slide and without the magazine inserted, the slide release lever can be pushed up manually with the slide pulled back and the slide is held open when the arresting lever is released.

After inserting a newly filled magazine and pressing the slide release lever, the slide moves forward. A new cartridge is then transported automatically into the chamber.

Magazine release lever

The lever that can be actuated on both sides underneath the trigger releases the magazine so that it can be removed.

Trigger

Depending on the hammer position, the following occurs when the trigger is pulled completely:

- When the hammer is cocked, it is immediately uncocked and transmits its energy via the firing pin to the ignition charge in the cartridge (Single Action / SA).
- When the hammer is uncocked, it is first cocked to a given point and then immediately uncocked. It transmits its energy via the firing pin to the ignition charge in the cartridge (Double Action / DA).



· Backstrap with backstrap switch

Three backstraps of different sizes are available for the SmartGun to allow a better ergonomic adaption of the pistol to the user. On delivery, the smallest backstrap (size "S") is fitted.

The backstrap switch linked to the backstrap is actuated when the weapon is picked up and activates the communication with the wrist watch.

3.3 The wrist watch

3.3.1 Design and operating elements

The wrist watch belonging to the SmartSystem contains not only a precise timer and associated auxiliary functions but more importantly the enable control of the weapon. Without the input of the correct PIN at the wrist watch, the weapon cannot be used.

The buttons on the upper side of the wrist watch are integrated into the housing and are actuated by deformation when the surface is pressed.



- 1 Button top left (TL)
- 2 Button top right (TR)
- 3 Display*
- 4 Button middle right (MR)
- 5 Button bottom right (BR)
- 6 Button bottom left (BL)
- * The meaning and functions of the displayed elements is described in <u>Chapter 4.4</u>.

3.3.2 Functions

The wrist watch has both the functions of a modern timer, but also a number of auxiliary functions relevant to the SmartSystem.

Timer functions

- Time and date display
- Alarm clock
- Stopwatch

SmartSystem functions

- Input of the PIN
- Setting and display of the remaining time (time until the wrist watch is automatically deactivated)
- Display of the SmartSystem activation status (large weapon symbol)
- Display of the weapon battery status (grip of the large weapon symbol)
- Time synchronisation between wrist watch and weapon
- Input of the SuperPIN

General functions

- · Indication of low capacity of the wrist watch battery
- Background lighting (see Chapter 4.4)

3.4 The accessories

3.4.1 Scope of supply

- Lockable transport case
- Weapon with magazine
- Second magazine (optional)
- Wrist watch (referenced to the weapon)
- Data medium with operating manual
- · Ouick Start Guide
- Batteries for weapon (2 × AAA/ Micro), supplied loose
- Battery for wrist watch (CR2032), installed in the wrist watch
- 2.8 mm diameter punch

3.4.2 Additional accessories / equipment required

- Weapon oil
- · Cleaning set
- Lint-free cleaning cloths



4 Handling

4.1 Checking the weapon system (weapon and wrist watch)

Before using the SmartSystem, the checks described here must be carried out to ensure that the individual components are in good condition and can be used safely.

4.1.1 Carry out safety check

The safety check serves to ensure that there is no ammunition in the weapon. This check is necessary when taking over the weapon from another user or if you are uncertain about the load state of the weapon for other reasons.

CAUTION!

Risk of damage!



Dropping the magazine can cause damage to the cartridge guides that may result in malfunctions.

- > Do not allow the magazine to fall on the floor when releasing; catch it in your hand.
- Release and remove the magazine.
- Hold the weapon firmly in your hand.
- Grip the slide, pull it back as far as it will go and lock it by pushing up the slide release lever.
- Check by looking into the chamber that there is no cartridge in the weapon.
 - If there is a cartridge in the chamber, read and follow the steps described in Chapter 6.

CAUTION!

Risk of injury!



The spring-loaded slide moves forward when the slide release lever is pressed.

- > Keep your hands out of the way of the slide.
- Press the slide release lever down. The slide moves forward.

4.1.2 Carry out function test

INFO ≡

The function test serves to check that the weapon is in a technically good condition. This test is particularly necessary after assembling the weapon or after remedying a malfunction.

- Insert an **empty** magazine into the weapon. The magazine must engage noticeably.
- Pull the slide back as far as it will go. It is held in this position by the slide release lever.

CAUTION!



The spring-loaded slide moves forward when the slide release lever is pressed.

> Keep your hands out of the way of the slide.

- Press the slide release lever down. The slide moves forward
- Release and remove the magazine.
- Pull the trigger guickly as far as it will go the hammer is uncocked.
- Move your finger away from the trigger and rest it on the side of the trigger guard.
- Move the slide back and forth several times to check its free movement.

4.2 Adapting the weapon to the user

4.2.1 Grip

In order to be able to adapt the weapon to different hand sizes, different backstrap housings are available for the SmartSystem. On delivery, the smallest backstrap (size "S") is fitted.

INFO



In order to avoid damage to the weapon housing when pressing out the pin, use the punch provided (2.8 mm diameter).

CAUTION!

Risk of damage!



Dropping the magazine can cause damage to the cartridge guides that may result in malfunctions.

> Do not allow the magazine to fall on the floor when releasing.

If the hammer is cocked with the backstrap removed, the hammer spring can be overstretched due to the lack of a stop.

> Do not cock the hammer when the backstrap is removed.



Release and remove the magazine.



Press out the pin using a punch (2.8 mm diameter).



Pull the backstrap down and to the rear.



Fit the desired backstrap and assemble the weapon.

INFO



The compartment for the weapon batteries is located under the backstrap. If the batteries have not yet been inserted into the weapon, you can do it at this point. Information on inserting the batteries can be found in <u>Chapter 4.3.1</u>.

The weapon is assembled again in the reverse order.

4.2.2 The gun sight (aiming device)

Various sights are available for the SmartSystem to allow the accuracy of the weapon to be optimised according to your own aiming habits.

Changing of the sights is described in Chapter 6.2.1.



4.3 Inserting the batteries

4.3.1 Weapon

CAUTION!

Risk of damage!



Dropping the magazine can cause damage to the cartridge guides that may result in malfunctions.

> Do not allow the magazine to fall on the floor when releasing; catch it in your hand.

The weapon batteries ($2 \times AAA / Micro$) are located under the backstrap. Proceed as follows to insert the batteries (reassemble in the reverse order).



Release and remove the magazine.



Press out the pin using a punch (2.8 mm diameter).



Pull the backstrap down and to the rear.



Insert the batteries as shown.

4.3.2 Wrist watch

The wrist watch battery (CR2032) is located under the battery compartment cover on the rear side. Proceed as follows to insert the battery:



Release and remove the battery compartment cover



Insert the battery as shown.



Replace and lock the battery compartment cover.



The wrist watch is now ready for use.

4.4 The wrist watch functions

The wrist watch of the SmartSystem has a large number of functions. Certain of these correspond to the functions of a commercially available digital wrist watch.

Furthermore, the wrist watch has numerous possibilities for controlling the functions of the SmartSystem.

This chapter explains both the wrist watch functions and the SmartSystem-related functions. The functions are described in the same order in which they can be called up on the wrist watch.

Background lighting

The background lighting of the wrist watch display is activated by holding the button BL pressed for 3 seconds and goes out again automatically after a short time.

Display elements

In addition to the time and date, the respective active functions of the wrist watch are indicated by various symbols on the display.



- 1 Weapon menu
- 2 Setting of remaining time
- 3 Alarm clock/stopwatch
- 4 Warning
- 5 Delete
- 6 Stopwatch start/stop
- 7 Alarm clock On/Off
- 8 Wrist watch battery
- 9 Display of remaining time
- 10 Weapon function of the wrist watch/weapon battery

Symbol	Meaning
4	Weapon menu
	The small weapon symbol appears in the top right-hand corner when the weapon menu is called up. Settings related directly to the weapon can be carried out here (see <u>Chapter 4.4.2</u>
0	Remaining time
8	The symbol appears during setting of the remaining time (see <u>Chapter 4.4.2.2</u>). In the lower half of the display it indicates the remaining time displayed alongside fo which the wrist watch is activated.
83	Alarm clock
©	The symbol appears during setting of the alarm time (see <u>Chapter 4.4.3</u>).
ON	After setting the alarm time, the alarm clock can be switched on $(\mathfrak{T}^{\circ N})$ or off $(\mathfrak{T}^{\circ N})$. When the alarm clock is switched on, the symbol $\mathfrak{T}^{\circ N}$ indicates that the alarm clock is switched on.
	Stopwatch
Ċ	The stopwatch symbol appears in the top right-hand corner of the display when the stopwatch is active (see <u>Chapter 4.4.4</u>).
▶()	The start-stop symbol appears when the stopwatch is called up and indicates that th stopwatch can be started, stopped and reset with the button MR.
×	Delete
	The 'Delete' symbol indicates that the last input (e.g. the last digit entered during input of the PIN) can be deleted with the button MR.
Δ	Warning
•	This symbol appear to indicate a fault.
	Wrist watch battery
	This symbol appears when the battery of the wrist watch needs to be replaced (see <u>Chapter 4.3.2</u>).
	Weapon function of the wrist watch/weapon battery
	The large weapon symbol appears in every menu when the weapon function of the wrist watch is activated.
	The three bars in the grip indicate the charge state of the battery in the weapon (see <u>Chapter 4.4.1.1</u>). They only appear when communication has been established with the weapon.

Scrolling through the individual function menus of the wrist watch

The basic functions of the wrist watch can be scrolled through with the buttons BR and TR in the recurring sequence illustrated below.

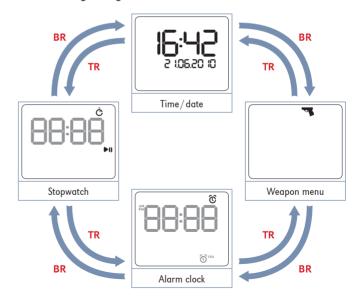
 Holding button TR depressed (3 seconds) calls up the respective submenu of the selected function menu.

INFO



If no button on the wrist watch is pressed in a menu for at least 20 seconds, the wrist watch returns automatically to the display of the time and date. Exceptions are the stopwatch (see <u>Chapter 4.4.4.</u>) and the firmware update function (see <u>Chapter 4.4.6</u>). Here the wrist watch does not return automatically to the standard display.

Menu sequence when scrolling through with button BR or TR





4.4.1 Standard display (time and date)

As standard, i.e. when no other function of the wrist watch has been called up, the display shows the following information:

· Current time.



· Current date.



When the weapon function of the wrist watch is activated, at least the following information is also displayed:

 Activation status of the wrist watch (contour) and status of the weapon battery (bars in the grip).



 Remaining time until automatic deactivation of the weapon function of the wrist watch.



4.4.1.1 Weapon symbol

The weapon symbol in the bottom left-hand corner of the display provides several items of information:

• Weapon function of the wrist watch activated

The display of the weapon symbol signals that the weapon function of the wrist watch is activated.

· Communication with weapon established

The display of the battery bars signals that the communication between wrist watch and weapon has been established and is functional. A precondition for this is that the preconditions described in Chapter 3.1 are satisfied.



· Status of the weapon battery

The three battery bars in the grip area of the weapon symbol indicate the charge state of the weapon batteries:



Battery capacity 100%



Battery capacity approx. 33%



Battery capacity approx. 66%



(Bar flashes) Battery empty

4.4.1.2 Set time and date

Starting situation is the standard display (see Chapter 4.4.1).



Call up setting: Hold TR pressed for 3 seconds.



Hours: Set (TL, BL) and confirm (TR).



Minutes: Set (TL, BL) and confirm (TR).



Day: Set (TL, BL) and confirm (TR).



Month: Set (TL, BL) and confirm (TR).



Year: Set (TL, BL) and confirm (TR).



12h / 24h mode: Select (TL, BL) and confirm (TR).



Standard display appears.

INFO

The display of the date also changed, depending on the 12h/24h setting:

12h mode: <Month>.<Day>.<Year>

24h mode: <Day>.<Month>.<Year>

The illustrations in this chapter show the setting of the date in 24h mode.

4.4.2 Weapon menu

The weapon menu contains the functions for activation (PIN input) and deactivation of the weapon function, and for setting the remaining time for which the weapon function is to remain activated.

4.4.2.1 Input of the PIN

The input of the PIN supplied activates the weapon function of the wrist watch.

The PIN supplied consists of 5 digits from 1 to 4 that can be entered via the buttons TL, TR, BL and BR. When the 5th digit is entered, the input is automatically accepted.

Example: PIN 41324 → Button BR (4), button TL (1), button BL (3), button TR (2), button BR (4).

Starting situation is the standard display (see Chapter 4.4.1).





seconds.







The PIN input can also be called up directly from the standard display (time and date). Hold button BR depressed for 3 seconds.

If the PIN is entered incorrectly, "FAIL" appears on the display. See Chapter 4.4.2.3.



4.4.2.2 PIN OK, set remaining time

After correct input of the PIN and confirmation by the display "GOOD", the remaining time menu is displayed. Here you can enter the time with the buttons + (TL) and - (BL) on expiry of which the weapon function of the wrist watch is automatically deactivated. The deactivation is indicated to the user by an acoustic signal.

- · Maximum settable time: 8 hours.
- · Minimum settable time: 1 hour.

The setting is confirmed and saved by pressing the button at top right (TR).



After setting the remaining time, the weapon menu is automatically terminated and the standard display appears. The weapon function of the wrist watch is now activated.





The set remaining time is displayed as standard at the next PIN input in the remaining time menu and can be either accepted directly or changed.

Check communication between wrist watch and weapon

To check the communication between wrist watch and weapon, hold the weapon in your hand (full batteries must be inserted) so that the backstrap switch is actuated. The LED display will indicate one of the following statuses:

- LED display lights up blue: No magazine inserted.
- LED display lights up red: Weapon not ready for firing.
- LED display lights up green: The wrist watch detects the signal from the weapon.

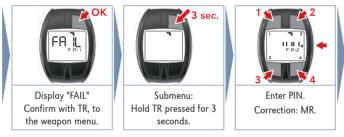
The weapon is ready for firing!

If this is not the case, remedy the problem following the troubleshooting guide in Chapter 6.

4.4.2.3 PIN entered incorrectly

If the PIN is entered incorrectly, "FAIL" appears on the display. After confirming this message with button TR, the system returns to the weapon menu. From here the submenu for the input of the PIN can be called up again by holding button TR depressed for 3 seconds.

In the second line of the display, a message now appears indicating that this is the second attempt to enter the PIN.



If the entered PIN was correct, the remaining time can now be set (see Chapter 4.4.2.2).

4.4.2.4 PIN entered incorrectly three times

If the PIN is entered incorrectly three times, the weapon function of the wrist watch is permanently barred. The message shown opposite appears on the display at every further attempt to enter the PIN.

The SuperPIN has to be entered to enable the system again. See <u>Chapter 4.4.5.2</u>.



4.4.2.5 Deactivate weapon function of the wrist watch prematurely

If necessary, the weapon function of the wrist watch can be terminated even before expiry of the set remaining time. For this the button at top right (TR) on the wrist watch must be held depressed in the weapon menu for at least 3 seconds.

Starting situation is the standard display (see Chapter 4.4.1).



Weapon menu: Press BR 1x



Deactivate weapon function prematurely: Hold TR pressed for 3 seconds.



Standard display appears.

INFO



The weapon function of the wrist watch can also be deactivated directly from the standard display (time and date). Hold button BR depressed for 3 seconds.

4.4.3 Alarm clock

The setting of the alarm clock function can be displayed and changed in the menu item "Alarm clock". When the alarm clock function is activated, an alarm sounds for 20 seconds when the set time is reached.

The alarm can be switched off by pressing any button on the wrist watch, but sounds again after 24 hours (set time is reached again). To switch off the alarm permanently, the alarm clock function has to be deactivated

4.4.3.1 Set the alarm clock

Starting situation is the standard display (see Chapter 4.4.1).



"Alarm clock" menu: Press BR 2x.



Display last alarm time. To set: Hold TR pressed for 3 seconds.



Hours: Set (TL, BL) and confirm (TR).



Minutes: Set (TL, BL) and confirm (TR).



Alarm clock on/off: Set (TL, BL) and confirm (TR).



Standard display appears.

4.4.4 Stopwatch

The stopwatch offers the possibility for measuring and displaying a given period of time.

The maximum accuracy is 1 second.

If 59 minutes and 59 seconds is exceeded, only hours and minutes are displayed.

Press button MR to start, stop and reset the timing.

Starting situation is the standard display (see Chapter 4.4.1).



The timing continues to run until it is stopped again by the user. It is also possible to return to the standard display without stopping the timing. The stopwatch then continues to run "in the background".





A maximum of 99 hours and 59 minutes can be displayed. After that the stopwatch starts again at 00 hours and 00 minutes.

4.4.5 Extended SmartSystem safety functions

The input of the PIN activates the weapon function of the wrist watch. In order that the weapon can be enabled by the wrist watch, the following criteria must be satisfied in addition to the correct input of the PIN:

- A magazine inserted into the weapon,
- · System times of wrist watch and weapon are synchronised,
- Wrist watch and weapon have a common "code" for their communication.

4.4.5.1 System time synchronisation

If the system times of the wrist watch and weapon are not synchronised (for example, after changing the batteries in the weapon), the message "no Sync" appears on the display of the wrist watch when the backstrap switch is actuated. In addition, the LED on the weapon flashes red. Wrist watch and weapon have to be synchronised.

Starting situation is the message "no Sync" on the display.



Display: "no Sync"
Weapon symbol,
+ and - flash



Hold TL and BL depressed for 3 seconds.



Weapon and wrist watch are synchronised



Standard display appears.

INFO



If after the attempted synchronisation only a flashing weapon symbol appears instead of the standard display, the synchronisation was not successful.

If you have access to several SmartSystem weapons, check whether the weapon belongs to the wrist watch being used.

If the weapon is to be used for self-defence purposes, we recommend that it is activated at regular intervals (enter the PIN and activate the weapon function of the wrist watch) and that the charge state of the batteries is regularly checked.

4.4.5.2 The SuperPIN

If the PIN of the wrist watch is to be deleted (for example, because the PIN was entered incorrectly three times, loss of the PIN or passing on of the weapon), this can be done with the SuperPIN supplied. It consists of 12 digits from 1 to 4.

Starting situation is the standard display (see Chapter 4.4.1).



Hold TL, TR, BL and BR depressed for 3 seconds.



MR: Cancel. Press any other button: To the input.



SuperPIN input correct

After input of the correct SuperPIN, the input mask for the new PIN is automatically displayed. The new PIN (5 digits from 1 to 4) has to be entered here. This is followed by the mask with the footer "PIN 2" again to confirm the previously entered PIN by entering again.

After successful confirmation, the standard display appears again.





If the second PIN entered does not match the first, the procedure has to be carried out again. This is repeated until "PIN 1" and "PIN 2" match.

SuperPIN input incorrect

After input of an incorrect SuperPIN, the standard display appears. To enter the SuperPIN again, proceed as described in <u>Chapter 4.4.5.2</u>. "PIN 2" is shown in the second line of the display. If the SuperPIN is entered incorrectly three times, no further input of the SuperPIN is possible for 10 minutes. Then you can try three times again to enter the SuperPIN.



4.4.5.3 Reset weapon

By resetting the weapon, the ID of the wrist watch and the code for the communication in the weapon are deleted. Resetting is performed in the following steps:

- Enter the weapon PIN,
- Check of the weapon PIN by the weapon (weapon held in the hand, backstrap switch actuated, empty magazine inserted).

After resetting the weapon, it has to be referenced again before it can be used further (see <u>Chapter 4.4.5.4</u>).

Enter weapon PIN

The function for entering the weapon PIN is called up via the weapon menu by holding the buttons TL and BL depressed for 3 seconds. To enter the input mode, you then have to press button TR once. The weapon PIN consists of 10 digits from 0 to 9 and is entered digit by digit by changing the displayed numbers with the buttons TL (+) and BL (-). Each digit has to be confirmed with button TR.

Starting situation is the standard display (see Chapter 4.4.1).





After confirmation of the last digit, the receiver in the wrist watch is activated – the weapon symbol flashes. The weapon must not be held in the hand (backstrap switch actuated) for communication with the wrist watch. After detection of the weapon, the wrist watch transmits the weapon PIN to the weapon.

Weapon PIN entered correctly

On input of the correct weapon PIN and successful transmission, the code and the ID of the wrist watch are deleted in the weapon. The symbol shown on the right appears on the display. The weapon must now be placed out of your hand (backstrap switch not actuated).

Pressing any button of the wrist watch now returns you to the standard display.



INFO

As the weapon now has no wrist watch ID and no code, it cannot be used.

In order to be able to use the weapon again, it must be referenced to a wrist watch. See Chapter 4.4.5.4.

Weapon PIN entered incorrectly

If the weapon PIN is entered incorrectly, the symbol shown on the right appears on the display. In addition, the renewed input of the weapon PIN is barred for 10 minutes.

The weapon PIN can then be entered again.



Weapon PIN incorrect

INFO



The ten minute input lockout is a safety function and cannot be bypassed, for example by removing and reinstalling the battery. If the battery is removed during the 10 minutes, the timer starts again at 10 minutes when the battery is inserted.,

4.4.5.4 Referencing the weapon

During referencing of the weapon, the ID of the wrist watch and the code are transmitted to the weapon and stored there. Referencing is necessary when the weapon has no stored wrist watch ID or code. This is the case, for example, after resetting the weapon.

Before delivery by the manufacturer, the weapon is referenced to the wrist watch supplied so that referencing is not necessary with a newly acquired weapon.

A precondition for referencing the weapon is that the weapon function of the wrist watch has been activated, i.e. the PIN of the wrist watch has been entered.

The function for referencing the weapon is called up via the weapon menu by holding the buttons TR and BR depressed for 3 seconds.

The weapon must then be held in your hand (backstrap switch actuated) in order to able to receive and save the ID and the code from the wrist watch.

DANGER!

Mortal danger!



As the PIN has already been entered beforehand, the weapon is immediately ready for use and firing after saving of the wrist watch ID and code!

> Observe the corresponding safety precautions for the handling of the armed weapon.

Starting situation: Wrist watch is activated (PIN entered), weapon is reset.



Weapon menu: Press BR 1x



Function "Reference weapon": Hold TR and BR depressed for 3 seconds.



Wrist watch is ready to transmit.



Hold the weapon in your hand (backstrap switch actuated).



Wrist watch ID and code are transmitted to the weapon and stored.



Back to standard display: Press any button.



Standard display appears.

4.4.6 Firmware update

The firmware of wrist watch and weapon can be updated using the USB tool available as an option. For the communication with the USB tool, the receiver in the wrist watch is activated manually. This menu is not terminated automatically. Press any button to return to the standard display. Starting situation is the standard display (see Chapter 4.4.1).



Activate receiver: Hold TL and BL depressed for 3 seconds.



Receiver ready.



Terminate waiting: Press any button.



Standard display appears.

INFO



Further information on the use of the USB tool and the procedure for the firmware update can be found in the documentation on the USB tool.

4.5 Preparing the weapon for use

4.5.1 Clean the barrel of the weapon

Before firing, the barrel must be cleaned to remove dirt, oil and residues. The slide of the weapon can be removed for cleaning (see <u>Chapter 5.2</u>).

Use commercially available cleansing agents for cleaning the barrel.

If necessary, install the slide again and carry out a function test as described in Chapter 4.1.2.

INFO



At very low temperatures, condensation can freeze on the weapon and impair the function.

Do not expose the weapon to warm and cold air in quick succession to avoid the formation of condensation.

4.5.2 Filling the magazine

DANGER!

Risk of injury!



If incorrectly handled, cartridges can pose serious hazards for the health of the user and for the proper function of the weapon.

> Observe the safety precautions for the handling of ammunition. See Chapter 2.2.

The magazine is design to hold max. 10 cartridges of calibre .22lr. Loading of the magazine can be simplified by also pulling back the slide.



Release and remove the magazine.



Grip the magazine, pull the slide at the same time when filling.



Insert the ammunition as shown, max. 10x calibre .22lr.



Push in the magazine completely.



4.5.3 Prepare the weapon for firing (load the weapon)

A precondition for the readiness for firing of the weapon is the correctly entered PIN in the wrist watch worn on the firing hand (see <u>Chapter 4.4.2.1</u>), and fully charged batteries installed in the weapon (see <u>Chapter 4.3.1</u>).

DANGER!

Mortal danger!



A weapon ready for firing represents a potential hazard to life and limb.

- > Observe the corresponding safety precautions for the handling of the armed weapon.
- > Load the weapon only immediately before firing.
- > Unload the weapon immediately after firing (see Chapter 4.6.6).



Hold the weapon with your firing hand, finger **not** on the trigger.



Grip the slide, pull back completely, ...



... release the slide, the slide moves forwards

DANGER!



Mortal danger! Weapon is loaded and cocked!

CAUTION!

Risk of injury!



During firing without cover, the slide is not fixed. This can result in damage to the weapon.

> Use the weapon only with fitted and locked cover (must engage noticeably when fitted).



4.6 Aiming and firing

4.6.1 The stance

CAUTION!

Risk of injury!



During firing, the slide moves back very quickly and can cause serious injuries to your hands.

Keep your hands out of the way of the slide.

We recommend two-handed firing for maximum accuracy.

Hold the weapon with your firing hand and support it with your other hand.

4.6.2 Aiming

The weapon has an ergonomically optimised gun sight based on "rear sight and front sight". The recess in the rear sight is trapezoidal to simplify centering of the front sight.

Focus the weapon over rear sight and front sight and aim along the middle of the upper edge of the front sight.



Hold the weapon firmly and aim at the target.

4.6.2.1 Aiming errors









Too low



4.6.3 Firing

Place your finger on the trigger only when you have aimed at the target!

Pull the trigger quickly (within 10 seconds) as far as it will go. The cartridge is ignited, the slide moves back, ejects the empty cartridge case and cocks the hammer. The slide moves forward again, transporting a new cartridge from the magazine into the chamber. The weapon is immediately ready for firing again.



Place your finger on the trigger.



Pull the trigger swiftly as far as it will go.

4.6.4 Uncock the weapon

DANGER!

Mortal danger!



A shot may be fired unintentionally during uncocking of the weapon.

> Always point the weapon towards a free area during uncocking.

Point the weapon towards a free area and hold the hammer with your thumb. Press the trigger and allow the hammer to move forwards slowly.

Before the next shot, either the hammer has to be cocked again by hand or you have to fire in DA mode. (When the trigger is pressed, the hammer is first cocked and then immediately uncocked.) The force needed to press the trigger increases in this case.



4.6.5 Reloading the weapon

DANGER!

Mortal danger!



The weapon is ready for firing after reloading.

- > Observe the corresponding safety precautions for the handling of the armed weapon.
- > Load the weapon only immediately before firing.
- ➤ Unload the weapon immediately after firing (see Chapter 4.6.6).

When the last cartridge in the magazine is fired, the slide moves back and remains in the rear position. The weapon is now free of ammunition.

The magazine can now be removed, reloaded and installed again as illustrated.



After the last shot: Slide remains back, chamber is empty.



Remove the magazine, reload and install.



Press the slide release lever, the slide moves forwards.

DANGER!



Mortal danger! Weapon is loaded and cocked!

4.6.6 Unloading remaining ammunition from weapon

CAUTION!

Risk of damage!



Dropped cartridges may be deformed and could jam in the barrel. Mechanical loading of the ignition charge can cause the cartridge to fire.

> Catch the cartridges in your hand during emptying of the magazine, do not allow them to drop onto the floor.

If there is still ammunition in the weapon after firing, the weapon has to be unloaded as illustrated. Empty the magazine before inserting again.



Release and remove the magazine.



Grip the slide, pull back completely, ...



... eject and collect the cartridge(s). Inspect the cartridge chamber - it must be empty!



Release the slide, press the trigger (uncock the weapon) and insert an empty magazine.



5 Cleaning

5.1 General notes on cleaning

Regular cleaning and care of the weapon enhances not only the appearance of the weapon, but also and more importantly the safety of the user.

- The service life is prolonged due to the reduced wear.
- The functional safety is assured.
- Hazards and accidents are avoided.

Therefore clean the weapon after every firing session and at intervals of 500 shots as described in the following chapters.

5.2 Dismantling the weapon

CAUTION!

Risk of damage and injury!



Improper handling during dismantling and assembly of the weapon can result in malfunctions and possibly even unserviceability of the weapon.

- > Strictly observe the instructions given during dismantling and assembly of the weapon.
- Dismantling of the weapon beyond the extent described here may only be carried out by authorised personnel.

5.2.1 Safety check

Before dismantling the weapon, carry out a safety check as described in <u>Chapter 4.1.1</u>. During the safety check, the magazine is released and removed.

5.2.2 Release the slide (pull off the cover)

In order to be able to remove the slide, the cover must first be released and pulled off.

To release the cover, press the metal strip under the barrel in front of the trigger upwards and pull the cover off the weapon from the front.



Release and pull off cover.

5.2.3 Remove slide

After pulling off the cover, the slide can now be removed as illustrated:



Pull the slide completely to the rear and lift out.



Remove the slide to the front over the barrel.



The weapon is dismantled.



5.3 Cleaning the weapon

CAUTION!

Risk of damage!



Use of the wrong cleaning agents and other materials can result in damage to the weapon.

- Use only weapon oil, commercially available cleaning agents and lint-free cleaning cloths without additives for cleaning the weapon.
- > Avoid the use of corrosive and aggressive media.
- Inspect the weapon first visually for damage.
- Clean soiled parts and surfaces of the weapon.
- Clean the inside of the barrel using suitable cleaning agents.
- Before storage only:
 Oil the outside and inside of the barrel lightly with weapon oil.
- Oil the inside, in particular the running surfaces, of the slide lightly with weapon oil.
- Oil the cleaned parts lightly with weapon oil.

5.4 Assembling the weapon



Push the recoil spring onto the barrel.



Push the slide over the spring and pull back over the barrel.



Pull the slide back as far as it will go and place onto the guide.



Push the slide forward in the guide.



Push on the cover until it engages.



Push in the magazine completely.



The weapon is assembled.

CAUTION!

Risk of injury!



During firing without cover, the slide is not fixed. This can result in damage to the weapon.

> Use the weapon only with fitted and locked cover (must engage noticeably when fitted).



6 Malfunctions and Remedies

This chapter describes possible malfunctions that may occur and corresponding remedial measures that the user can carry out himself.

If the malfunction cannot be remedied with the measures described here, please consult your dealer.

6.1 Mechanical faults

Malfunction	Cause	Remedial measure
The cartridge jams in the barrel.	Faulty ammunition.	Have the weapon repaired by a specialist.
Cartridge does not ignite.	Communication error.	See <u>Chapter 6.3</u> .
	Faulty ammunition.	Wait at least one minute!
		Unload the weapon (see <u>Chapter 4.6.6</u>).
		Do not use the cartridge with the failed ignition charge again!
	Weapon is heavily soiled.	Unload the weapon (see <u>Chapter</u> 4.6.6) and clean (see <u>Chapter 5.3</u>).
Cartridge case is not ejected.	Faulty ammunition.	Unload the weapon (see <u>Chapter</u>
		4.6.6).
		Use other ammunition.
	Cartridge case jams in the chamber.	Unload the weapon (see <u>Chapter</u>
	Reason: Cartridge case deformed or chamber soiled.	4.6.6), push the cartridge case out through the barrel.
		Clean chamber (see <u>Chapter 5.3</u>).
		Use other ammunition.
	Slide does not return far enough.	Unload the weapon (see <u>Chapter</u>
		4.6.6), carry out a function test (see
		<u>Chapter 4.1.2</u>), if necessary clean the chamber (see <u>Chapter 5.3</u>).
		Use other ammunition.
	Ejection mechanism damaged.	Have the weapon repaired by a
		specialist.

Malfunction	Cause	Remedial measure
Cartridge is not transported into the chamber.	Faulty ammunition.	Use other ammunition.
	Chamber soiled.	Unload the weapon (see <u>Chapter</u> 4.6.6), clean the chamber (see <u>Chapter 5.3</u>).
	Recoil spring defective.	Replace recoil spring.
	Magazine not inserted correctly.	Push in the magazine completely (must engage noticeably).
	Magazine damaged.	Replace magazine.
(Last) cartridge is not delivered from the magazine.	Magazine spring defective.	Have magazine repaired.
	Magazine damaged.	Replace magazine.
Slide does not re-	Faulty ammunition.	Use other ammunition.
main back after the last shot.	Magazine spring defective.	Have magazine repaired.
	Slide return too short.	Carry out function test (see <u>Chapter 4.1.2</u>) and clean chamber, if necessary (see <u>Chapter 5.3</u>). Use other ammunition.
	Slide release lever defective.	Have weapon repaired.
Slide does not close completely.	Faulty ammunition.	Use other ammunition.
	Weapon is heavily soiled.	Unload the weapon (see <u>Chapter 4.6.6</u>) and clean (see <u>Chapter 5.3</u>).
	Recoil spring defective.	Replace recoil spring.
Projectile strikes to the side of the target.	Faulty ammunition.	Use other ammunition.
	Gun sight maladjusted.	Adjust gun sight correctly (see Chapter 6.2).
Projectile strikes above or below the target.	Faulty ammunition.	Use other ammunition.
	Gun sight (front sight) damaged.	Replace front sight (see <u>Chapter</u> 6.2).

6.2 Change shot pattern

The shot pattern of the weapon can be changed both vertically (by using a different front sight size) and horizontally (by lateral adjustment of the front sight).

The front sight is held in the front sight mounting and can be moved sideways in the mounting to change the shot pattern horizontally.

After replacing the front sight, the horizontal shot pattern must always be readjusted.

6.2.1 Replacing the front sight (change shot pattern vertically)

- Unload the weapon (see Chapter 4.6.6).
- Remove the slide from the weapon (see Chapter 5.2).
- Remove the front sight mounting with front sight from the seat from the inside using the punch supplied.
- Push the front sight to the side out of the mounting.
- Push the new front sight into the mounting from the side.
- Press the front sight mounting with front sight into the seat from above until it noticeably engages.
- Install the slide on the weapon again (see Chapter 5.4).

6.2.2 Adjusting the front sight laterally (change shot pattern horizontally)

- Move the front sight using suitable tools to adjust the shot pattern.
- Check the shot pattern by aiming and firing as described in Chapter 4.6.

6.3 Electronic malfunctions

Malfunction	Cause	Remedial measure
LED display does not light up (backstrap switch actuated).	No or empty batteries in the weapon.	Install full batteries in the weapon (see <u>Chapter 4.3.1</u>).
LED display lights up red.	Weapon function of the wrist watch not activated.	Enter PIN at the wrist watch (see Chapter 4.4.2.1).
	Weapon is not synchronised with the wrist watch (the weapon symbol flashes after synchronisation).	Reference weapon (see <u>Chapter 4.4.5.4</u>), possibly test a different weapon (if you have access to several weapons).
	Wrist watch is not within range of the weapon.	Bring wrist watch and weapon into communication range.
LED display flashes red.	System times of wrist watch and weapon not synchronised (symbol "no Sync" on display).	Synchronise system times of wrist watch and weapon (see <u>Chapter 4.4.5.1</u>).
LED display lights up blue.	No magazine inserted.	Insert magazine.
	Magazine not inserted correctly.	Push in the magazine completely (must engage noticeably).
	Magazine damaged.	Replace magazine.
LED display lights up weakly.	Weapon battery is empty.	Install full batteries in the weapon (see <u>Chapter 4.3.1</u>).
	Backstrap/optical waveguide soiled.	Clean backstrap/optical waveguide.
	Optical waveguide defective.	Replace optical waveguide.
No message on display of the wrist watch.	No battery inserted or battery empty.	Install full battery in the wrist watch (see <u>Chapter 4.3.2</u>).

7 Storage

7.1 Corrosion protection of the weapon

Corrosion protection of the weapon is only necessary if storage for at least 6 months is planned. The corrosion protection guards the weapon against external influences and its functional safety is maintained.

If the weapon is not to be stored for longer than 6 months, cleaning as described in <u>Chapter 5</u> is sufficient.

CAUTION!

Risk of damage!



Use of the wrong cleaning agents and other materials can result in damage to the weapon.

- Use only weapon oil, commercially available cleaning agents and lint-free cleaning cloths without additives for cleaning the weapon.
- Avoid the use of corrosive and aggressive media.
- Carry out a safety check as described in Chapter 4.1.1.
- Inspect the weapon first visually for damage.
- Dismantle the weapon as described in Chapter 5.2.
- Clean soiled parts and surfaces of the weapon using a cleaning cloth.
- · Remove the batteries.
- Oil the cleaned parts lightly with weapon oil.
- · Clean the barrel of the weapon.
- Then grease the inside of the barrel.
- · Close off both ends of the barrel.
- Oil the outside of the barrel lightly with weapon oil.
- Oil the inside, in particular the running surfaces, of the slide lightly with weapon oil.
- Oil the cleaned parts lightly with weapon oil.
- · Clean the magazine and feeder with a cleaning cloth and oil the outside of the magazine lightly.



7.2 Packing the weapon

- Unload the weapon as described in Chapter 4.6.6.
- Empty the magazine.
- Pack the weapon in the corresponding transport container.

7.3 Storage of the weapon





The national regulations on the storage of weapons and ammunition must be observed and obeyed.

- Remove the batteries
- If the weapon is not to be stored for longer than 6 months, cleaning as described in <u>Chapter 5</u> must be carried out.
- If the weapon is expected to be stored for longer than 6 months, the weapon must be protected against corrosion before storage (see <u>Chapter 7.1</u>).
- Pack the weapon (see Chapter 7.2).
- Always store the unloaded weapon and the ammunition separately from one another in closed rooms where they are protected against the influence of the weather, burglary and fire.
- During storage of more than 1 year: Check the grease packing of the barrel once a year.

8 Transport/Shipment

8.1 Preparing the weapon for transport

INFO



The national regulations on the transport of weapons and ammunition must be observed and obeyed.

- Unload the weapon (see Chapter 4.6.6).
- Pack the weapon (see Chapter 7.2).

8.2 Shipping the weapon

INFO



The national regulations on the shipment of weapons and ammunition must be observed and obeyed.

- Unload the weapon (see Chapter 4.6.6).
- Pack the weapon (see Chapter 7.2).

9 Disposal

INFO



The national regulations on the disposal of weapons, ammunition and batteries must be observed and obeyed.

The batteries, in particular, contain hazardous substances and must not be disposed of in the domestic refuse.

The weapon must be disposed of via the weapon dealer or the manufacturer.

For disposal by the manufacturer, please proceed as follows:

- Pack the weapon ready for shipment (see Chapter 8.2).
- Send the weapon with the following information to Armatix GmbH (address, see rear cover of this
 operating manual):
 - Your name
 - Your address
 - Your telephone number
 - Product designation and weapon number
 - Order to the manufacturer to dispose of the weapon.

10 Spare Parts and Repairs

DANGER!

Risk of injury!



The iP1 SmartSystem from Armatix is a high-tech product and is manufactured with the highest precision. Errors during repair can lead to serious injury to persons and serious damage to the weapon and to dangerous malfunctions.

> For repairs going beyond the replacement of the parts to be removed for cleaning, the weapon must be placed in the hands of a dealer or sent to the manufacturer.

The following spare parts can be sourced from the dealer and replaced independently by the user:

- Backstraps in the sizes S, M and L
- · Front sights in four different sizes
- Front sight mounting
- Magazine
- Cover
- Batteries
- · Wrist watch

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