



#interactivetargets

# User Manual

## SQ Fire



[sportquantum.com](https://sportquantum.com)

Sanja Vukasinovic

2019 European Games in women's 50-meter rifle three positions

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# Preface





The SQ Fire electronic target is engineered for rimfire competitions in 5.6mm (22 Long Rifle) at a distance of 50m, 25yds, and 20yds. This target assesses the impact point on a durable armored steel impact plate, specifically designed to capture both bullets and fragments through an integrated debris collection system.

It is operated through the SQ Touch tablet. The system delivers real-time scoring with precision to the nearest tenth of a point. In its standard configuration, the SQ Fire interactive target and the SQ Touch tablet are linked via an Ethernet cable, although Wi-Fi connectivity is also an option.

### Technology

SPORT QUANTUM technology precisely detects impacts through the analysis of shock waves. This pioneering innovation has resulted in four international technology patents, allowing it to meet the performance standards mandated by ISSF and Olympic disciplines, including an accuracy surpassing one-tenth of a point.

### For enhancements

Because progress relies on performance measurement, SQ Fire enables shooters of all skill levels, from novices to competitors, to assess every facet of their shooting training, monitor their advancement over time, and employ effective training methodologies.

### Delight in and disseminate.

Whether you are an enthusiast or a competitor, SPORT QUANTUM technology provides a groundbreaking approach to precision shooting training. Shooters can access a comprehensive library of training exercises centered on methodology, accuracy, and proper rhythm.

### Competition

The SQ Fire target has received certification from the French Shooting Federation, confirming its compliance with international standards for sport shooting. Consequently, the French Shooting Federation permits the use of this equipment nationwide for all 5.6 mm (22 Long Rifle) competitions conducted at a distance of 50m, 25yds, and 20yds

# Certificate of Approval from the French Shooting Federation

**DATE:** January 23, 2024

**AUDIENCE:** Jean-Louis GAYAUDON (circa B7799)

**DESCRIPTION:** Following audits,

**SQ Fire electronic targeting system**

developed and marketed by the company

**SPORTS QUANTUM**

It is confirmed to adhere to international regulations for sport shooting.  
The French Shooting Federation thus permits the use of this equipment on  
national territory for 50 m shooting disciplines.



A handwritten signature in blue ink, which appears to read "Baczyk".

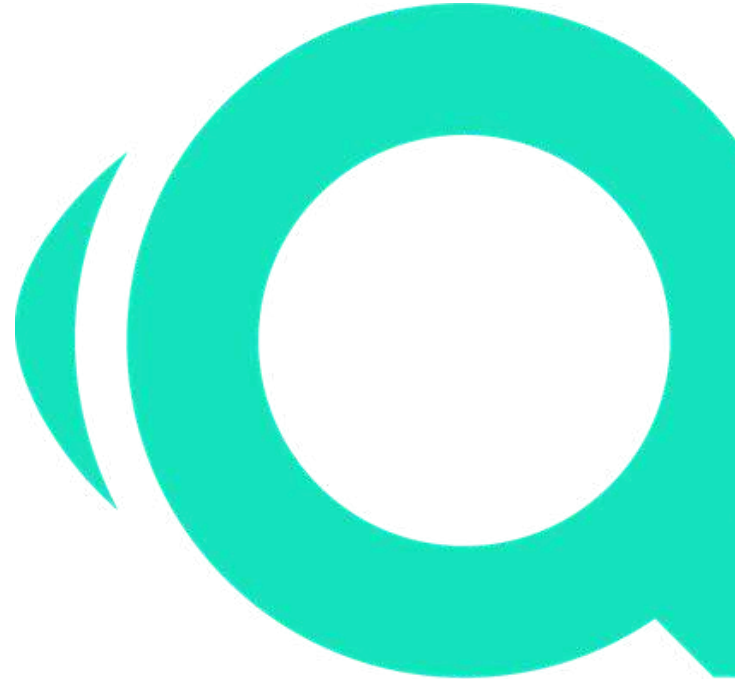


Michel BACZYK - President of the French Shooting Federation

# Application utilization and functionalities



# Launching and configuring the application



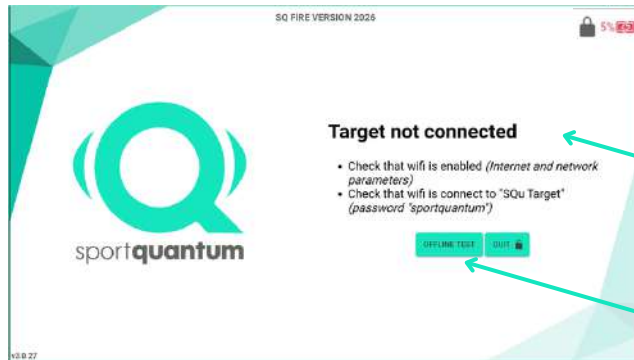


# Launch the application and establish a connection with the target.

If the application does not launch automatically upon starting the SQ Touch tablet, please select the "SPORT QUANTUM APP" icon. The application should then connect to the target automatically.

If you encounter this page: (device not connected)

- When utilizing a wired connection, ensure that the cable is firmly connected to both the SQ Touch and SQ Fire devices.
- If you are utilizing Wi-Fi, please consult page 53 of this manual.

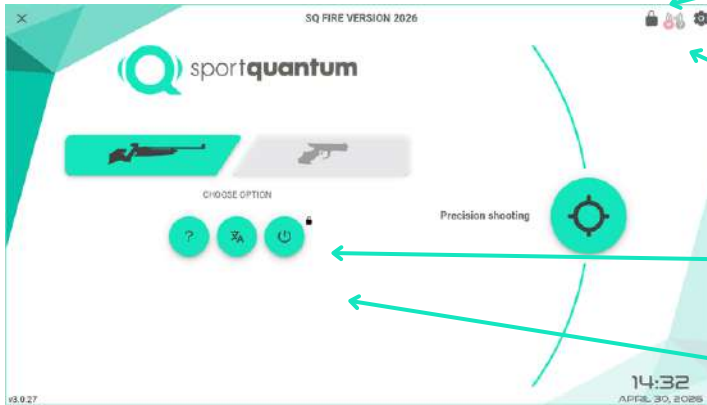


Battery charge indicator / battery lifespan in percentage

Your SQ Touch is now linked to your SQ Fire target, which is fully operational and prepared to receive your shots.

Click the "ENTER" button to commence shooting.

# Application homepage



This application is, by default, always in a locked state.



Configuring Applications and Targets



Destination connectivity status  
(green = operational; red = connection lost)



Helpful resources/Additional details and language options



Deactivate your target.





- Click to  access the target user's tablet settings page and obtain system information. You have access to four menus, the specifics of which are outlined in the subsequent pages of this manual.



TABLET SQ Touch



DEVICE

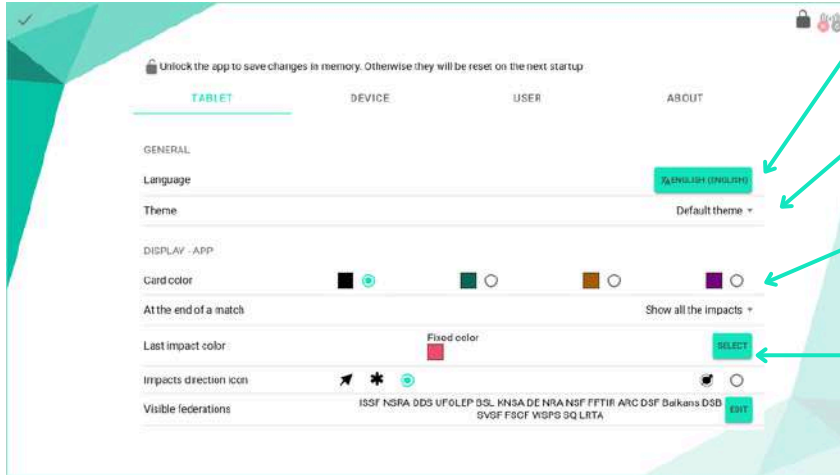


USER



ABOUT THE WEBSITE

- Click  to access the TABLET settings page.

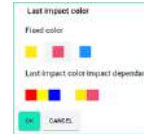


Select your preferred language (11 options). You must restart the application for the changes to be applied. This indicates that the application will restart, leading to the loss of all your data (interventions, etc.).

light (white background) and dark (black background) SQ Touch mode



Modify the display color settings on your SQ Touch tablet.



Last Impact Color: A fixed color or the last impact color determined by the score.

  To preserve your modifications, please unlock the application. Failure to do so will result in their automatic deletion upon your next restart.



Modified hue



Final impact hue determined by score

# sportquantum **Tablet configuration (2/2)**

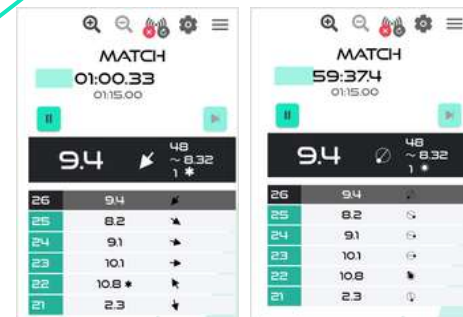
- Click  to access the TABLET settings page.



-  To preserve your modifications, please unlock the application.

Failure to do so will result in their automatic deletion upon your next restart.

- Impact Direction Icon



- Select your visibility preferences.

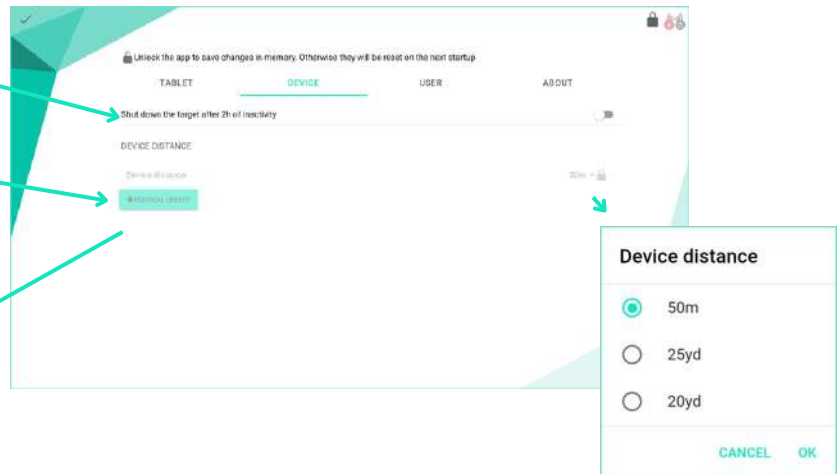
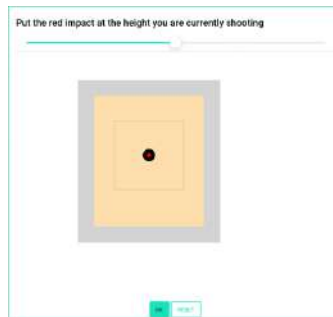


# sportquantum **Target configurations**

- Click  to access the TARGET application and its configuration page.

Wallpaper: If the target is not struck within two hours, it will automatically enter standby mode; a brief tap on the screen will reactivate it.

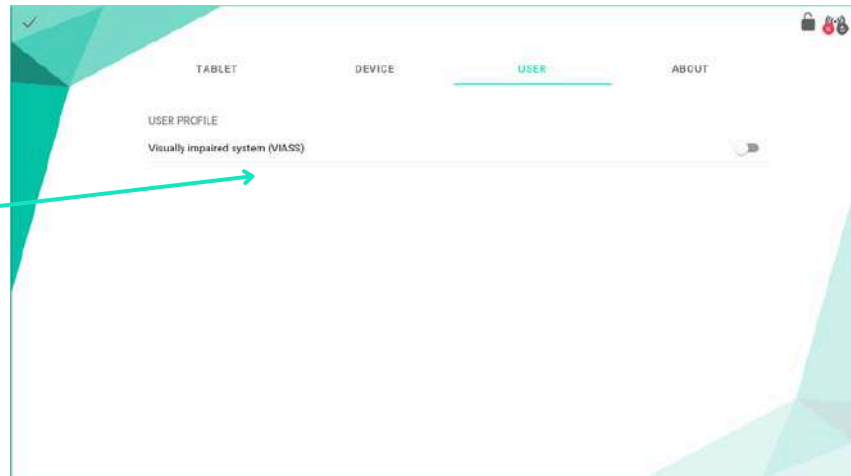
Select a target position (shooting distance).





 To preserve your modifications, please unlock the application.  
Failure to do so will result in their automatic deletion upon your next restart.



- Click  to reveal the user settings interface.

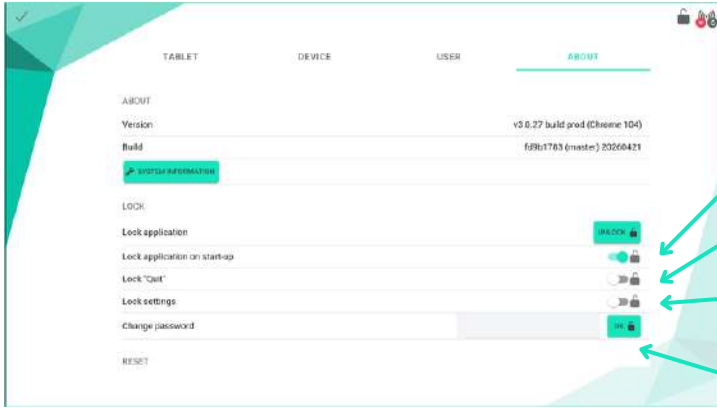


 VIASS – An audio system tailored for individuals who are visually impaired or blind, intended for use alongside the SQ Fire target.

 To preserve your modifications, please unlock the application. Failure to do so will result in their automatic deletion upon your next restart.



# Settings Information (1/2)



Secure the default application. All protected actions and configurations will necessitate a password for access.

Lock the "Exit" button. The user will be unable to exit the application without a password.

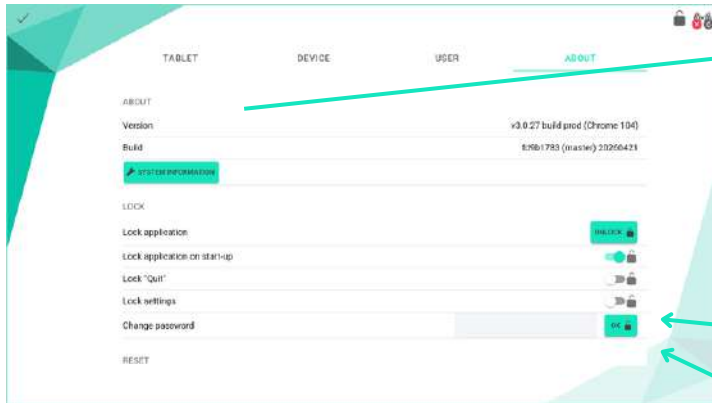
Lock "Settings." The user will be unable to access the target and application settings without a password.

Update the current padlock password. The default password is "1896".

# SPORTQUANTUM Settings Information (2/2)



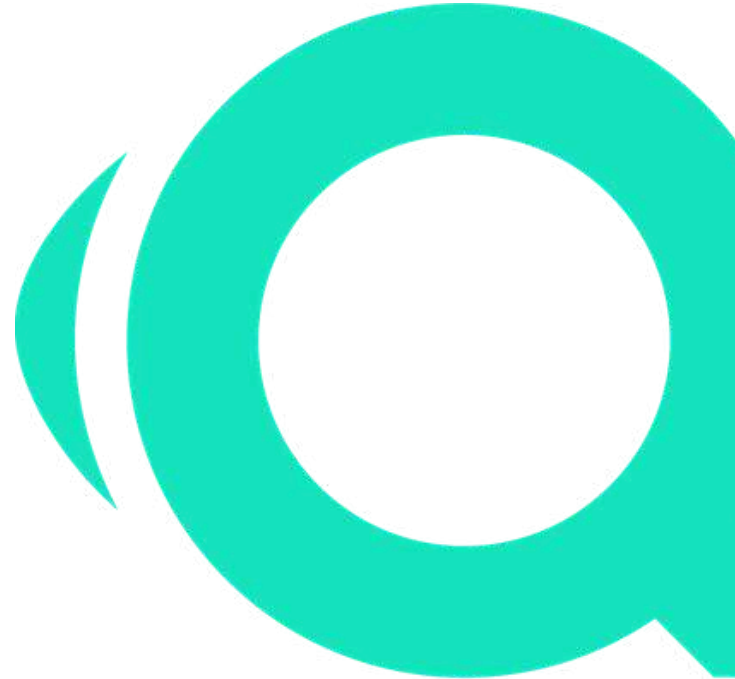
Access to system information may be requested by SPORT QUANTUM technical support.

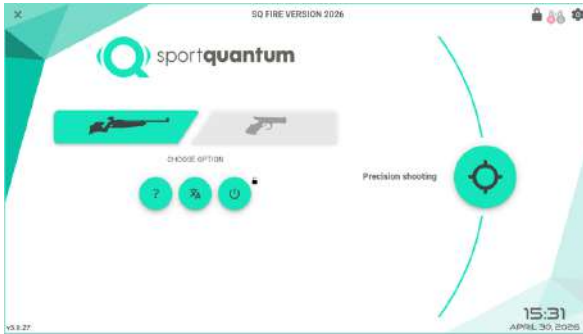



Reset all settings to factory defaults, including login configurations.

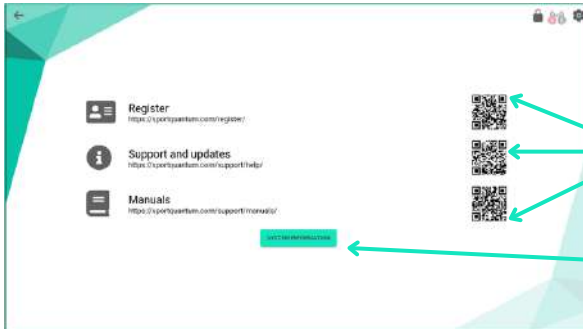
Disable kiosk mode. The operating system is set to activate kiosk mode by default. An administrator can re-enable it.

# Application utilized and objective





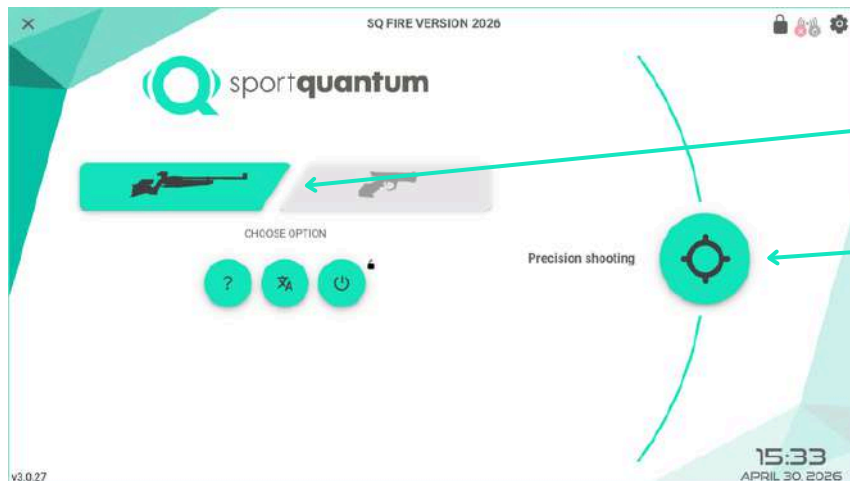
Valuable assets  
Clicking on  the links will direct you to the valuable resources provided below.



To obtain the most recent documents and information on the SPORT QUANTUM website, please scan the QR codes using your mobile device.

Access to system information is available. This information may be requested through the SPORT QUANTUM helpline.

# Selection of fields and activities.



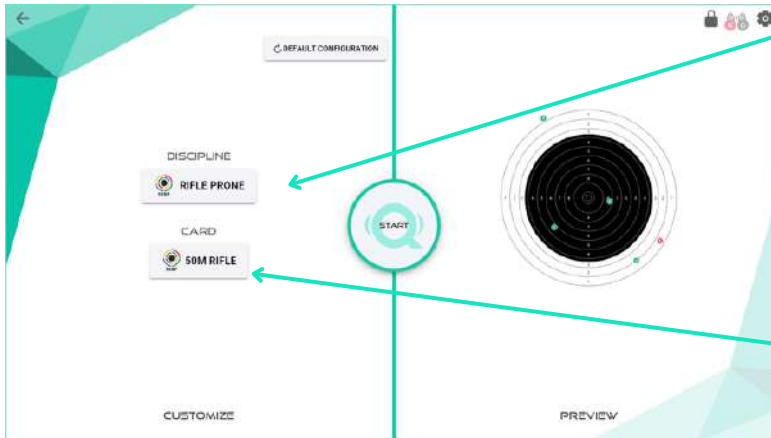
Select your discipline: rifle or pistol. You may modify your choice at any time by returning to the main menu.

Then select your activity: Precision shooting.

# Precision Shooting



# Choose the preferred visual element in two stages.



## Step One: Self-Discipline

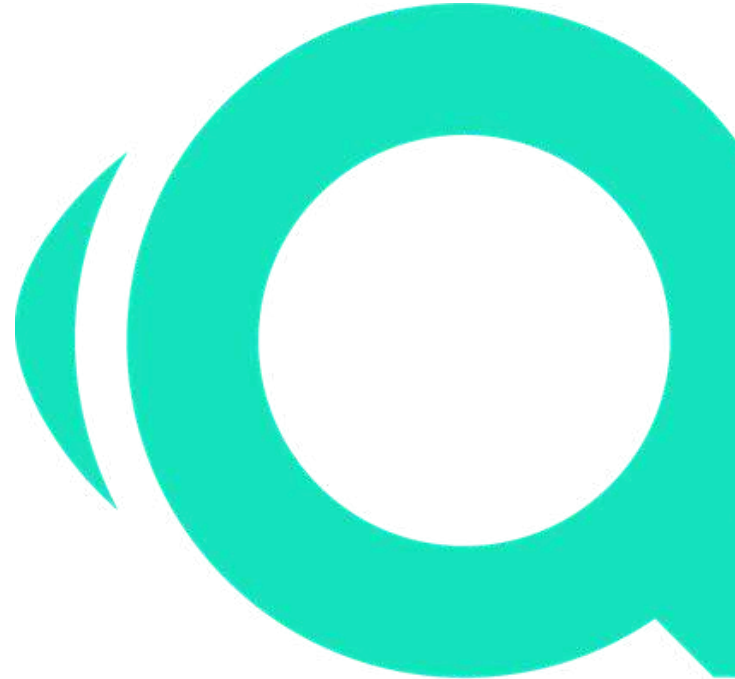
Select: Training / Challenge, followed by the relevant settings.

Understood. Please provide the text you would like me to update.  
Complimentary Shooting Pyramid of Contracts  
Longest sequence

## Step two: selecting a cardboard

Select a visual card design from recognized national or international federations.

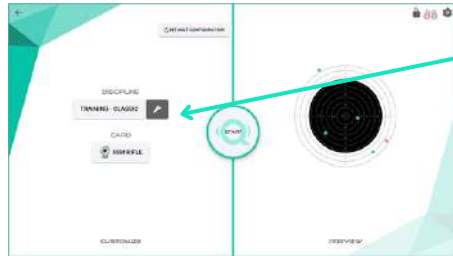
# Step One: Preparation for Training or Competition



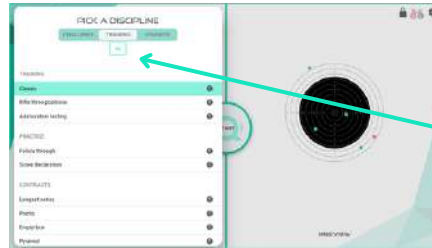


sportquantum

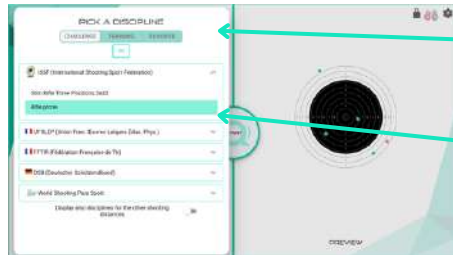
# Discipline selection: Training or competition



Select a discipline: Training / Challenge



Mode (gray cursor) TRAINING

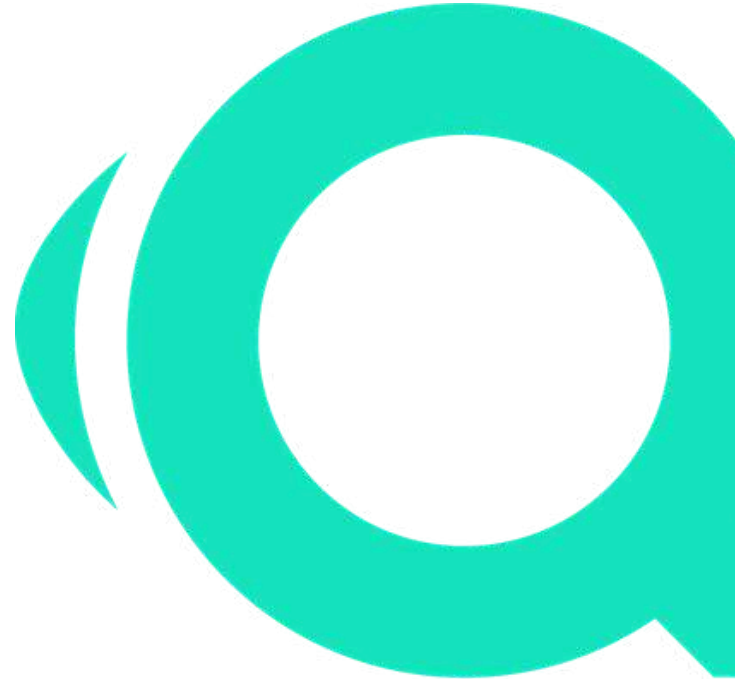


Mode (gray cursor) CHALLENGE

Select your discipline

# Initial phase: Training

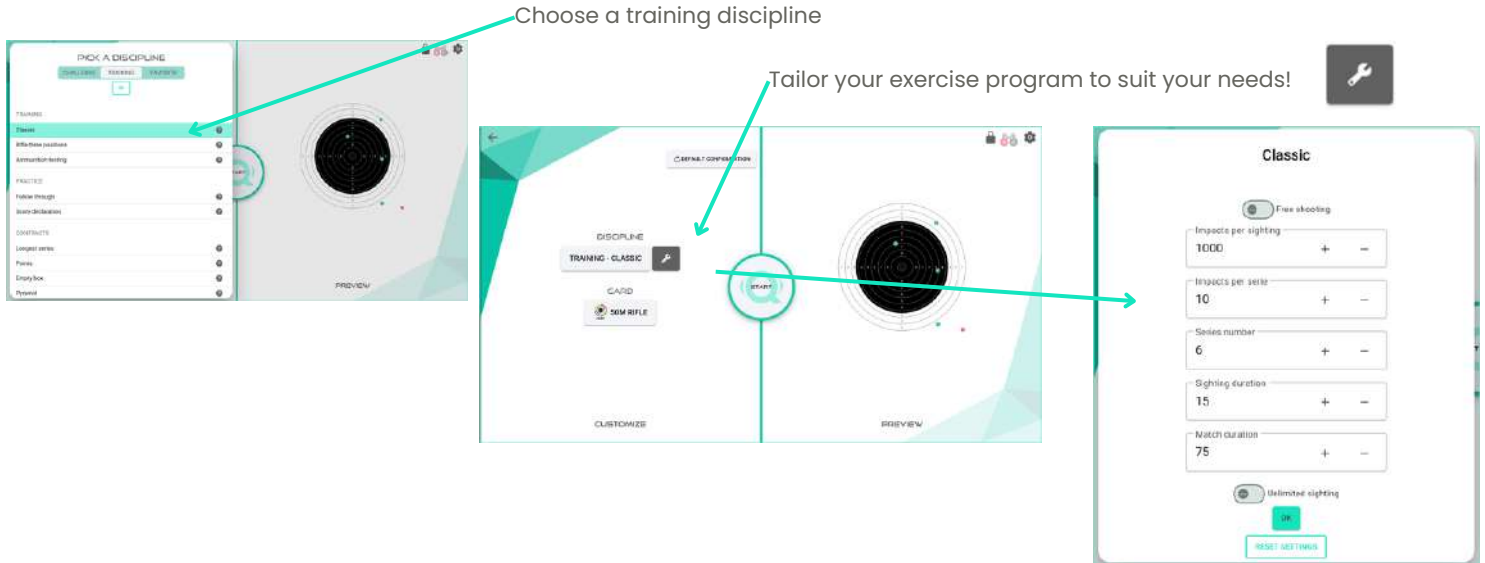
- Complimentary shooting
- Contracts



# Contract discipline selection - Unrestricted shooting

Choose a training discipline

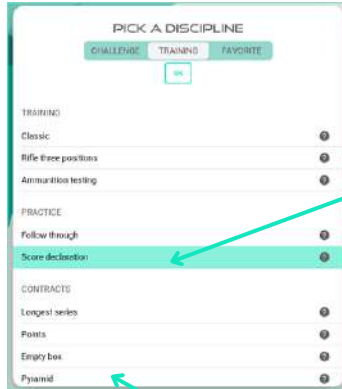
Tailor your exercise program to suit your needs!



The interface consists of three main screens:

- PICK A DISCIPLINE:** A screen with a list of disciplines on the left and a target preview on the right. The 'Classic' discipline is highlighted.
- TRAINING - CLASSIC:** A screen showing the selected discipline and a 'CUSTOMIZE' button. A target preview is also visible.
- Classic:** A screen with various settings for the 'Classic' discipline, including 'Impacts per sighting', 'Impacts per series', 'Series number', 'Sighting duration', and 'Match duration'. There are also toggle switches for 'Fire shooting' and 'Unlimited sighting'.

# Contract discipline selection - Unrestricted shooting



## Score declaration

The goal of this exercise is to help you to better analyse your technical during a shot. The principle is that between every shot, a page appears and ask you to estimate where you think the shot will arrive. After that, the real shot is displayed on the tablet and you can compare with your estimation. Thanks to this exercise, you will more focus on what you feel during the shot, to analyse it and improve your technical.

OK

Contract Objective – Key Aspects Achieve 5 or 10 points with the minimum number of shots. Based on the selected level, each shot will either award points or incur a penalty.

## Contract target - Points

Reach 5 or 10 points with as few shots as possible. Depending on the chosen level, each shot will give you points... or penalties! Hard

| Easy        | Medium     | Easy       | Points |
|-------------|------------|------------|--------|
| 10.9 - 10.4 | 10.9 - 9.4 | 10.9 - 8.4 | 2      |
| 10.3 - 10.0 | 9.3 - 9.0  | 8.3 - 8.0  | 1      |
| 9.9 - 9.4   | 8.9 - 8.4  | 7.9 - 7.4  | 0      |
| 9.3 - 9.0   | 8.3 - 8.0  | 7.3 - 7.0  | -1     |
| 8.9 - 0     |            |            |        |

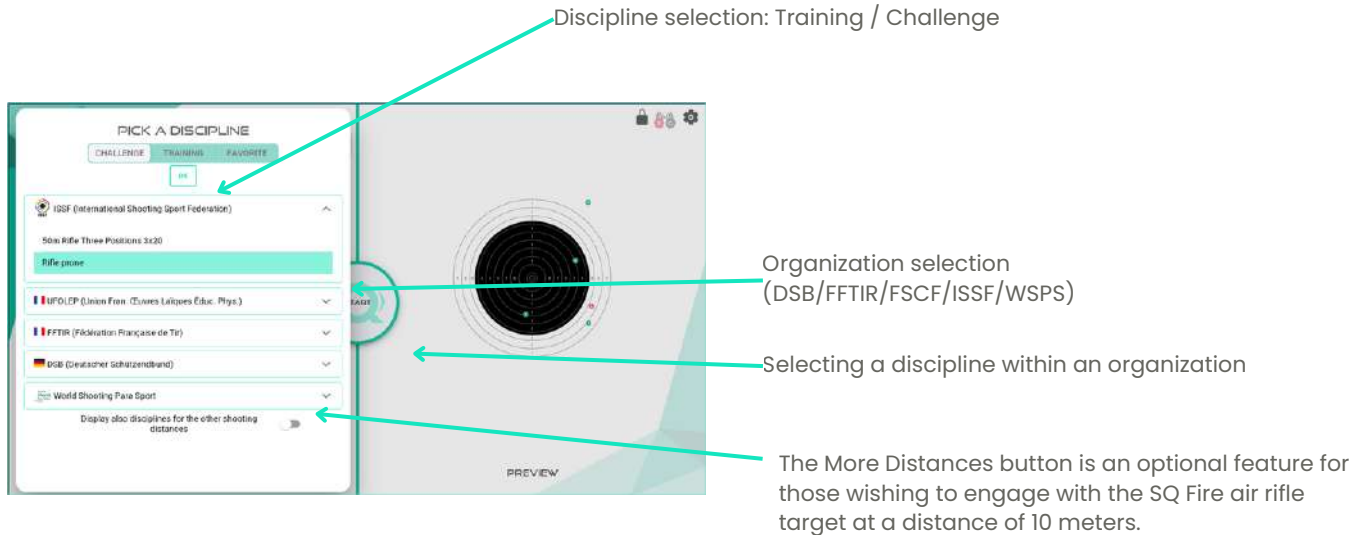
OK

# Step One: Challenge

- **FFTIR**
- **FSCF**
- **ISSF**
- **DSB**
- **WSPS**



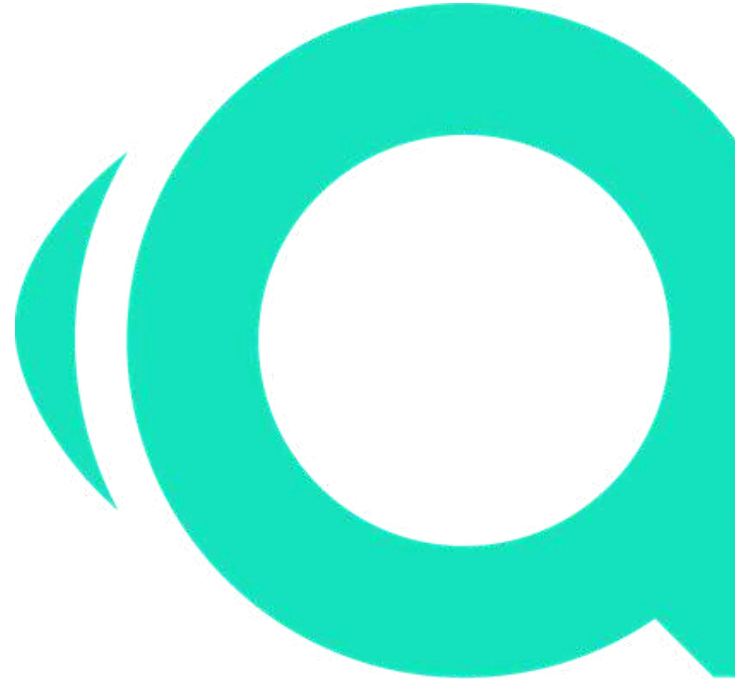
# Selection Discipline: Challenge



The screenshot shows a web interface titled "PICK A DISCIPLINE" with three tabs: "CHALLENGE", "TRAINING", and "FAVORITE". The "CHALLENGE" tab is active. Below the tabs, there are three buttons: "DIS", "TRAINING", and "FAVORITE". A list of organizations is displayed, including ISSF (International Shooting Sport Federation), DSB (Deutscher Schützenbund), and World Shooting Para Sport. A "More Distances" button is located at the bottom of the list. To the right of the list is a target graphic. The interface is annotated with four callouts:

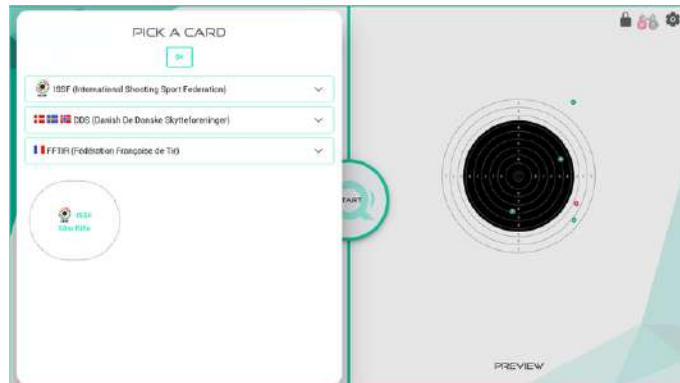
- Discipline selection: Training / Challenge
- Organization selection (DSB/FFTIR/FSCF/ISSF/WSPS)
- Selecting a discipline within an organization
- The More Distances button is an optional feature for those wishing to engage with the SQ Fire air rifle target at a distance of 10 meters.

# Step Two: Configuration shooting card

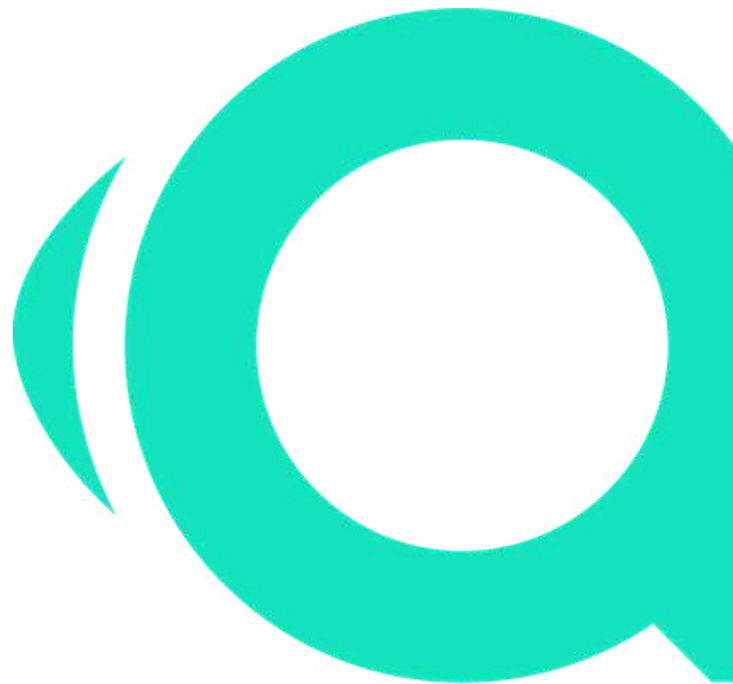


# Shooting card selection

Cardboard selection process



# End of session



# End of session

**Annotations:**

- Overall score
- Average impact score
- Total number of flies
- By selecting a series, you can examine the specific impacts associated with it.
- Number of flies in succession
- Activate the zoom feature.
- Two options: Remaining time / Elapsed time (click on the time to toggle between the two options)
- View settings
- Current sequence Current step (Attempts/Match/Attack/Attention/Shooting/Conclusion)
- Total duration of the present phase (Training / Match)
- Average impact score for this series Understood. Please provide the text you would like me to update.
- Most recent impact value
- Number of flies in the current series: 18

**App Interface Data:**

**Session Summary:**

- Overall score: 620.8
- Remaining time: 10:35
- Elapsed time: 39:39
- Series list:
 

|   |    |       |   |   |
|---|----|-------|---|---|
| 1 | 10 | 102.7 | 5 | * |
| 2 | 10 | 103.6 | 7 | * |
| 3 | 10 | 103.3 | 6 | * |
| 4 | 9  | 102.5 | 5 | * |
| 5 | 10 | 104.6 | 8 | * |
| 6 | 10 | 104.1 | 8 | * |

**Target View:**

RIFLE PRONE

Target diagram showing impact distribution.

**Series Detail (Series 6):**

|    |     |   |   |
|----|-----|---|---|
| 50 | 104 | * | ↔ |
| 59 | 103 | * | ↔ |
| 58 | 104 | * | ↔ |
| 57 | 106 | * | ↔ |
| 56 | 107 | * | ↔ |
| 55 | 108 | * | ↔ |
| 54 | 102 | * | ↔ |
| 53 | 105 | * | ↔ |
| 52 | 99  | * | ↔ |
| 51 | 103 | * | ↔ |
| 50 | 104 | * | ↔ |
| 49 | 109 | * | ↔ |
| 48 | 108 | * | ↔ |
| 47 | 103 | * | ↔ |
| 46 | 103 | * | ↔ |

**Match Summary:**

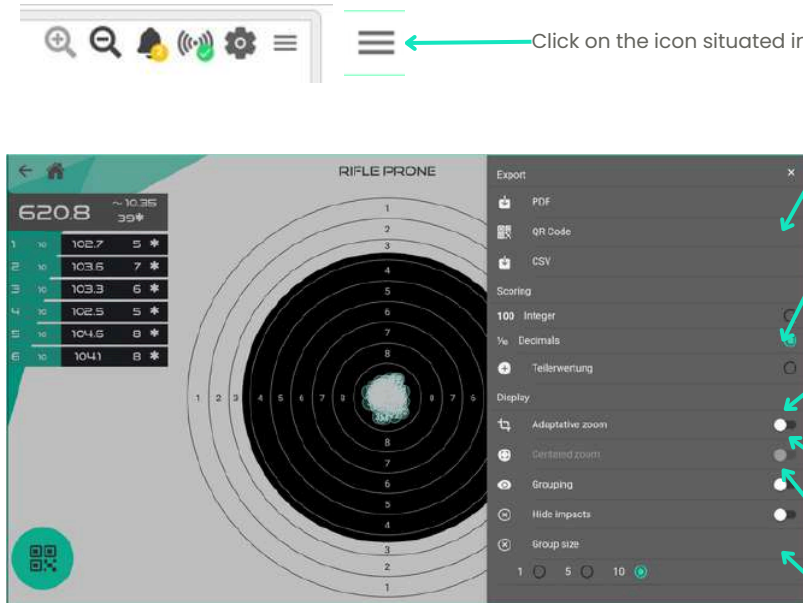
- Match time: 48:07.1
- Phase duration: 50:00.0
- Current score: 10.4
- Series list:
 

|    |     |   |   |
|----|-----|---|---|
| 50 | 104 | * | ↔ |
| 59 | 103 | * | ↔ |
| 58 | 104 | * | ↔ |
| 57 | 106 | * | ↔ |
| 56 | 107 | * | ↔ |
| 55 | 108 | * | ↔ |
| 54 | 102 | * | ↔ |
| 53 | 105 | * | ↔ |
| 52 | 99  | * | ↔ |
| 51 | 103 | * | ↔ |
| 50 | 104 | * | ↔ |
| 49 | 109 | * | ↔ |
| 48 | 108 | * | ↔ |
| 47 | 103 | * | ↔ |
| 46 | 103 | * | ↔ |

**Zoomed Series Detail (Series 6):**

- Score: 10.7
- Average impact score: 103.7
- Number of flies in current series: 18

# Configure the display of impact and scores.



Click on the icon situated in the upper right corner of SQ Touch.

Score display format (whole numbers, decimals, fractions)

Zoom mode (adaptive for impacts, centered to maintain the target in the middle)

If Clustering is selected in the display options, the red clustering circle represents the average variance of the current impact series.  
The X, Y, and  $\phi$  values denote the coordinates of the center and the diameter of this grouping circle.

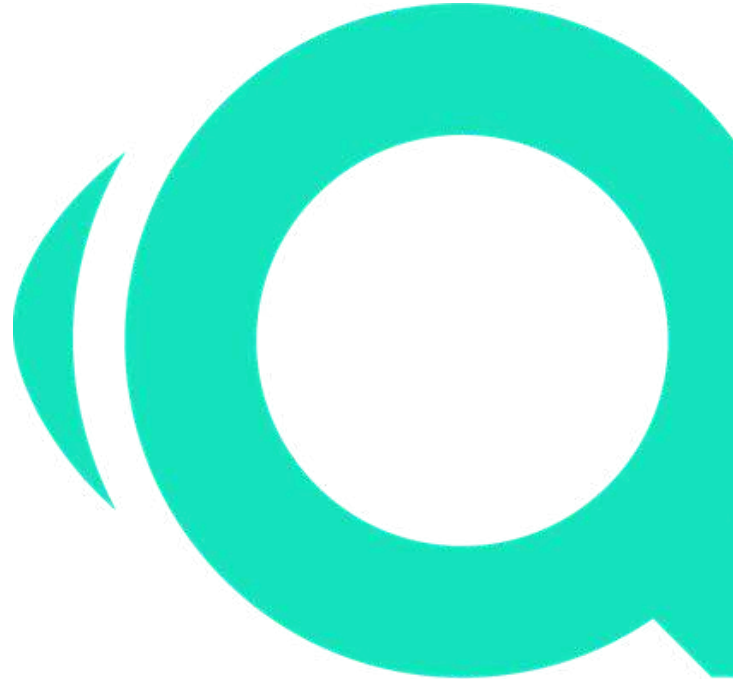
Time: stopwatch for every beat

Conceal the effects

Demonstrate effects in increments of 1, 5, or 10.

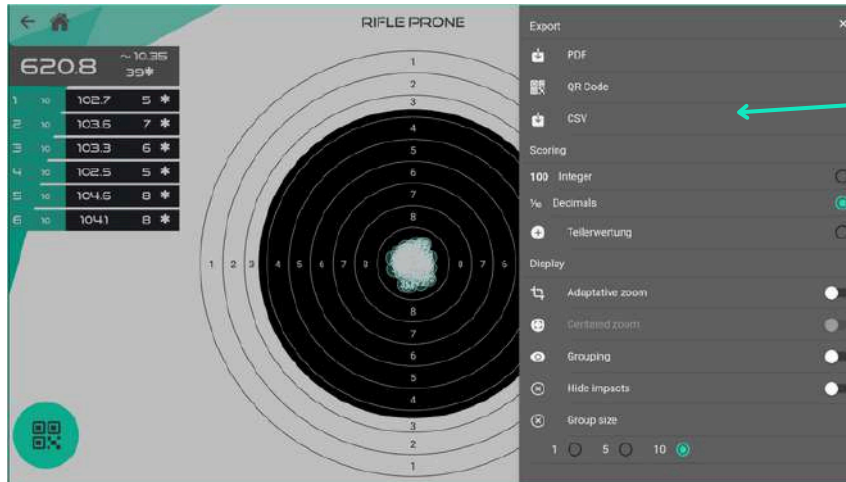
|   | 10    | Score | Star |
|---|-------|-------|------|
| 1 | 102.7 | 5     | *    |
| 2 | 103.6 | 7     | *    |
| 3 | 103.3 | 6     | *    |
| 4 | 102.5 | 5     | *    |
| 5 | 104.6 | 8     | *    |
| 6 | 104.1 | 8     | *    |

# Export your data



# Preserve your results (scores)

Select this symbol 



The screenshot shows the SQ Touch application interface. On the left, there is a table of scores for a rifle prone target. The table has columns for shot number, distance, score, and a star icon. The total score is 620.8. In the center, there is a target diagram with concentric rings and a central bullseye. On the right, there is an 'Export' menu with options for PDF, QR Code, and CSV. Below the export options are settings for Scoring (Integer, Decimals, Tellerwertung) and Display (Adaptive zoom, Gestured zoom, Grouping, Hide impacts, Group size).

| Shot | Distance | Score | Star |
|------|----------|-------|------|
| 1    | 102.7    | 5     | *    |
| 2    | 103.6    | 7     | *    |
| 3    | 103.3    | 6     | *    |
| 4    | 102.5    | 5     | *    |
| 5    | 104.6    | 8     | *    |
| 6    | 104.1    | 8     | *    |

Click on "PDF" or "CSV" to export the data to SQ Touch.

# Save your results as a PDF or CSV file.

## EXPORT PDF

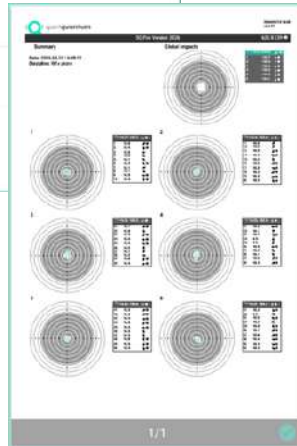
**NOTES**  
Enter your comments...

Print in black & white

Copy on the USB key

USB key is missing ? Try to unplug it and plug it again

**EXPORT** CANCEL



Kindly input your notes or comments and select EXPORT.

Click the PDF icon.

The file will be stored in the “Downloads” directory on the SQ Touch tablet. You may specify a file name and save it accordingly.

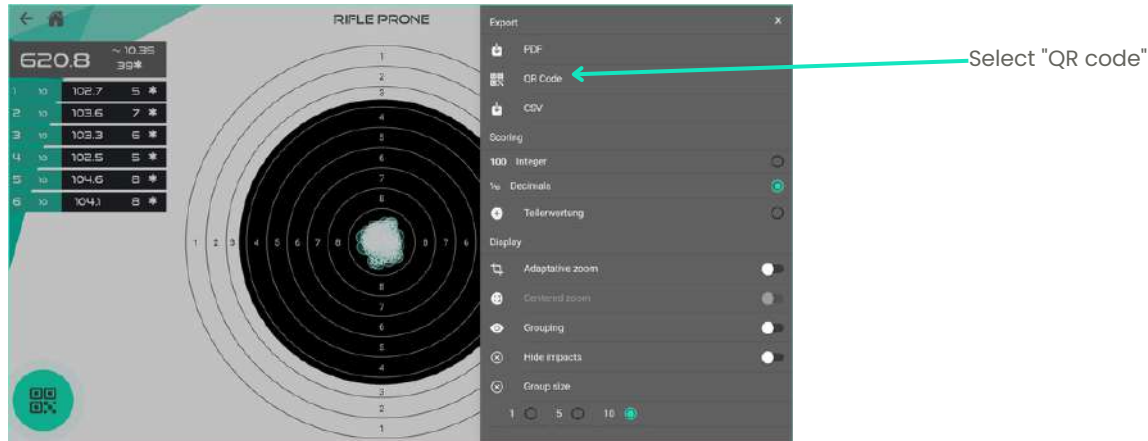
Exporting and copying to a USB drive occurs outside the application or by connecting SQ Touch to a computer.

If your objective pertains to SynQro, you may obtain your data and results directly from your supervisor.

## Export: QR Code Generator

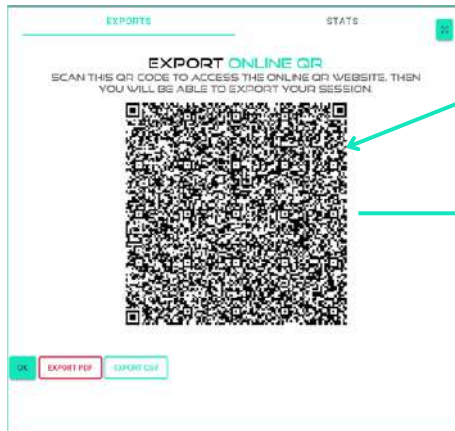
An efficient method to transfer your photography results directly to your smartphone utilizing the QR code generator.

This method streamlines the process in comparison to exporting PDF and CSV files, particularly in kiosk mode.

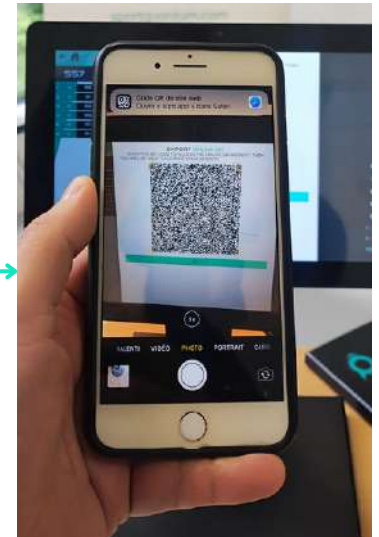


## Export: QR code generator

- Launch the integrated camera application on your smartphone or tablet.
- Aim the camera at the QR code.
- Click the link in the banner displayed on your phone or tablet.

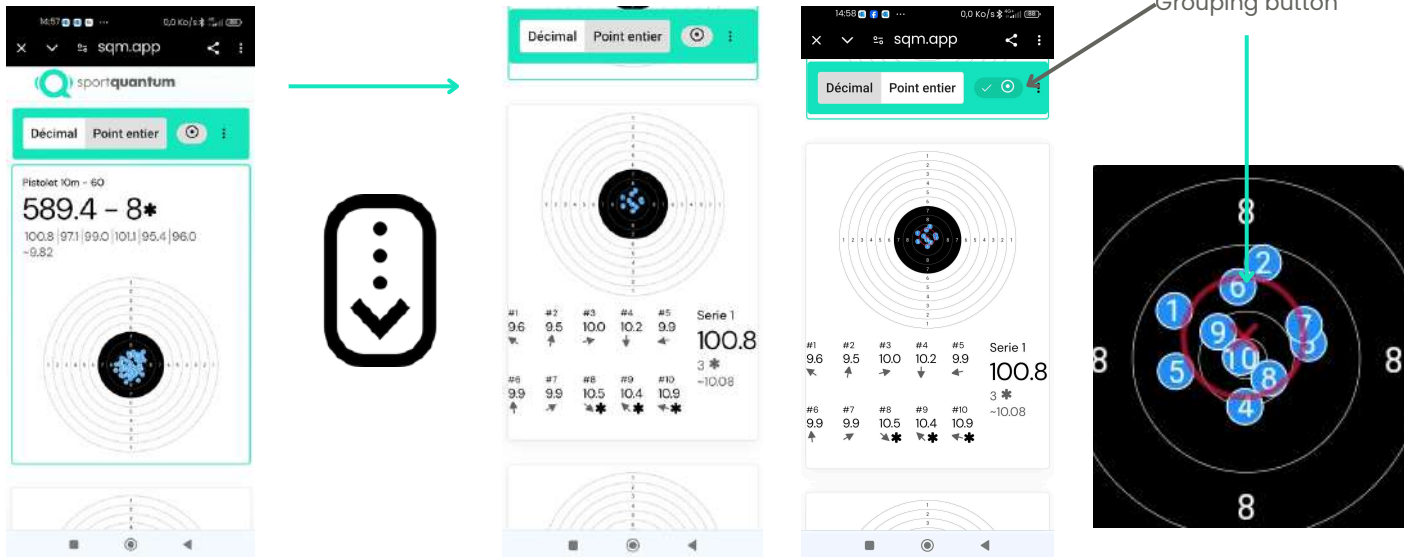


Select "QR code"



# Online Monitoring Report

- You will have the capability to analyze all your results on your phone.

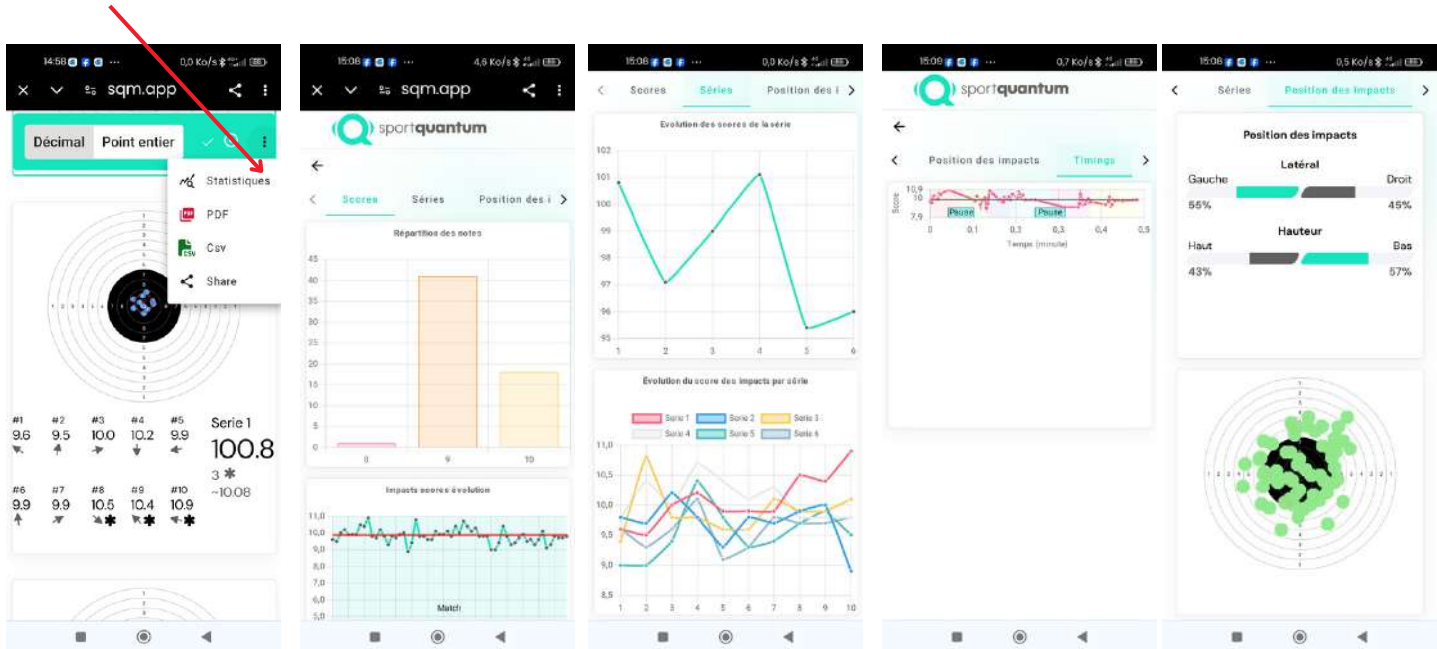


Grouping button

| #1  | #2  | #3   | #4   | #5   | Serie 1 |
|-----|-----|------|------|------|---------|
| 9.6 | 9.5 | 10.0 | 10.2 | 9.9  | 100.8   |
| 9.9 | 9.9 | 10.5 | 10.4 | 10.9 | -10.08  |

| #1  | #2  | #3   | #4   | #5   | Serie 1 |
|-----|-----|------|------|------|---------|
| 9.6 | 9.5 | 10.0 | 10.2 | 9.9  | 100.8   |
| 9.9 | 9.9 | 10.5 | 10.4 | 10.9 | -10.08  |

You will have the ability to view statistics on the dashboard via your phone.





You can effortlessly create a PDF or CSV file and transmit it via email.

Additionally, sharing on social media is a straightforward process!



# Technical specifications



## SQ Fire – Summary

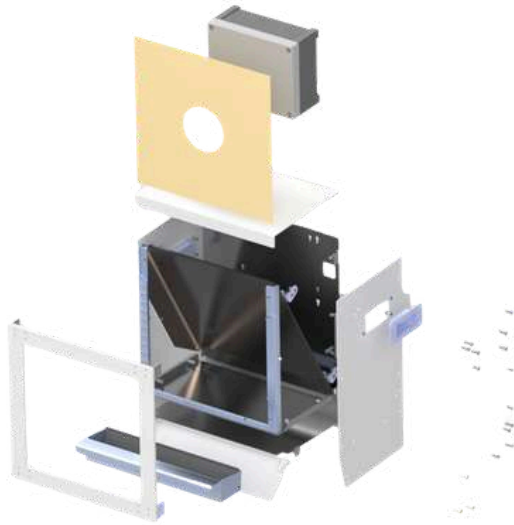


Unpacking your SQ Fire objective:

1 x target SQ Fire

- SQ Touch (shooter interface) featuring a dedicated application
- Interchangeable protective casing
- 75-meter RJ45 cable
- 15-meter RJ45 cable
- Water-resistant switch
- Power over Ethernet (for two devices)
- Wall-mounted fixture
- 2 x Waterproof boxes, 50 meters, 22 LR

## SQ Fire – Summary

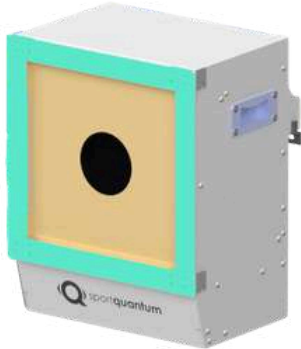


Engineered for total repairability, every component of the SQ Fire target can be ordered separately in the event of damage.

### Interchangeable elements:

- Waterproof cardboard, 50 meters, LR22 Waterproof cardboard type C50 Waterproof cardboard,
- 10 meters of EPDM tape (internal target protection)
- Face shield
- Front panel of the outlet
- Measuring cup
- Ball dispenser
- Right side
- Left side
- Upper cover

## SQ Fire – Safety Frame



Never fire at an SQ target without its frame.

The frame is secured to the target using four BTR screws; it is recommended to routinely verify the tightness of these screws.

If this frame is compromised, it must be substituted.



## SQ Touch – Overview

Touchscreen, configurable 10 inches (optional 15 inches)



Intuitive remote control

The power button for the SQ Touch is situated on the rear panel.

Connecting the rear panel of the SQ Touch

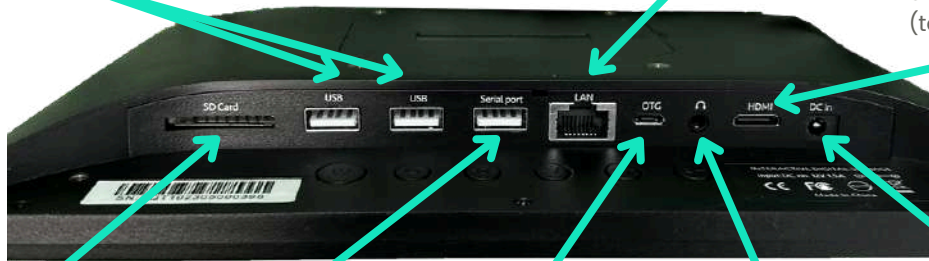
Adjustable stand for monitors with a diagonal measurement ranging from 10" to 27"

# SQ Touch – Connectivity Solution

USB facilitates the transfer of files from external devices, including USB flash drives and remote controls, enabling the export of scores and the updating of applications.

The LAN port enables direct connection of your SQ Touch to your local network through Ethernet or Power over Ethernet (PoE), thereby facilitating data transfer and power supply.

HDMI for direct connection to a monitor or television (tablet display)



microSD card slot

USB to RS-232 Serial Output

An OTG, or On-The-Go adapter, enables the connection of your tablet to a computer for the purpose of file transfer, including the exportation of scores or the updating of applications.

3.5mm audio headphone connectors

If the tablet is not powered through the PoE LAN port, a DC 12V power supply must be connected.

# SQ Touch – Setup

The power button for the SQ Touch is situated on the rear panel.



Return to the SQ Touch homepage.

Modifying the brightness of the SQ Touch display

Modifying the SQ Touch audio settings



# SQ Touch - Remote Controller

Remote control featuring a 2-meter cable.  
Dimensions (W x H x D): 110 x 30 x 40 mm; weight:  
0.100 kg



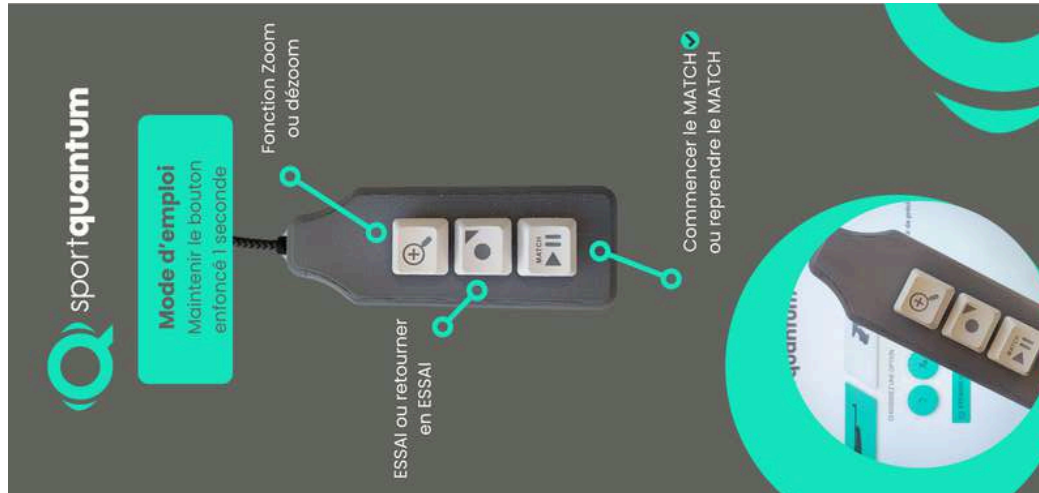
Connect the rear of the SQ Touch using a USB cable.

Zoom feature

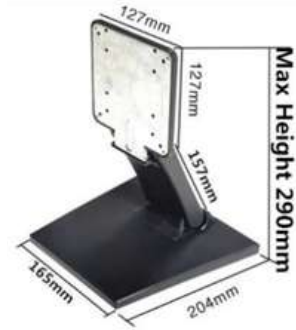
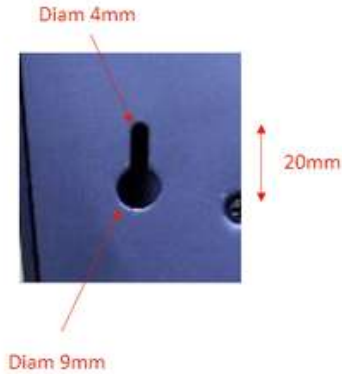
TRIAL VERSION or revert to TRIAL VERSION

Initiate LOGIN or Proceed with LOGIN

Flyer for printing and placement near the remote control.

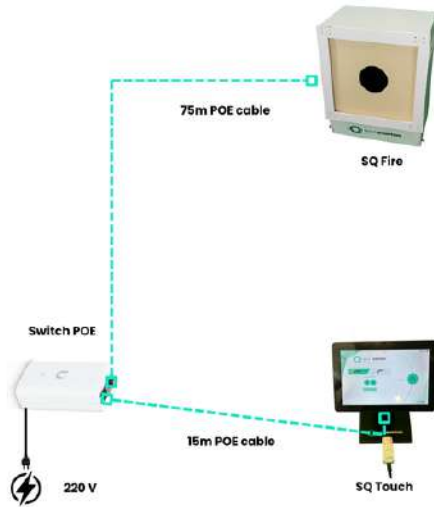


Possibility of affixing SQ Touch to a shooting table

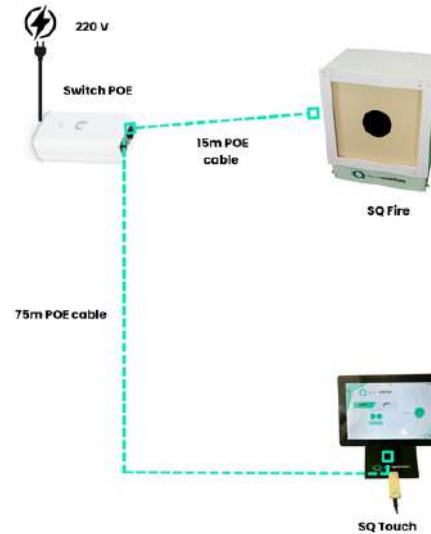


# Power and Connectivity

SPORT QUANTUM recommends two standard wiring diagrams; further studies may be conducted based on the number of targets and the configuration of your shooting range.



OPTION 1



OPTION 2



# Technical specifications

| Description                  | Technical specifications   |
|------------------------------|--|
| <b>Dimensions</b>            | Width 405 mm x Height 510 mm x Depth 315 mm  |
| <b>Weight</b>                | Target weight: 24 kg (packaging weight: 35 kg)   |
| <b>Primary energy source</b> | Power over Ethernet (PoE)  |
| <b>Lens power source</b>     | 12V DC   |
| <b>Temperature</b>           | Operating range: 0°C to 35°C; storage range: -10°C to 60°C (storage at temperatures below 0°C may result in accelerated system degradation). |
| <b>Humidity</b>              | 8–80 %   |
| <b>Energy utilization</b>    | 10 to 15 W target and tablet   |

# Initial installation process



# Initiating a SQ Fire

The target must be securely fastened.

- Utilizing the provided wall mount.
- Utilizing a strategically positioned tripod.

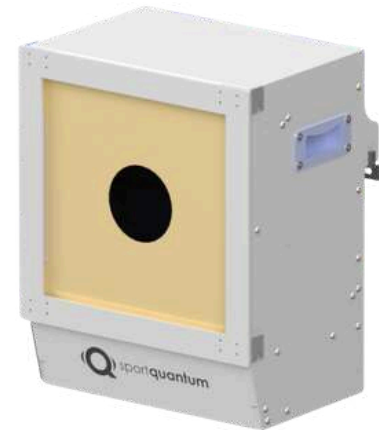
For alternative mounting options, please refer to the accessory instructions.

## Shooting distances and target center elevations

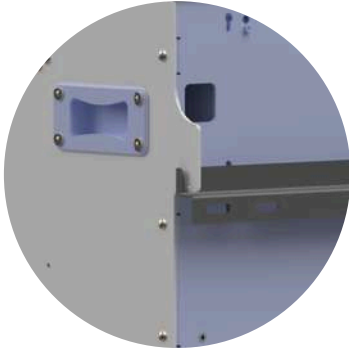
(sources EDITION 2022 (First printing 01/2023) Valid from January 1, 2022 © ISSF)

- Shooting distances should be measured from the firing line to the target.
- The center of the target must be positioned at the following heights, measured from the floor level of the shooting station:

| Standard range | Height | Permissible variation in height |
|----------------|--------|---------------------------------|
| 50 meters      | 0,75 m | ±0,50 m                         |
| 25 meters      | 1,40 m | +0.10 m/-0.20 m                 |
| 10 meters      | 1,40 m | ±0,05 m                         |



## Commencement of shooting at the SQ target



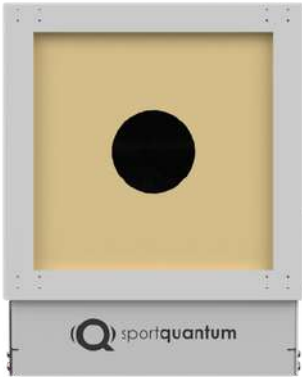
- Secure the target to the stand by utilizing the two hooks positioned on the rear of the target.
  - Modify the target angle by utilizing the “verticality” screws.
- Confirm vertical alignment with a spirit level.

Position the designated SQ Touch tablet on the shooting range table.

- The device is inherently powered electrically via its PoE port.
- Connection to the SQ Touch tablet can be established through either PoE or Wi-Fi, depending on the user’s preferences and constraints.
- The SQ Touch tablet is capable of being powered.
- its internal battery (offering 2 to 3 hours of autonomy)
  - Through the PoE port
  - Through the provided 12V power supply.



# Usage Precautions



## **IMPORTANT: Please read before each use:**

Ensure that the projectile, bucket, or slag drawer is firmly positioned and completely inserted into the target.

Ensure that the front cover is firmly secured with the two thumbscrews.

Ensure that the protective frame is securely affixed to the target.

Ensure that the top cover is firmly in place.

Ensure that no electrical cables are accessible in proximity to the fire.

## **IMPORTANT: Establishing SQ Targets**

SQ Fire targets, which are electrically powered and integrated into a communication network, are utilized in environments susceptible to electromagnetic interference, overvoltage, or insulation faults.

Consequently, appropriate grounding is imperative.

### **Grounding objectives.**

- Measurement reliability: Reducing interference and guaranteeing the precision of integrated sensors.
- Safety: Mitigate the risk of surges or electrostatic discharge (ESD).

### **Suggested cable type**

- Flexible copper conductor with a minimum cross-sectional area of 2.5 mm<sup>2</sup>
- Green-yellow insulation that complies with relevant electrical standards.

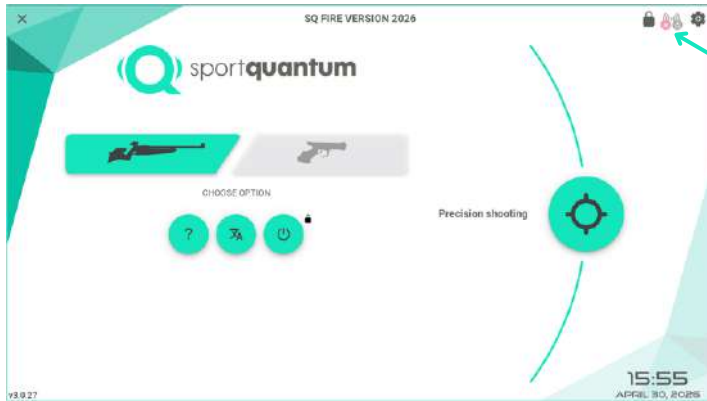
### **Connection point**


The SQ Fire target features a dedicated grounding point situated at the rear of the chassis, indicated by a grounding symbol.

### **Examination and upkeep**




Ensure continuous grounding throughout the installation process.

Conduct an annual inspection or following any technical intervention.



 Destination connection status (click to access Device Management)

Various potential states:

-  The SQ application is linked to the target.
-  SQ is not connected to the target. Please refer to the troubleshooting section on page 65.
-  The SQ application is endeavoring to re-establish a connection with the target.



# Device management



The screenshot displays a mobile application interface for device management. It features a sidebar on the left with a back arrow and a lock icon. The main content area is divided into several sections: 'DEVICE CONTROL' with a 'STANDBY DEVICE' button; 'DEVICE IMPACTS'; 'DEVICE INFORMATION' with a 'SYSTEM INFORMATION' button; 'NETWORK INFORMATION' showing wlan0 with MAC address 81:16:45:21:19:26 and IP address 172.22.152.173; and 'WI-FI INFORMATION' showing Channel -1MHz (-481.6), RSSI / Level -10dBm (9/10), and Speed 72Mbps. A large black redaction box covers the bottom right portion of the screen.

Disable the target.

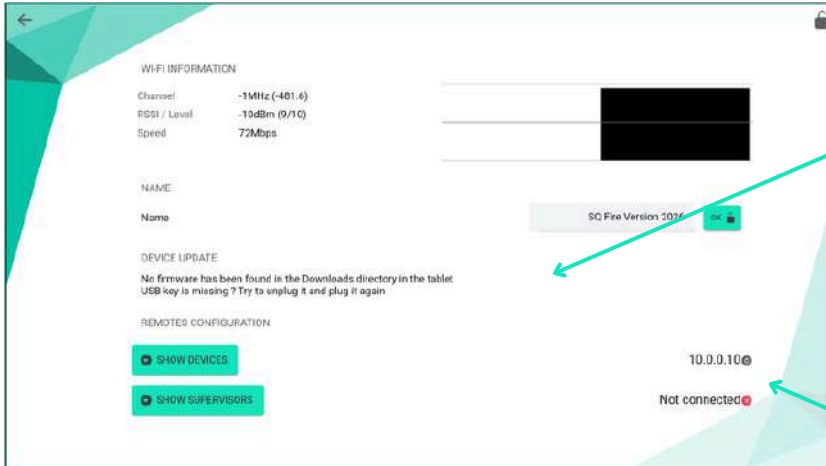
Number of hits attained by the target.

System information



Wi-Fi signal quality

Ascertain the designation of the shooting range utilized by the superior.

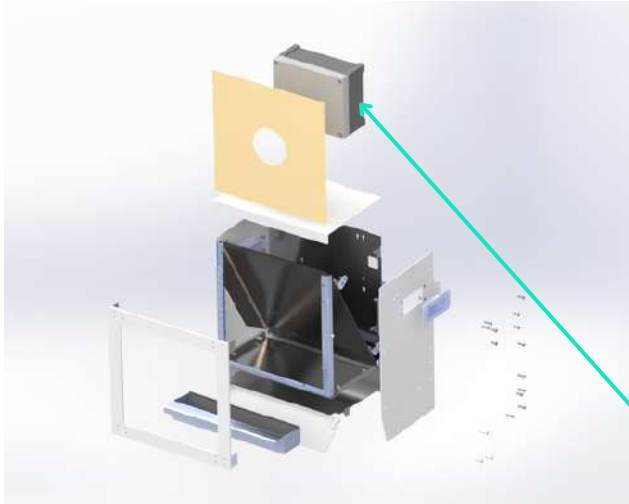


Target firmware update. Please refer to the maintenance section for further details.

The presently configured destination IP address and connection status.

# Service and Assistance

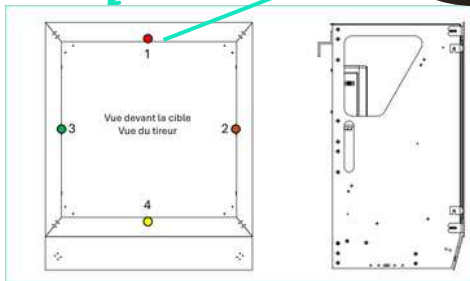
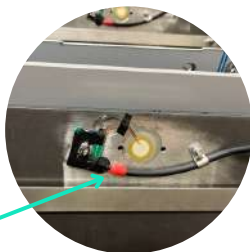




This waterproof unit is secured to the target frame with four BTR screws.  
Any modification to the electronic unit nullifies the hardware warranty.  
It must be returned directly to SPORT QUANTUM for all maintenance activities to be conducted.



Impact plate output



Ethernet connector for the transmission of power and data to the destination.



The serial number can be found on the front of the target, positioned in the lower right corner.

Please ensure that you include the serial number in all communications with our support team.

# sportquantum **Troubleshooting**



- The target and tablet are powered on, but there is no connection.

If you have a wired installation, ensure that the RJ45 connectors are properly connected.

Verify the connection configurations for the SQ application/target p60.

Verify that the SQ application and the target are operating on compatible versions (in X.X.X format).

The target software version can be found in the "Target Information" menu by selecting the Wi-Fi icon. The application version is displayed in the lower left corner of the SQ Touch home page. The first two digits must correspond (e.g., Application v2.0.1 and target software v2.0.0).

If the versions are incompatible, please reach out to support and request an update for one of the two media.

- Impact not detected

Ensure that no "parasite impact" warning  is displayed on the application icon ( ).

If you come across "parasitic impact reports," sanitize the internal surfaces with alcohol (never acetone!).

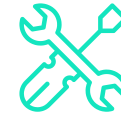
Ensure that the measurement board connector is securely attached to the electronics box.

If the issue continues, please reach out to our customer support team.

# Maintenance

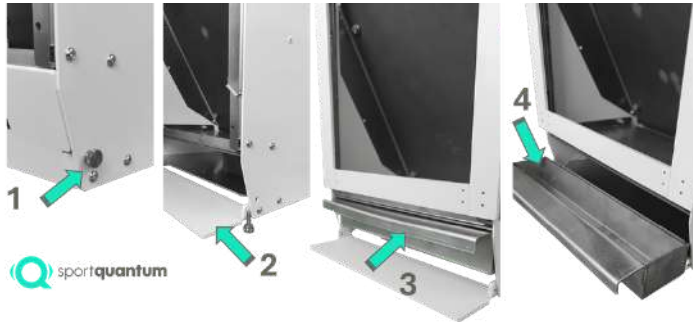


# Suggested maintenance protocol



Adhere to the prescribed maintenance protocols:

- The cartridge/slag drawer should be emptied approximately every 2,500 shots, specifically when it reaches two-thirds of its capacity.
  - Utilize equipment appropriate for lead cleaning with the same regularity.



## Warning



**Handling lead heads or slag necessitates the use of personal protective equipment (PPE) and suitable containers.**

- Remove the two flat-head screws situated at the bottom of the target side panels.
- Tilt the front cover downward.
- Pull the drawer forward from the base of the target (you will need to reposition it at the bottom of the target).
- Empty the drawer completely and transfer all items to the designated bin.
- To replace the drawer, execute the procedure in reverse order: 4-3-2-1.

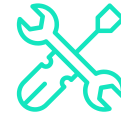
# Suggested maintenance protocol



- If the impact plate exhibits considerable deformation, it must be replaced with a new plate from SPORT QUANTUM.
- If the protective frame is substantially deformed, replace it with a new frame from SPORT QUANTUM.
- To remove the protective frame, gently unscrew the four screws (1 and 2 at the top, and 3 and 4 at the bottom on the sides of the target).
- Ensure that the four screws are tightened uniformly to maintain the frame's stability during filming.

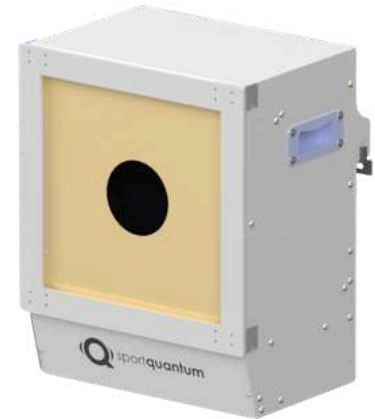
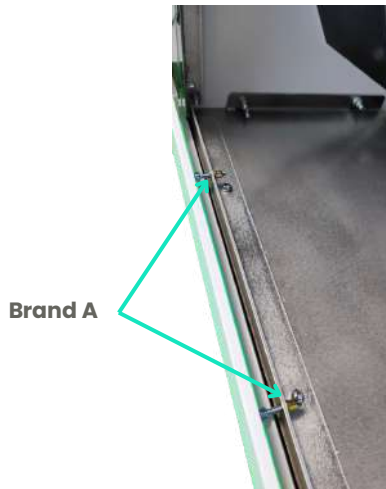


# Suggested maintenance protocol



The shooting cardboard can be effortlessly changed or replaced without the need for tools.

- Simply slide it vertically: upward to remove and downward to insert a new one.
- The shooting board must be positioned on two adjustable stops (Brand A) and glide within the lateral sliding components (Mark B).

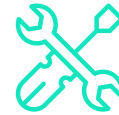


# Warranty





## Warranty



SPORT QUANTUM guarantees that all products provided will be devoid of physical or manufacturing defects under normal usage and service for a duration of two (2) years from the date of delivery.

If the product is determined to be defective, SPORT QUANTUM or the local distributor may either replace it with a product of at least equivalent quality or repair it using reconditioned or new spare parts, at the discretion of the company or distributor.

The customer is required to grant SPORT QUANTUM the necessary time and opportunity to perform the repair or replacement. This warranty is valid solely if the defective product is accompanied by an original invoice that indicates the date of purchase, product type, and, if applicable, the name of the distributor.

SPORT QUANTUM retains the right to deny complimentary repairs if the necessary documents are absent, incomplete, or illegible.

The warranty becomes void under the conditions outlined in the General Terms and Conditions of Sale. Additionally, the warranty does not extend to components that are subject to normal wear and tear, as specified in the general terms and conditions of product use.

Warranty Extension Should the customer choose to extend the warranty by one year, the Warranty and Repair Terms will remain entirely valid, with the exception of the warranty period.

### The duration of the warranty is:

For new products: Two (2) years from the date of collection by the carrier.

For repaired products: Six (6) months for repaired items and replaced spare parts, commencing from the date the carrier retrieves the repaired products.

In the context of a subscription and for the "ongoing" delivery of the Solution: at any point during the subscription period.



## Management shortcomings during the warranty period



The Service and Support Form can be downloaded from <https://sportquantum.com/support/contact/> and must be properly completed and attached to each defective item.

If the form is not submitted, the customer may incur diagnostic fees.

- During the warranty period, SPORT QUANTUM or the local distributor will manage shipping at their discretion.
- SPORT QUANTUM will bear the expenses related to the repair and return of the goods to the customer, provided that the defect falls under warranty coverage.
- If the defect is not included under the warranty as outlined in the General Terms and Conditions of Sale and the General Terms and Conditions of Use of the Product, the claim will be categorized as a defect not covered by the warranty. Consequently, the customer will be liable for shipping costs, administrative fees, and repair expenses.



# Troubleshooting beyond warranty



The Service and Support Form can be downloaded from <https://sportquantum.com/support/contact/> and must be properly completed and attached to each defective item.

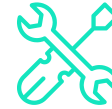
Shipping expenses to SPORT QUANTUM or the local distributor, along with return costs, are the responsibility of the customer.

An administrative fee will be applied to each repair request.

Labor will be billed, and parts will be charged at the prevailing list price at the time of repair.

For any urgent repair needs, please reach out to SPORT QUANTUM or your local distributor.

If no defect is identified, the customer will still incur administrative and diagnostic fees.



### General recycling declaration

SPORT QUANTUM urges owners of electronic devices to recycle their unwanted items responsibly.

### Recycling guidelines within the European Union

The upper plate (impact plate) and protective frame should be disposed of as recyclable materials.



### Crucial information regarding batteries and electronic waste

Batteries and electrical and electronic equipment bearing the crossed-out wheeled bin symbol must not be discarded as unsorted municipal waste. Batteries and waste from electrical and electronic equipment (WEEE) must be processed separately through a collection system established for customers to return, recycle, and manage batteries and WEEE.

Where possible, batteries should be extracted and segregated from e-waste prior to entering the waste stream. Batteries must be collected independently in accordance with the established framework for the collection, recycling, and treatment of batteries and accumulators.

SPORT QUANTUM products offered in the European Union adhere to the stipulations of Directive 2011/65/EU, which limits the use of certain hazardous substances in electrical and electronic equipment.



### A CE declaration of conformity is mandatory.

- European Union adherence

# General Terms and Conditions of Use





# Usage Instructions



The following Terms of Use delineate the rights and responsibilities of SPORT QUANTUM customers when utilizing a product or solution. It is the customer's duty to convey these Terms of Use to all users of the products and solutions and to guarantee their adherence. In the event of an authorized minor user (under 18 years of age), the customer must relay these Terms of Use to the individual holding parental responsibility, who must accept them and ensure that the minor user comprehends them.

SPORT QUANTUM retains the right to amend these Terms of Use periodically. Any modifications will be published on the website [www.SportQuantum.com](http://www.SportQuantum.com) thirty (30) days before their effective date. Each Customer is responsible for staying informed about the current Terms of Use.

# Product safety standards



To guarantee optimal safety when utilizing the Products, the Customer and/or User must specifically, though not exclusively, ensure that:

The site of product installation and usage complies with safety standards for sports shooting as stipulated by the relevant regulations of the country and the usage guidelines established by the International Shooting Sport Federation (I.S.S.F.) or the national shooting federation applicable to the target's use.

All spectators and individuals must stay behind the shooter.

Adherence to all safety regulations concerning the use of firearms is essential.

It is essential to aim directly at the target, ensuring that the weapon is held strictly perpendicular to the plane of suspension, with the target positioned vertically. The shot must strike the specified surface, namely the inclined plate.

All users and spectators are overseen by a qualified individual to ensure adherence to all safety regulations governing the operation of shooting sports, in accordance with the aforementioned safety requirements.

Moreover, to mitigate the risk of electric shock, never submerge the cord, plug, or appliance in liquid, and refrain from conducting maintenance while the appliance is powered on.



sport**quantum**

# Inherent risks associated with shooting sports



SPORT QUANTUM provides electronic targets; however, it disclaims any responsibility for their use, the handling of weapons, or adherence to safety regulations and best practices related to this sport. Given the inherent risks, all participants are required to meticulously follow these instructions.

The products are designed for seasoned sport shooters who possess an in-depth understanding of the rules and procedures of this discipline as established by the International Shooting Federation (ISSF).

SPORT QUANTUM customers, like all other users of the Product, acknowledge the inherent risks associated with this sport and commit to adhering to all safety regulations pertinent to its practice during any use of the Product, irrespective of the purpose or location (whether at a shooting club or any other appropriate venue for sports shooting). In particular, but not limited to, it is essential to ensure that:

Weapons must be unloaded and secured when not in active use.

A loaded firearm is continuously grasped in the hand.

A loaded firearm is perpetually aimed at the target.

Minors must adhere to the restrictions on access to weapons as stipulated by relevant legislation.



# Terms of Use for Extended Utilization



To ensure the effective operation of the Product and Solution, adherence to the specified environmental conditions for their use is essential, particularly:

In the event of a malfunction, issue, or damage to the Product, the Customer and/or User must promptly disconnect the Product and contact SPORT QUANTUM's after-sales service at the earliest opportunity.

If the product exhibits any signs of malfunction during operation, disconnect it immediately.

Refrain from using a malfunctioning device or attempting to repair it independently.

If the appliance is dropped or inadvertently submerged in liquid, promptly disconnect it from the power source. Refrain from using it again.

Air humidity must be maintained at levels below 80%.

The product is designed for outdoor applications.

The product is a precision instrument and must not be exposed to impacts exceeding those caused by balls striking a metal plate.

# Terms of Use for Extended Utilization



- Always ensure that the protective frame is secured before aiming at a target
- Always ensure that the front cover is secured before aiming at a target
- Never aim at a target without a bullet magazine or slag container properly installed.
- The product must be hung with care and secured adequately to support the weight of the target over an extended duration, as well as to endure the force of impacts during shooting.
- The front frame must be accurately aligned. If the target frame is compromised, the target should not be utilized.
- The power cable of the target must be safeguarded from gunfire at all times.
- In circumstances where high reliability is essential, such as in official competitions, it is highly advisable to utilize a wired connection.
- Under no circumstances should the Product be utilized for purposes other than those for which it was designed.





## Update the SQ application and the target software.



It may be necessary to acquire updates or new versions of the product solution and/or firmware periodically, particularly to rectify potential errors and to implement any modifications within the parameters established by the ISSF – International Shooting Sport Federation.

It is the responsibility of the Customer and/or User to ensure they possess the most current version of the SQ application and firmware. SPORT QUANTUM provides the latest updates through all available channels. However, it is advisable to confirm the compatibility of the Product's hardware version with the available software versions in advance.

# Contact





## Client assistance

### Customer service in France

Email: [support@sportquantum.com](mailto:support@sportquantum.com) Phone: +33 9 80 08 70 87

### Beyond the confines of France

Please reach out to your SQ Fire distributor or SPORT QUANTUM customer service.

### Mailing address

4 rue René Razel  
91400 Saclay, France