



Manual

How to conduct ISSF competitions with ShootMaster 5.3

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1. Maintenance

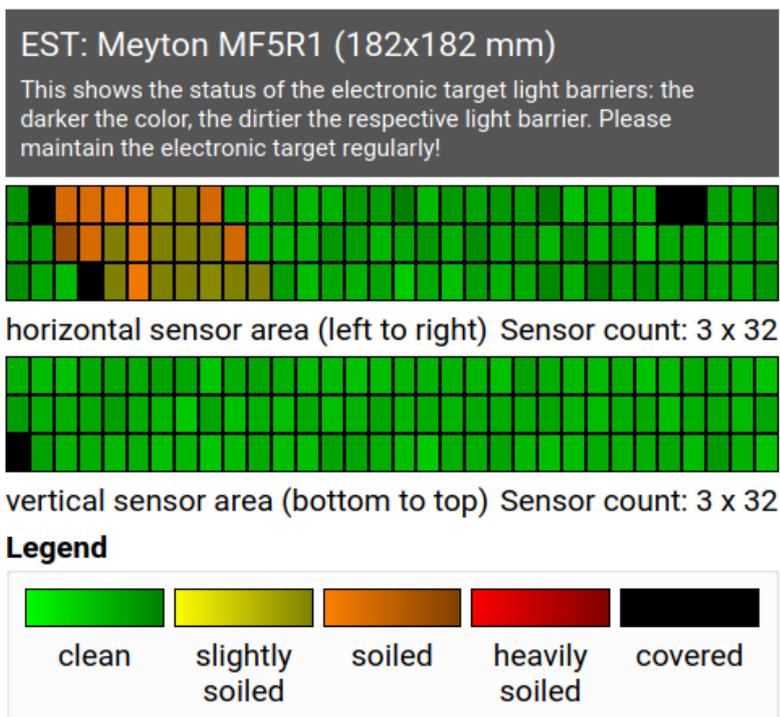
1.1. EST health check

To check the health of your Electronic Scoring Targets (EST's), follow these steps:

1. If the system is powered off, power on the whole MEYTON system (EST's, Control PC's, Gateways, Power Supplies, Workstations, ...) and wait until all Control PC's show the target view.
2. Open the Competition Control program in the MEYTON Control Center.
3. Mark all firing points in the firing point table.
4. Click on the  icon in the toolbar or use the function **Diagnostics** → **Calibrate EST** from the menu.
5. The Control PC's switch to the blue calibration screen. Wait until the EST calibration is finished and the message **[Competition] - back to target view** appears on the bottom of the screens of the Control PC's.

 While calibration is running, there must be no objects inside the EST and paper targets or target faces must not be changed!

6. Click on the  icon in the toolbar or use the function **Diagnostic** → **Quit service mode** from the menu to switch the Control PC's back to target view.
7. Click on the  icon in the toolbar or use the function **Diagnostics** → **Show EST status** from the menu. For each EST a windows with the current status its light barriers will pop up.



8. Check the color of each light barrier.

- **green:** light barrier is clean and in perfect condition
- **yellow:** light barrier is slightly soiled (no immediate action needed)
- **orange:** light barrier is soiled and should be cleaned as soon as possible (correct measurement is still possible)
- **red or black:** light barrier heavily soiled, covered or faulty and must be cleaned immediately (correct measurement isn't guaranteed anymore)

If you see other colors than green and yellow, the EST should be cleaned and soil like scraps of paper or bullet remains must be removed. Also check the acrylic glass covers for cracks and replace them if they are damaged. The exact position of the soil within the EST can be derived from the sensor state window.

For further information about cleaning the EST's follow the instructions in the separate **Cleaning Instructions** manual.

After cleaning you have to calibrate the EST's by using the function "Diagnostics → Calibrate EST" in Competition Control again! After that check if cleaning was successful by using the function "Diagnostics → Show EST status" again.



EST health checks should be carried out multiple weeks before the start of an important event to have the chance to order spare parts or send defective equipment to MEYTON for repair. Keep in mind that the repair and shipping process can take several weeks to months!



We recommend to conduct EST health checks after each round of an event to ensure that the measuring system is in perfect condition before starting the next round.

2. Prepare (Qualification) Start Lists

Start lists should be prepared as soon as possible after the athlete registration deadline of the event. There are two possible ways of preparing start lists:

1. Prepare the start lists with third party spreadsheet software like OpenOffice or Microsoft Excel and import them into the MEYTON system with the **Start Lists** module.

The data has to be formatted in the correct way. More information about this you can find in the „Import Start Lists“ manual in the Meyton Download Portal. There you can also find a template file with examples.

2. You can also use the **Start Lists** module of the MEYTON software directly to prepare the start lists for your event. You can find more information in the corresponding manual of the **Start Lists** module in the Meyton Download Portal.

When conducting events according to the ISSF rules, ensure that all relevant information is set in the start list:

- Set the correct ISSF (qualification) discipline for each athlete.
- Set start times so that the software can distinguish between multiple (qualification rounds) within a discipline. When the start time is set, it is a lot easier to find the correct round when allocating athletes to firing points later on.
- Set the firing point number for each athlete.
- When conducting team events like **ISSF AR Mixed** the same team has to be set for all team members. Otherwise the software can't calculate the total score of that team.
- If an athlete participates in the same event in multiple disciplines, he or she can be added to the start list multiple times. In this case a unique start number has to be set for every start.



Start lists for finals can be generated automatically with the **Result Lists** module of the ShootMaster software after all qualification rounds of a discipline have been finished. More information about this you can find in chapter 5.1. of this manual.

3. Allocate Firing Points

Before starting a qualification or final round of a discipline, you have to allocate the participating athletes to their firing points assigned in the start list. In most cases follow the instructions in chapter 3.2. Only for the **25m Rapid Fire Pistol** disciplines follow the instructions in chapter 3.3.1.

3.1. How to mark firing points

When allocating firing points and while conduction the competition, you need to mark certain firing points (athletes) in the firing point table in **Competition Control** to trigger certain actions and to proceed with the competition. The following options are possible for marking firing points:

Marking individual firing points

- Hold down the **[Ctrl] button** and **left-click** each firing point you want to mark. Use the same method to unmark a firing point.

Marking all athletes

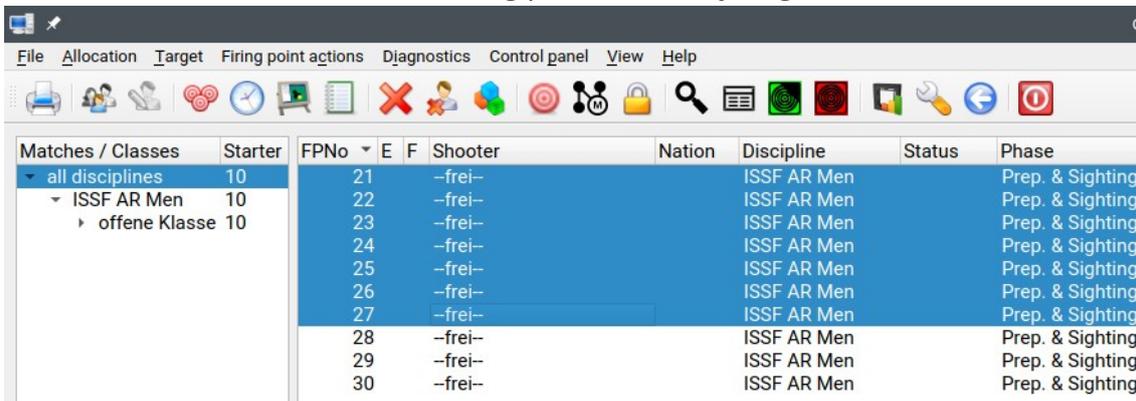
- Hold down the **[Ctrl] button** and press the **[A] button** to mark all firing points.

Marking a contiguous group of firing points

- Mark the first firing point by **left-clicking** it, then hold down the **[Shift] button** and left-click on the firing point. All firing points in between will be marked as well.

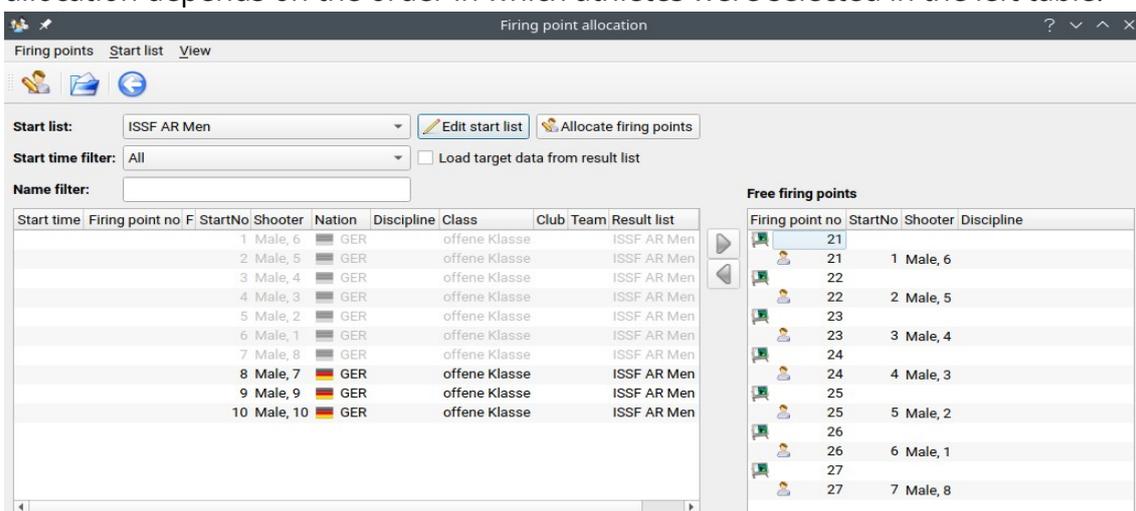
3.2. Standard Allocation

1. Start the **Competition Control** program in the MEYTON Control Center.
2. Mark all firing points you want to allocate athletes to in the firing point table. Make sure all firing points are free and not in match mode. Otherwise you have to switch off match mode and/or free the firing points before you go on.



Matches / Classes	Starter	FPNo	E	F	Shooter	Nation	Discipline	Status	Phase
all disciplines	10	21	-	frei-			ISSF AR Men		Prep. & Sighting
ISSF AR Men	10	22	-	frei-			ISSF AR Men		Prep. & Sighting
offene Klasse	10	23	-	frei-			ISSF AR Men		Prep. & Sighting
		24	-	frei-			ISSF AR Men		Prep. & Sighting
		25	-	frei-			ISSF AR Men		Prep. & Sighting
		26	-	frei-			ISSF AR Men		Prep. & Sighting
		27	-	frei-			ISSF AR Men		Prep. & Sighting
		28	-	frei-			ISSF AR Men		Prep. & Sighting
		29	-	frei-			ISSF AR Men		Prep. & Sighting
		30	-	frei-			ISSF AR Men		Prep. & Sighting

3. Click on the icon  in the toolbar or choose **Allocation** → **Start list allocation** in the menu to open the firing point allocation window.
4. Select the start list of your event in the **Start list** area. Additionally you can use the **Start time filter** to more easily find the athletes from a specific relay, if your event consists of multiple relays.
5. Mark all athletes you want to allocate in the left table. Then use the right arrow  to allocate them to the free firing points. If firing point numbers are set in the start list, allocation is done automatically by firing point number. Otherwise, the order of allocation depends on the order in which athletes were selected in the left table.



Start time	Firing point no	F	StartNo	Shooter	Nation	Discipline	Class	Club	Team	Result list
	1	Male, 6	GER		offene Klasse	ISSF AR Men				
	2	Male, 5	GER		offene Klasse	ISSF AR Men				
	3	Male, 4	GER		offene Klasse	ISSF AR Men				
	4	Male, 3	GER		offene Klasse	ISSF AR Men				
	5	Male, 2	GER		offene Klasse	ISSF AR Men				
	6	Male, 1	GER		offene Klasse	ISSF AR Men				
	7	Male, 8	GER		offene Klasse	ISSF AR Men				
	8	Male, 7	GER		offene Klasse	ISSF AR Men				
	9	Male, 9	GER		offene Klasse	ISSF AR Men				
	10	Male, 10	GER		offene Klasse	ISSF AR Men				

Firing point no	StartNo	Shooter	Discipline
21			
21	1 Male, 6		
22			
22	2 Male, 5		
23			
23	3 Male, 4		
24			
24	4 Male, 3		
25			
25	5 Male, 2		
26			
26	6 Male, 1		
27			
27	7 Male, 8		

6. Click on the **Allocate firing points** button to confirm the allocation.
7. Back in the main window mark all the firing points which participate in the relay and click on  in the toolbar or use **Firing point actions** → **Toggle match mode** in the menu to activate the match mode for these firing points. Verify that all firing points show  in the **Status** column of the firing point table.

3.3. Special Allocation

3.3.1. Rapid Fire Allocation

Rapid fire events are conducted on a group of five targets. The Control PC of the middle target of each group of five – the master firing point – is used to display the hits of all five targets. Its firing point number must end with 3 or 8.

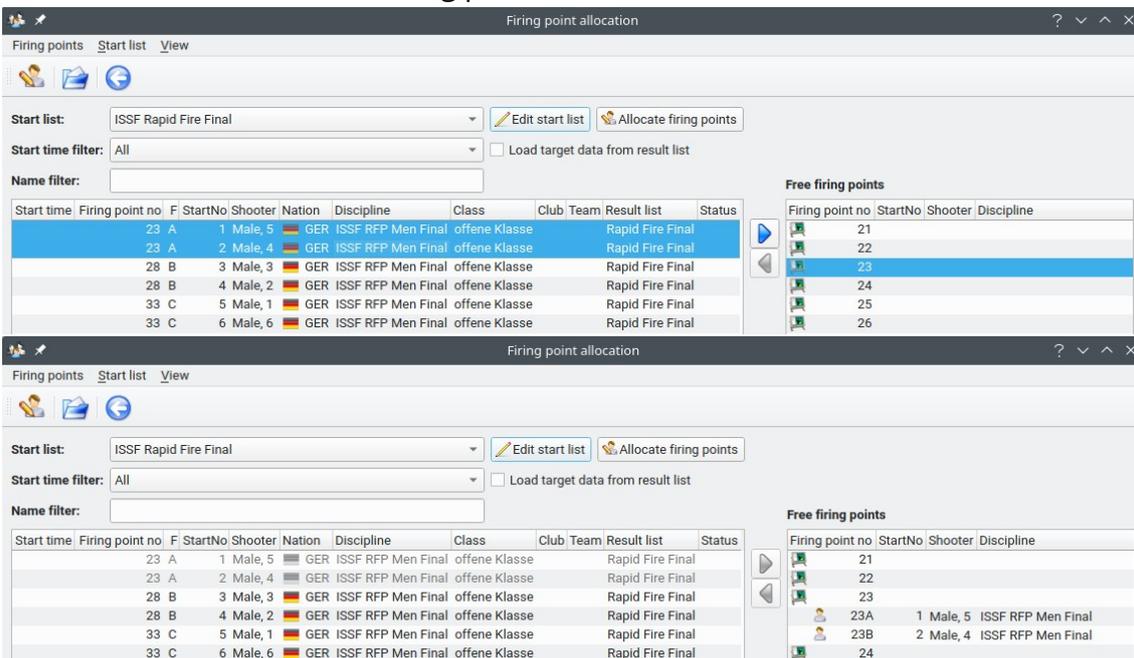
Rapid Fire Qualification

1. Follow the same steps as described in chapter 3.2. **but only select the master firing points in step 2.**

Rapid Fire Final

In the rapid fire final two athletes share a rapid fire group of five targets. For this event a special firing point allocation method is used.

1. Follow steps 1-4 from the Standard Allocation in chapter 3.2. **but only select master firing points in step 2.**
2. Mark the two athletes who share a firing point in the left table and mark the corresponding master firing point in the right table. Click the right arrow  to assign both athletes to the master firing point.



The screenshot shows the 'Firing point allocation' software interface. It features a 'Start list' dropdown set to 'ISSF Rapid Fire Final' and a 'Start time filter' set to 'All'. Below these are two tables:

Start time	Firing point no.	F	StartNo	Shooter	Nation	Discipline	Class	Club	Team	Result list	Status
23	A	1	Male, 5	GER	ISSF RFP Men Final	offene Klasse				Rapid Fire Final	
23	A	2	Male, 4	GER	ISSF RFP Men Final	offene Klasse				Rapid Fire Final	
28	B	3	Male, 3	GER	ISSF RFP Men Final	offene Klasse				Rapid Fire Final	
28	B	4	Male, 2	GER	ISSF RFP Men Final	offene Klasse				Rapid Fire Final	
33	C	5	Male, 1	GER	ISSF RFP Men Final	offene Klasse				Rapid Fire Final	
33	C	6	Male, 6	GER	ISSF RFP Men Final	offene Klasse				Rapid Fire Final	

The 'Free firing points' table on the right shows:

Firing point no.	StartNo	Shooter	Discipline
21			
22			
23			
24			
25			
26			

In the second screenshot, the 'Free firing points' table is updated to show the allocation of firing points 23A and 23B to the athletes from the 'Firing points' table:

Firing point no.	StartNo	Shooter	Discipline
21			
22			
23			
23A	1	Male, 5	ISSF RFP Men Final
23B	2	Male, 4	ISSF RFP Men Final
24			

3. Repeat step 2 for all athletes in the final.
4. Follow steps 6 ff from the Standard Allocation in chapter 3.2.

4. Conduct Events

In this section you can find information on how to conduct different kinds of ISSF qualification and final events with the **Competition Control** module of the ShootMaster software. **All these explanations start at the point after you have allocated the firing points and switched them to match mode as described in chapter 3.**

4.1. Conduct Qualification (and non olympic disciplines without finals)

In this chapter the conduction of ISSF disciplines with a qualification stage and non olympic disciplines without finals is described.

In this list you can find all of these disciplines, which are included in the ShootMaster software. For each discipline the corresponding ISSF Event Code, the MEYTON discipline name and MEYTON discipline ID is listed.

Discipline name	ISSF Event Code	MEYTON discipline name	MEYTON discipline ID
10m Air Rifle Men	AR60M	ISSF AR Men	1-0710-060
10m Air Rifle Men Junior	AR60MJ	ISSF AR Men Jun	1-0712-060
10m Air Rifle Women	AR60W	ISSF AR Women	1-0711-060
10m Air Rifle Women Junior	AR60WJ	ISSF AR Women Jun	1-0713-060
10m Air Rifle Mixed Team	ARMIX	ISSF AR Mixed	1-0714-030
10m Air Rifle Mixed Team Junior	ARMIXJ	ISSF AR Mixed Jun	1-0715-030
10m Air Pistol Men	AP60M	ISSF AP Men	1-0810-060
10m Air Pistol Men Junior	AP60MJ	ISSF AP Men Jun	1-0812-060
10m Air Pistol Women	AP60W	ISSF AP Women	1-0811-060
10m Air Pistol Women Junior	AP60WJ	ISSF AP Women Jun	1-0813-060
10m Air Pistol Mixed Team	APMIX	ISSF AP Mixed	1-0814-030
10m Air Pistol Mixed Team Junior	APMIXJ	ISSF AP Mixed Jun	1-0815-030
25m Rapid Fire Pistol Men	RFPM	ISSF RFP Men	3-0830-160
25m Rapid Fire Pistol Men Junior	RFPMJ	ISSF RFP Men Jun	3-0834-160
25m Pistol Women	SPW	ISSF 25mP Women	3-0831-160
25m Pistol Women Junior	SPWJ	ISSF 25mP Women J	3-0835-160
25m Center Fire Pistol Men	CFPM	ISSF 25mCFP Men	3-0832-160
25m Pistol Men Junior	SPMJ	ISSF 25mP Men Jun	3-0836-160

25m Standard Pistol Men	STPM	ISSF StdP Men	3-0833-160
25m Standard Pistol Men Junior	STPMJ	ISSF StdP Men Jun	3-0837-160
50m Rifle 3-Positions Men	FR3X20M	ISSF 3p Men	4-0740-060
50m Rifle 3-Positions Men Junior	FR3X20MJ	ISSF 3p Men Jun	4-0744-060
50m Rifle 3-Positions Women	R3X20W	ISSF 3p Women	4-0741-060
50m Rifle 3-Positions Women Junior	R3X20WJ	ISSF 3p Women Jun	4-0745-060
50m Rifle Prone Men	FR60PRM	ISSF Prone Men	4-0742-060
50m Rifle Prone Men Junior	FR60PRMJ	ISSF Prone Men J	4-0746-060
50m Rifle Prone Women	R60PRW	ISSF Prone Women	4-0743-060
50m Rifle Prone Women Junior	R60PRWJ	ISSF Prone Women J	4-0747-060
50m Pistol Men	FPM	ISSF 50mP Men	4-0840-060
50m Pistol Men Junior	FPMJ	ISSF 50mP Men Jun	4-0841-060

4.1.1. 10m Air Rifle Men/Men Junior Qualification

10m Air Rifle Women/Women Junior Qualification

10m Air Pistol Men/Men Junior Qualification

10m Air Pistol Women/Women Junior Qualification

Rules

- Each of these events consists of 60 shots within 75 minutes.
- Before competition time starts, there is a 15 minute preparation and sighting time.
- Decimal scoring is used for Air Rifle and full ring scoring is used for Air Pistol.
- The top eight ranked athletes proceed to the final.

Preparation and sighting

1. Start the combined preparation and sighting time by pressing the **Sighting** button .
2. Preparation and sighting can be aborted by pressing the **Sighting** button  again while time is running.

Competition

1. After sighting time has ended press the **Competition** button  to switch the match phase to competition. This does not start competition time. The column **Phase** in the competition control program shows **Competition**.
2. Start competition time by pressing the **Competition** button  again.

4.1.2. 10m Air Rifle Mixed Team/Team Junior Qualification 10m Air Pistol Mixed Team/Team Junior Qualification

Rules

- Each mixed team consists of a male and a female athlete.
- Members of each team shoot next to each other with the female athlete on the firing point left of the male athlete.
- Before competition starts there is a 10 minutes preparation and sighting time.
- Each team member fires 30 competition shots in 30 minutes (60 total shots per team). The scores of both team members are added together for the team result.
- Decimal scoring is used for Air Rifle and full ring scoring is used for Air Pistol.
- The four top-ranked teams proceed to the finals. Teams ranked 3rd and 4th are qualified for bronze medal match. Teams ranked 1st and 2nd are qualified for gold medal match.

Preparation and sighting

1. Start the combined preparation and sighting time by pressing the **Sighting** button .
2. Preparation and sighting can be aborted by pressing the **Sighting** button  again while time is running.

Competition

1. After sighting time has ended press the **Competition** button  to switch the match phase to competition. This does not start competition time. The column **Phase** in the competition control program shows **Competition**.
2. Start competition time by pressing the **Competition** button  again.

4.1.3. 25m Rapid Fire Pistol Men/Men Junior Qualification

Rules

- The 25m Rapid Pistol Men/Men Junior qualification event is divided into two stages of 30 competition shots each (60 competition shots total).
- At the beginning of each stage one sighting series of 5 shots in 8s is allowed.
- Then two competition series of 5 shots in 8s, 6s and 4s follow in each stage.



Always wait until the red lights are turned off at the end of each series before starting the next series!

Sighting Series 8s

1. Press the **Sighting** button  to start the 8s sighting series.

Competition Series 8s

1. Press the **Menu** button  to switch the firing points to **Competition 8s** phase.
2. Start both 8s series one after another by pressing the **Competition** button  each time.

Competition Series 6s

1. Press the **Menu** button  to switch the firing points to **Competition 6s** phase.
2. Start both 6s series one after another by pressing the **Competition** button  each time.

Competition Series 4s

1. Press the **Menu** button  to switch the firing points to **Competition 4s** phase.
2. Start both 4s series one after another by pressing the **Competition** button  each time.
3. After all competition series of the first stage (30 shots) are finished, the firing points have to be switched back to **Sighting 8s** to start the second stage of 30 shots. Do this by pressing the **Menu** button  **three times**.
4. Conduct the second stage just like the first.

Shoot-Off (only for events without finals)

1. If there is a tie after the last 4s series in the second stage, mark only the master firing points of the tied athletes in main table. Switch them to **Sighting Shoot-off** phase by pressing the **Menu** button .
2. Start the 4s Shoot-off sighting series by pressing the **Sighting** button .
3. Press **Menu** button  to switch the firing points to **Comp. Shoot Off** phase.
4. Start the 4s Shoot-off series by pressing the **Competition** button .
5. Repeat step 4 until the tie is broken.

4.1.4. 25m Pistol Women/Women Junior Qualification

25m Center Fire Pistol Men Individual

25m Pistol Men Junior Individual

Rules

- Each of these events is divided into two stages of 30 competition shots each (60 competition shots total).
- First stage is **Precision**, where six series of 5 shots are fired in 5 minutes each.
- Second stage is **Rapid Fire** stage, where six series of 5 shots are fired. In every rapid fire series the target is shown five times for 3s (green light) with a pause of 7s (red light) between it.
- At the beginning of each stage one sighting series is allowed.



Always wait until the red lights are turned off at the end of each series before starting the next series!

Precision Sighting

1. Press the **Sighting** button  to start the precision sighting series.

Precision Competition

1. Press the **Menu** button  to switch the firing points to **Comp. Precision** phase.
2. Start each of the six precision competition series after another by pressing the **Competition** button .

Rapid Fire Sighting

1. Press the **Menu** button  to switch the firing points to **Sighting Rapid Fire** phase.
2. Press the **Sighting** button  to start the rapid fire sighting series.

Rapid Fire Competition

1. Press the **Menu** button  to switch the firing points to **Comp. Rapid Fire** phase.
2. Start each of the six rapid fire competition series after another by pressing the **Competition** button .

Shoot-Off (only for events without finals)

1. If there is a tie after the last rapid fire series in the second stage, mark only the firing points of the tied athletes in main table. Switch them to Sighting Shoot-off phase by pressing the **Menu** button .
2. Start the Shoot-off sighting series by pressing the **Sighting** button .
3. Press the **Menu** button  to switch the firing points to **Comp. Shoot Off** phase.
4. Start the Shoot-off series by pressing the **Competition** button .
5. Repeat step 4 until the tie is broken.

4.1.5. 25m Standard Pistol Men/Men Junior Individual

Rules

- The 25m Standard Pistol event is divided into three stages of 20 competition shots each (60 competition shots total). Each stage consists of four series of 5 shots.
- The time limit for each series is 150s in stage one, 20s in stage two and 10s in stage three.
- At the beginning of the first stage one sighting series in 150s is allowed. There are no sighting series at the beginning of stage two and three.



Always wait until the red lights are turned off at the end of each series before starting the next series!

Sighting Series 150s

1. Press the **Sighting** button  to start the 150s sighting series.

Competition Series 150s

1. Press the **Menu** button  to switch the firing points to **Competition 150s** phase.
2. Start each of the four 150s competition series after another by pressing the **Competition** button .

Competition Series 20s

1. Press the **Menu** button  to switch the firing points to **Competition 20s** phase.
2. Start each of the four 20s competition series after another by pressing the **Competition** button .

Competition Series 10s

1. Press the **Menu** button  to switch the firing points to **Competition 10s** phase.
2. Start each of the four 10s competition series after another by pressing the **Competition** button .

Shoot-Off (only for events without finals)

1. If there is a tie after the last 10s series in the third stage, mark only the firing points of the tied athletes in main table. Switch them to **Sighting Shoot-off** phase by pressing the **Menu** button .
2. Start the Shoot-off sighting series by pressing the **Sighting** button .
3. Press the **Menu** button  to switch the firing points to **Comp. Shoot Off** phase.
4. Start the Shoot-off series by pressing the **Competition** button .
5. Repeat step 4 until the tie is broken.

4.1.6. 50m Rifle 3-Positions Men/Men Junior Qualification

50m Rifle 3-Positions Women/Women Junior Qualification

Rules

- The 50m Rifle 3-Positions qualification event is divided into three stages. Each stage consists of 20 competition shots (60 competition shots total).
- The order of the three positions is: kneeling, prone, standing.
- There is a 15 minute preparation and sighting time before the competition time starts.
- The total competition time for all three stages is 90 minutes. The competition time includes the changeover and sighting times when switching positions.
- The athlete is responsible to switch to the sighting phase of the next position when a position is finished and from sighting to competition within a position with the control panel by himself.

Preparation and sighting

1. Start the combined preparation and sighting time by pressing the **Sighting** button .

Competition 3-Positions

1. Press the **Menu** button  to switch the firing points to **Kneeling** stage.
2. Press the **Competition** button  to start the total competition time.
3. When an athlete has finished the competition shots in kneeling or prone stage, he or she has to switch to the sighting phase of the next stage by pressing the **Sighting** button  on the control panel.
4. When an athlete has finished the sighting shots after switching to another stage and wants to start with the competition shots of that stage, he or she has to switch to the competition by pressing the **Competition button**  on the control panel.

4.1.7. 50m Rifle Prone Men/Men Junior Individual

50m Rifle Prone Women/Women Junior Individual

50m Pistol Men/Men Junior Individual

Rules

- The 50m Rifle Prone event consists of 60 shots in 50 minutes.
- The 50m Pistol event consists of 60 shots in 90 minutes.
- Before the competition time starts, there is a 15 minute preparation and sighting time.

Preparation and sighting

1. Start the combined preparation and sighting time by pressing the **Sighting** button .
2. Preparation and sighting can be aborted by pressing the **Sighting** button  again while time is running.

Competition

1. After sighting time has ended press the **Competition** button  to switch the match phase to competition. This does not start competition time. The column **Phase** in the competition control program shows **Competition**.
2. Start the competition time by pressing the **Competition** button  again.

4.2. Create (Qualification) Result Lists

Normally after each round and at the end of the last round of a discipline a (preliminary) result list is published on the local scoreboard. In general result lists are created with the module **Result Lists** of the ShootMaster software.

To generate a result list, you have to create an evaluation first. An evaluation defines a set of rules which define how scores are calculated and which targets are evaluated. In an evaluation you can also set the scoring method (e.g. full ring or decimal ring) and the rules for breaking ties. You can also define if you want an individual result list or a team result list.

In the table below you can find the correct evaluation settings for the ISSF qualification events and the non olympic disciplines without finals:

Discipline	Eval mode	Hit score calculation	Competition type	Team
10m Air Rifle Men 10m Air Rifle Men Junior 10m Air Rifle Women 10m Air Rifle Women Junior	ISSF	tenth ring (decimal)	Qualification	no teams
10m Air Rifle Mixed Team 10m Air Rifle Mixed Team Junior	ISSF	tenth ring (decimal)	Qualification	ISSF team scoring Team size: 2
10m Air Pistol Men 10m Air Pistol Men Junior 10m Air Pistol Women 10m Air Pistol Women Junior	ISSF	ring	Qualification	no teams
10m Air Pistol Mixed Team 10m Air Pistol Mixed Team Junior	ISSF	ring	Qualification	ISSF team scoring Team size: 2
25m Rapid Fire Pistol Men 25m Rapid Fire Pistol Men Junior 25m Pistol Women 25m Pistol Women Junior	ISSF	ring	Qualification	no teams
25m Center Fire Pistol Men 25m Pistol Men Junior 25m Standard Pistol Men 25m Standard Pistol Men Junior	ISSF	ring	Individual	no teams
50m Rifle 3-Positions Men 50m Rifle 3-Positions Men Junior 50m Rifle 3-Positions Women 50m Rifle 3-Positions Women Junior	ISSF	ring	Qualification	no teams
50m Rifle Prone Men 50m Rifle Prone Men Junior	ISSF	tenth ring (decimal)	Individual	no teams

50m Rifle Prone Women 50m Rifle Prone Women Junior				
50m Pistol Men 50m Pistol Men Junior	ISSF	ring	Individual	no teams

4.2.1. Edit event data

The header of each result list displays some detailed information about the event such as title, subtitle, location and the period in which the event takes place. You can also setup a custom event logo, which is displayed in the top left corner of the result list. Also a sponsor logo can be added, which is displayed in the footer of every result list page.

To setup the event data to be displayed in the result list, do the following steps:

1. Open the **Result Lists** module in the ShootMaster Control Center.
2. Select the event for changing the event data in the **Event** select box.
3. Click on the  icon in the toolbar or use the function **Event** → **Edit event data** from the menu.
4. A new dialog pops up where all detailed event data can be set. All these information will be displayed in the result list header like described above.

5. Type in all relevant information for your event and click on **save changes**.

4.2.2. Result list revisions

After creating an evaluation with the **Result Lists** module of the ShootMaster software, the generated result list is in an initial state. Every time you reload the evaluation or refresh the result list (press F5), all individual results, all scores and the ranking is recalculated completely. So you can update the result list on-the-fly, when new shots come in or results change (e.g. when footnotes for penalties or records were set).

With the revision feature, you can take a snapshot of the current state of a result list and save it in the ShootMaster database. This snapshot will never change again. It can be accessed afterwards even if results have changed since the revision (snapshot) was created.

Normally this feature is used at the end of every stage or every relay of a discipline. For example if you have more registered athletes for a discipline than the total amount of available firing points. Then you have to shoot multiple relays. After each relay you take a revision (snapshot) and publish it on the local scoreboard. The revision contains a running number and a timestamp. You have access to all previous revision and can compare what has changed between revision.

You can add addition status attributes to a revision when it is created:

- **Preliminary:** This status is used when publishing a new result list, which is not official yet. It is mostly used directly after a relay has finished. It marks the result list as preliminary, because the athletes have the right to protest against the preliminary results (e.g. scoring protest) within a certain protest time after the list was published. If a protest is upheld and some results change therefore, a new preliminary result list with a new protest time will be published. If there are no protests or protests are not upheld, a final result list will be published after the protest time has expired.
- **Final:** This status is used when there were no protests against the latest preliminary revision of a result list and the protest time has expired or when protests against the latest preliminary result lists were not upheld. Results are official and normally don't change anymore.
- **Revised:** This status cannot be set directly by the user. It is only used, when a result list with status final has to be changed afterwards. There are multiple occasions when this can happen. Mostly because of disqualifications of athletes due to a failed late equipment tests.

5. Conducting Finals

Before conducting a final all rounds of the qualification phase of that discipline have to be finished. Also the **final version** of the result list of the qualification phase has to be created like described in chapter 4.2. and 4.2.2 with all protests being resolved. Athletes who qualified for the final are marked with **QF** in the result list. The number of athlete who qualify for the final depends on the qualification discipline.

In this table you can find all ISSF final disciplines which are included in the ShootMaster software. For each discipline the corresponding ISSF Event Code, the MEYTON discipline name and the MEYTON discipline ID is listed.

Discipline name	Event Code	MEYTON discipline name	MEYTON discipline ID
10m Air Rifle Men Final	AR60M	ISSF AR Men Final	1-0610-220
10m Air Rifle Men Junior Final	AR60MJ	ISSF AR Men Jun F	1-0614-220
10m Air Rifle Women Final	AR60W	ISSF AR Women Final	1-0612-220
10m Air Rifle Women Junior Final	AR60WJ	ISSF AR Women Jun F	1-0616-220
10m Air Rifle Mixed Team Final	ARMIX	ISSF AR Mixed Final	1-0618-050
10m Air Rifle Mixed Team Junior Final	ARMIXJ	ISSF AR Mixed Jun F	1-0620-050
10m Air Pistol Men Final	AP60M	ISSF AP Men Final	1-0611-220
10m Air Pistol Men Junior Final	AP60MJ	ISSF AP Men Jun F	1-0615-220
10m Air Pistol Women Final	AP60W	ISSF AP Women Final	1-0613-220
10m Air Pistol Women Junior Final	AP60WJ	ISSF AP Women Jun F	1-0617-220
10m Air Pistol Mixed Team Final	APMIX	ISSF AP Mixed Final	1-0619-050
10m Air Pistol Mixed Team Junior Final	APMIXJ	ISSF AP Mixed Jun F	1-0621-050
50m Rifle 3-Positions Men Final	FR3X20M	ISSF 3p Men Final	4-0642-245
50m Rifle 3-Positions Men Junior Final	FR3X20MJ	ISSF 3p Men Jun F	4-0648-245
50m Rifle 3-Positions Women Final	R3X20W	ISSF 3p Women Final	4-0647-245
50m Rifle 3-Positions Women Junior Final	R3X20WJ	ISSF 3p Women Jun F	4-0649-245
25m Rapid Fire Pistol Men Final	RFPM	ISSF RFP Men Final	3-0630-400
25m Rapid Fire Pistol Men Junior Final	RPFMJ	ISSF RFP Men Jun F	3-0632-400
25m Pistol Women Final	SPW	ISSF 25mP Women Fin	3-0631-375
25m Pistol Women Junior Final	SPWJ	ISSF 25mP Women J F	3-0633-375

5.1. Create Final Start Lists

Before conducting a final in a discipline, you have to create a start list for the corresponding final first. This final start list must contain all athletes or teams who qualified for that final. The number of athletes or teams who qualify for a final depends on the discipline of the qualification stage. The **Result Lists** module of the ShootMaster software assists you in creating final start lists by deriving them automatically from the final result list of the qualification round.

To create a final start list follow these steps:

1. Make sure that all qualification rounds of the discipline have been finished. All protests have to be resolved and the final revision of the qualification result list has to be published on the scoreboard.
2. Open the **Result Lists** module in the MEYTON Control Center.
3. Select the correct event and evaluation of the qualification round and check if the correct number of finalists are marked with **QF** in the final revision of the result list.
4. Click the icon  in the toolbar or use the function **Result list** → **create final startlist** from the menu bar. A new dialog pops up.
5. Check the settings in the dialog. Make sure that the correct **Final discipline** is set and the number of starters who qualified for final is correctly set in the **Placings** area. Also check if the **Firing point assignment** method is set correctly.
6. Set the first firing point to use for the final in the **First firing point** area.
7. Set the start time for the final in the **Start time** section.
8. Click on the button **create final start list** to generate the start list for the final.

When creating a final start list the ShootMaster software also automatically creates a corresponding evaluation for that final, too. You can change this evaluation in the **Result Lists** module if needed.

5.2. Allocate Final Firing Points

Follow the instructions from chapter 3. to assign the starters from the start list of the final to the corresponding final firing points.

5.3. Setting up Display Controllers for Finals

When conducting finals it is highly recommended to use one (ore more) MEYTON Display Controller devices with big screens or projectors to keep the audience informed about the current (immediate) results of the final. Depending on the discipline, you have to use different presentation programs on the display controller. In the table below you can find the correct display controller presentation program for all ISSF final disciplines which are included in the ShootMaster software.

Final Discipline	Display Controller Presentation Program for Final
10m Air Rifle Men Final 10m Air Rifle Men Junior Final 10m Air Rifle Women Final 10m Air Rifle Women Junior Final 10m Air Pistol Men Final 10m Air Pistol Men Junior Final 10m Air Pistol Women Final 10m Air Pistol Women Junior Final	ISSF Final 10m
10m Air Rifle Mixed Team Final 10m Air Rifle Mixed Team Junior Final 10m Air Pistol Mixed Team Final 10m Air Pistol Mixed Team Junior Final	ISSF Final 10m Mixed Team
50m Rifle 3-Positions Men Final 50m Rifle 3-Positions Men Junior Final 50m Rifle 3-Positions Women Final 50m Rifle 3-Positions Women Junior Final	ISSF Final 50m Rifle 3-Positions
25m Rapid Fire Pistol Men Final 25m Rapid Fire Pistol Men Junior Final	ISSF Final 25m Rapid Fire Pistol
25m Pistol Women Final 25m Pistol Women Junior Final	ISSF Final 25m Pistol Women

The current presentation program and other settings of the Display Controller can be changed in its configuration interface. Do the following steps to setup a Display Controller for a final:

1. Open the configuration interface of the Display Controller by double clicking onto a Display Controller device in the device table in the section **Network** → **Device overview** in the MEYTON Control Center.

Note: You have to expand the category item **Displaycontroller** by clicking the arrow first to see all the devices in the category.

2. Select the correct presentation program in the section **Overview** → **Active Program** in the Display Controller configuration interface and click on the **save** button to confirm. The Display Controller now shows the selected presentation program.
3. Select the firing point area (and other final specific settings) by clicking on the name of the selected presentation program in the left menu of the configuration interface. After that you can find the setting for the selected presentation program in the center region of the screen.
4. Change the firing point area in the section **Lanes** (and other settings if needed) and confirm the changes by clicking the **save** button at the end of the settings page. The output of the Display Controller changes immediately after saving.

5.4. 10m Air Rifle Men/Men Junior Final

10m Air Rifle Women/Women Junior Final

10m Air Pistol Men/Men Junior Final

10m Air Pistol Women/Women Junior Final

Rules

- This final is conducted with 8 athletes, which all start with a score of zero. It consists of two stages. Decimal scoring is used.
- In the first stage two series of 5 shots are fired in 250s each.
- In the second stage up to 14 single shots are fired in 50s each.
- After every two single shots in the second stage, the athlete with the lowest total score is eliminated. If there is a tie for the lowest ranking athlete to be eliminated, the tied athletes (2 or more) will fire additional tie-breaking single shots until the tie is broken.

Preparation and sighting

1. Start the combined preparation and sighting time by pressing the **Sighting** button .

5 shot series

1. After the preparation and sighting time has ended, switch the firing points to **5 Shot Series** phase by pressing the **Menu** button .
2. Start the first **5 shot series** by pressing the **Competition** button , and after that the second series in the same way. If all athletes have ended a series before the allowed shooting time has expired, the competition time can be stopped early by pressing the **Competition** button  again. This also applies for all subsequent phases of this final.

Single shots

1. Once the athletes have completed both 5 shot series, switch the firing points to **Single Shot Series** phase by pressing the **Menu** button .
2. Now start each single shots one after the other by pressing the **Competition** button .
3. After every two single shots, the athlete with the lowest total score is eliminated from the final. If two or more athletes are tied with the same lowest total score, a tie break must be conducted between those athletes. Instructions for conducting a tie break can be found in the section below.

Tie Breaking

1. To conduct a tie break, the firing points involved must be switched to tie break phase. Mark the relevant firing points in the firing point table and switch these into **Tie Breaking** phase by pressing the **Menu** button .
2. Each individual tie-break shot is started by pressing the **Competition** button . The tied athletes must fire as many tie-break shots until the tie is broken.

3. Once the tie is broken, the firing points involved must be switched back to **Single Shot Series** phase by pressing the **Menu** button . The final now continues until all athletes have been ranked as described in the section **Single shots**.

5.5. 10m Air Rifle Mixed Team / Team Junior Final

10m Air Pistol Mixed Team / Team Junior Final

General Rules

- The final consists of two **Medal Matches** (Bronze Medal Match and Gold Medal Match) being conducted one after another.
- Each **Medal Match** starts with a combined preparation and sighting time of 5 minutes.
- In the first **Medal Match**, the 3rd and 4th ranked teams from the qualification round will compete against each other for the bronze medal.
- In the second **Medal Match**, the 1st and 2nd ranked teams from the qualification round will compete against each other for the gold medal.
- In this final decimal scoring is used for both Air Rifle and Air Pistol.

Medal Match Rules

- In **Medal Match** consists of multiple rounds. In each round each team member fires a single shot within 50 seconds independently from each other.
- At the end of each round the team with highest combined score in that round gets 2 points. In the event of equal scores each team gets 1 point.
- The first team to score at least 16 points and leading by at least one point wins the Medal Match. If there is a tie the Medal Match continues with additional rounds until the tie is broken.

Preparation and Sighting

1. Start the combined preparation and sighting time by pressing the **Sighting** button .
2. Preparation and sighting can be aborted by pressing the **Sighting** button  again while time is running.

Medal Match

1. After sighting time has ended press the **Competition** button  to switch to **Medal Match** phase. This does not start competition time. The column **Phase** in the competition control program shows **Medal Match**.
2. Start each phase one after another by pressing the **Competition** button  until the winner is determined. If all athletes finish a phase before time expires, time can be stopped early by pressing the **Competition** button  again.

5.6. 50m Rifle 3-Positions Men/Men Junior Final

50m Rifle 3-Positions Women/women Junior Final

Rules

- This final is conducted with 8 athletes, which all start with a score of zero.
- It consists of 15 match shots in each position. The order of the positions is kneeling, prone, standing. Decimal scoring is used.
- The final starts with **three** series of 5 shots in kneeling position with 200s each. It continues with a changeover and sighting time of 7 minutes.
- Then **three** series of 5 shots in prone position with 150 seconds each follow. It continues with a changeover and sighting time of 9 minutes.
- Then **two** series of 5 shots in standing position with 250 seconds each follow. After that the two lowest ranked athletes are eliminated.
- The final continues with **five** single shots in standing position in 50 seconds each. After each of these single shots the athlete with the lowest total score is eliminated.
- If there is a tie for the lowest ranking athlete to be eliminated, the tied athletes (2 or more) will fire additional tie-breaking single shots in 50 seconds until the tie is broken.

Kneeling Position

1. Start the combined preparation and sighting time is started by pressing the **Sighting** button .
2. After the preparation and sighting time has ended, switch the firing points into **Kneeling 3x5** phase by pressing the **Menu** button .
3. Now three 5-shot series in the kneeling position will be fired. Start each individual series by pressing the **Competition** button . If all athletes have finished their series before the allowed shooting time has expired, the competition time can be stopped early by pressing the **Competition** button  again. This also applies for all subsequent phases of this final.

Prone Position

1. After all three series in the kneeling position have been finished, press the **Menu** button  to switch the firing points to **Prone Sighting** phase.
2. Start the combined changeover and sighting time by pressing the **Sighting** button .
3. After the changeover and sighting time has ended, press the **Menu** button  to switch the firing points to **Prone 3x5** phase.
4. Now three 5-shot series in prone position will be fired. Start each individual series by pressing the **Competition** button .

Standing Position (5-shot Series)

1. After all three series in the prone position have been finished, press the **Menu** button  to switch the firing points to **Standing Sighting** phase.
2. Start the combined changeover and sighting time by pressing the **Sighting** button .
3. After the changeover and sighting time has ended, press the **Menu** button  to switch the firing points to **Standing 2x5** phase.
4. Now two 5-shot series in the standing position will be fired. Start each individual series by pressing the **Competition** button .
5. After all athletes have fired the two 5-shot series, the two athletes with the lowest scores are eliminated from the final. If scores are tied on the highest place to be eliminated, a tie break must be conducted between these athletes. Instructions for conducting a tie break are given in the section **Tie Breaking**.

Standing position (single shots)

1. Once the athletes have completed both of the standing series (and tie breaks if necessary), switch the firing points to **Standing 5x1** phase by pressing the **Menu** button .
2. Now start the 5 single shots in the standing position one after the other, by pressing the **Competition** button  each time. After every single shot, the athlete with the lowest total score is eliminated from the final.
3. If there is a tie for the lowest ranking athlete to be eliminated, a tie break must be conducted between these athletes. You can find instructions about conducting a tie break in section **Tie Breaking** below.

Tie Breaking

1. To conduct a tie break, firing points must be switched to Tie break phase. Mark the relevant firing points in the main table and switch these into **Tie break** phase by pressing the **Menu** button .
2. Start the individual tie-shots by pressing the **Competition** button . The athletes must fire as many tie shots until the tie is broken.
3. Once the tie has been broken, switch the firing points involved back to **Standing 2x5** or if applicable **Standing 5x1** phase by pressing the **Menu** button . The Final now continues until all placings have been determined as described in the section **Standing position (single shots)**.

5.7. 25m Rapid Fire Pistol Men/Men Junior Final

Rules

- This final is conducted with 6 athletes, which all start with a score of zero.
- Three rapid fire groups of five targets are used. Two athletes share a group of five targets.
- The final consists of 8 series of five shots in 4 seconds with hit and miss scoring.
- Beginning after the fourth series and continuing until the eighth series the athlete with the lowest total number of hits is eliminated until the final ranking is decided. If there is a tie for the lowest ranking athlete to be eliminated, a tie break will be conducted.



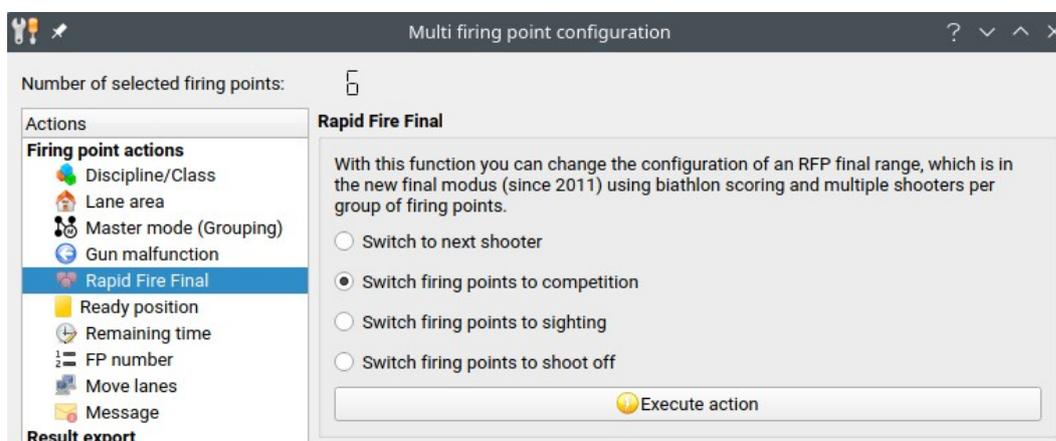
Always wait until the red lights are turned off at the end of each series before starting the next series!

Sighting series

1. Start the sighting series for the currently active athlete of a group by pressing the **Sighting** button
2. To switch to the next athlete for this target group, press the **Menu** button

Competition series

1. To switch from sighting to the competition series, right click onto the firing point table. In the window which pops up, click onto the option **Rapid Fire Final** in the action table on the left side. Then select the option **Switch firing points to competition** in the right area and confirm with the **Execute action** button.

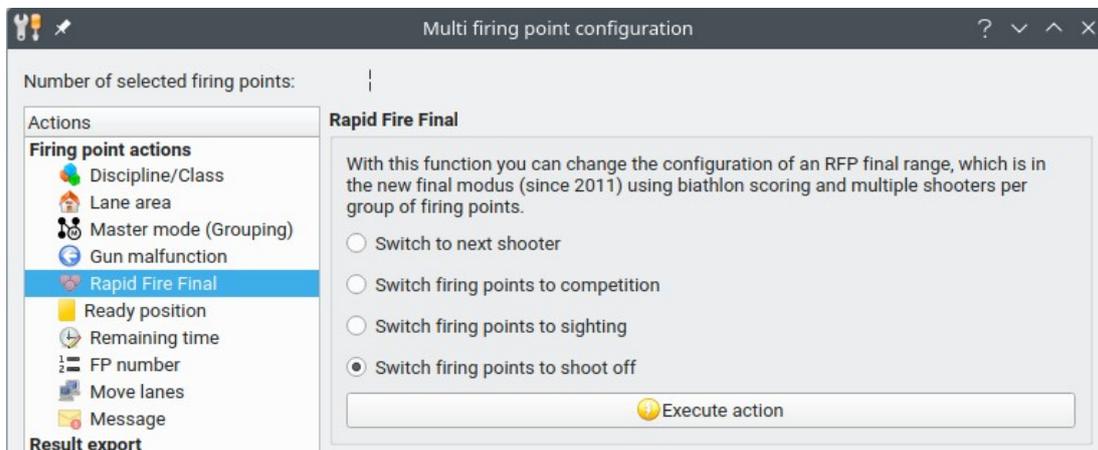


2. To start each competition series for the currently active athlete, press the **Competition** button . To switch to the next athlete of the target group, press the **Menu** button

3. After all athletes have completed their fourth series and continuing until the eighth series, the athlete with the lowest total score is eliminated from the final. If there is a tie for the lowest ranking athlete to be eliminated, a tie break will be conducted. You can find instructions about conducting a tie break in section **Tie Breaking** below.

Tie Breaking

1. To conduct a tie break, the firing points involved must be switched to **Tie Breaking** phase. Mark the relevant firing points in the main table and activate the relevant athlete by pressing the **Menu** button .
2. Right click onto the firing point table. In the window which pops up, click onto the option **Rapid Fire Final** in the action table on the left side. Then select the option **Switch firing points to shoot off** in the right area and confirm with the **Execute action** button.



3. To start a tie break series for the currently active athlete, press the **Competition** button .
4. Now conduct as many tie break series until the tie is broken.
5. After the tie break has ended, the relevant firing points must be switched back into competition phase. Right click onto the firing point table. In the window which pops up, click onto the option **Rapid Fire Final** in the action table on the left side. Then select the option **Switch firing points to competition** in the right area and confirm with the **Execute action** button. The competition is then ready to be continued as described in the section **Competition Series**.

5.8. 25m Pistol Women/Women Junior Final

- This final is conducted with 8 athletes, which all start with a score of zero.
- Two groups of five targets are used with the middle target of each group left free.
- The final consists of 10 rapid-fire series of five shots with the 3s/7s timing.
- Hit and miss scoring is used.
- After the fourth series the athlete with the lowest score is eliminated. Then after each next series another athlete is eliminated until the final ranking is decided. If there is a tie for the lowest ranking athlete to be eliminated, a tie break will be conducted.



Always wait until the red lights are turned off at the end of each series before starting the next series!

Sighting series

1. Start the sighting series by pressing the **Sighting** button

Rapid Fire series

1. Once the sighting series is finished, switch the firing points to **Rapid Fire** phase by pressing the **Menu** button
2. Now start the each rapid-fire series one after another by pressing the **Competition** button
3. After the fourth rapid fire series and after each following series the athlete with the lowest score is eliminated from the final. If there is a tie for the lowest ranking athlete to be eliminated, a tie break will be conducted. You can find instructions about conducting a tie break in section **Tie Breaking** below.

Tie Breaking

1. To conduct a tie break, the firing points involved must be switched to tie break phase. Mark the relevant firing points in the main table and switch these into **Tie Breaking** phase by pressing the **Menu** button.
2. The individual tie break series are started by pressing the Competition button . The athletes must fire as many tie break series as necessary to break the tie.
3. Once the tie has been broken, switch the firing points involved back to **Rapid Fire** phase by pressing the **Menu** button . The final now continues until all ranks have been determined as described in the section **Rapid Fire series**.

6. Irregularities

6.1. Malfunctions

If an athlete claims a malfunction during a 25m pistol event, the jury has to decide if it is an **Allowable Malfunction (AM)** or a **Non-Allowable Malfunction (NAM)**.

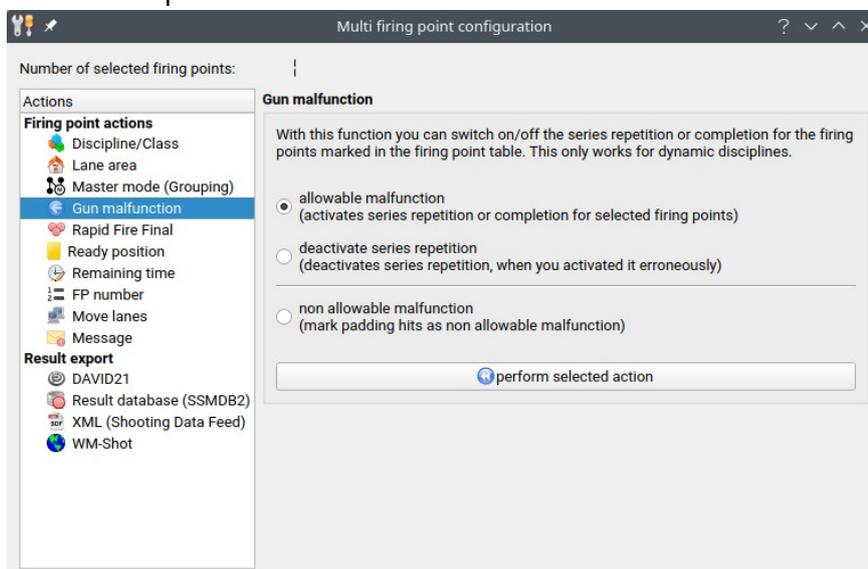
6.1.1. Allowable Malfunction (AM)

Allowable Malfunctions are treated differently in the 25m pistol events:

- **25m Rapid Fire Pistol:** Series is repeated and the lowest shot value of each of the five targets is counted. Early, late and missed shots, which were not caused by an allowable malfunction, are counted as zero(es). If there is a second malfunction in the repetition series, the series (original or repetition) with the higher number of shots is filled up with zero(es).
- **25m Rapid Fire Pistol Final:** Series is repeated and only the shots of the repeat series count.
- **25m Standard Pistol:** Series is repeated and the five lowest shot values from all hits of both series count.
- **25m Pistol Women, 25m Center Fire Pistol, 25m Pistol Women Final:** Series is completed with missing hits of the series where the malfunction occurred.

To activate the series repetition or completion in case of an Allowable Malfunction (AM), you have to do the following steps:

1. Mark the firing point(s) where the malfunction occurred in the firing point table of the Competition Control program.
2. Right click on the firing point table to open the configuration window. There select the option **Gun malfunction** in the action table on the left.



- Then select **allowable malfunction** in the right area and press the **perform selected action** button. If the activation of the series repetition or completion was successful, you see the rewind symbol  in the status column of the firing point table. According to the discipline software automatically chooses if series repetition or completion is needed.

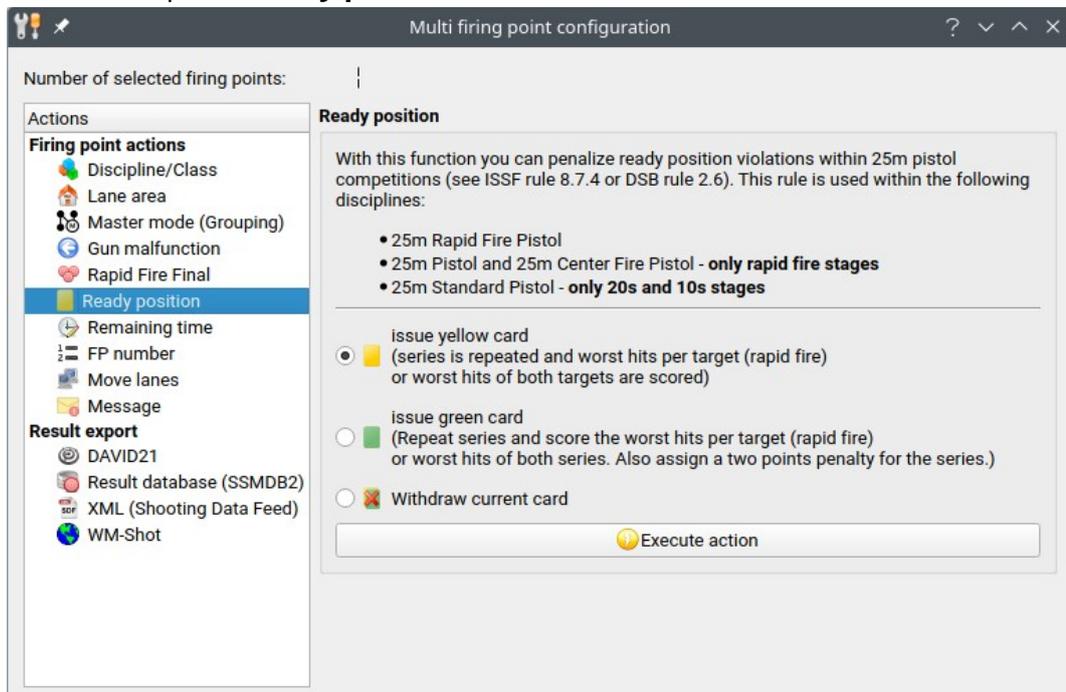
6.1.2. Non-Allowable Malfunctions (NAM)

In case of a Non-Allowable the ShootMaster program automatically fills up missing shots in 25m pistol event series with invalid shots of zero (0,0) value. Start the next series as usual.

6.2. Ready Position Violations

If an athlete commits a ready position violation according to ISSF rules, do the following steps in Competition Control program:

- Mark the firing point(s) on which the ready position violation occurred in the firing point table.
- Right-click onto the firing point table to open the configuration window. Select the option **Ready position** in the action table on the left.



- Select the **Issue yellow card** or **Issue green card** option on the right side and confirm by clicking the **Execute action** button. If the activation was successful, you see the card symbol  or  and the rewind symbol  for series repetition in the status column of the firing point table.

6.3. Crossfire

A crossfire shot during the competition phase of an event can be corrected in the following way:

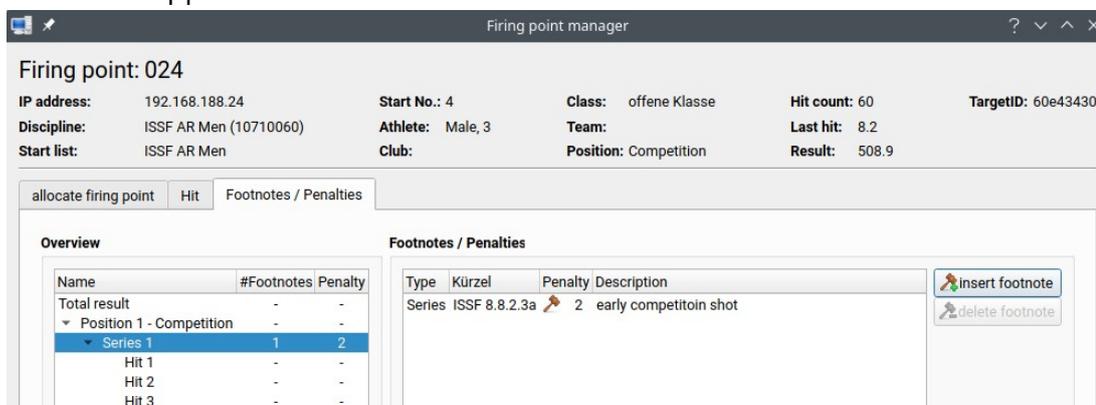
1. Delete the crossfire shot from the target where it was shot on accidentally by following the steps described in chapter 6.5..
2. Add a missing hit (zero) to the target of the athlete who fired the cross shot as described in chapter 6.6..
3. Inflict a point deduction (according to the rules) for the athlete who fired the cross shot as described in chapter 6.4..

6.4. Penalties (point deduction) / Footnotes

When an athlete commits a rule violation, you can inflict a point deduction (according to the ISSF rules) from his score. In the same way you can also set footnotes for status information like DNS (Did Not Start) or DNF (Did Not Finish) or RW (World Record).

Do the following steps to set a penalty or footnote for an athlete:

1. Double click on the corresponding firing point in the Competition Control program.
2. Open the **Footnotes / Penalties** tab.
3. Select the total result, position, series or hit where the penalty or footnote should be applied to in the overview table on the left side.



4. Click on **insert footnote** button on the right. A new window pop up.
5. Select the penalty or footnote you want to apply from the list of predefined penalties and footnotes and click on the **choose footnote** button to apply it.



Note: The list of available predefined footnotes and penalties depend on the category item (total result, position, series or hit) which was selected in the overview table in step 3.

6. If you can't find a matching footnote or penalty, you can also create a user defined one by pressing the **Create new footnote** button in the selection window.

6.5. Delete hit

1. Double click on the corresponding firing point in Competition Control.
2. Open the **Hit** tab.
3. Mark the hit you want to delete in the table by clicking it.
4. Select the action **delete hit** from the action table by clicking it.
5. Check if the correct hit number is set in the field **Position**.
6. Click onto the button **delete hit** to delete the hit.

Firing point manager

Firing point: 023

IP address: 192.168.188.23 Start No.: 3 Class: offene Klasse Hit count: 60 TargetID: 60e4342e
 Discipline: ISSF AR Men (10710060) Athlete: Male, 4 Team: Last hit: 9.5
 Start list: ISSF AR Men Club: Position: Competition Result: 514.1

allocate firing point Hit Footnotes / Penalties

Hits

Position: Competition

No.	Relay	Series	Value	IT	Pos.	Divider	x [mm]	y [mm]	Status	Date	Time	Diff
47	Competition	5	8.9	↓		522.46	+0.22	-5.22	valid	04.09.2024	12:43:30.75	
48	Competition	5	7.4	↘		900.40	+7.19	-5.42	valid	04.09.2024	12:43:32.23	
49	Competition	5	9.0	↗		484.42	+2.58	+4.10	valid	04.09.2024	12:43:32.97	
50	Competition	5	8.1	↑		725.09	+0.12	+7.25	valid	04.09.2024	12:43:33.96	
51	Competition	6	7.5	↙		855.96	-5.65	-6.43	valid	04.09.2024	12:43:37.00	
52	Competition	6	9.1	↗		473.05	+3.36	+3.33	valid	04.09.2024	12:43:37.61	
53	Competition	6	10.4*	⊙		150.23	+1.47	+0.31	valid	04.09.2024	12:43:38.57	
54	Competition	6	9.0	↘		481.30	+3.55	-3.25	valid	04.09.2024	12:43:39.35	
55	Competition	6	8.3	↘		661.39	+6.32	-1.95	valid	04.09.2024	12:43:40.79	
56	Competition	6	8.6	↗		583.01	+3.53	+4.64	valid	04.09.2024	12:43:41.73	
57	Competition	6	8.2	↓		682.83	+0.50	-6.81	valid	04.09.2024	12:43:42.39	
58	Competition	6	7.8	↘		778.40	+4.64	-6.25	valid	04.09.2024	12:43:43.67	
59	Competition	6	6.9	↗		1001.74	+7.30	-6.86	valid	04.09.2024	12:43:45.09	
60	Competition	6	9.5	↙		374.28	-3.73	+0.31	valid	04.09.2024	12:43:46.50	



Single hits All hits Series

Actions

- delete hit
- change hit status
- insert miss/frame hit
- insert hit

delete hit

Position: 49 delete hit

Value: 9.0

6.6. Insert missed hit (zero)

1. Double click on the corresponding firing point in Competition Control.
2. Open the **Hit** tab.
3. Select the action **Insert miss/frame hit** from the action table by clicking it.
4. Select the position where you want to insert the missed hit in the **Position** field.
5. Click onto the button **insert hit** to insert a zero at the desired position.

Firing point manager

Firing point: 023

IP address: 192.168.188.23 Start No.: 3 Class: offene Klasse Hit count: 60 TargetID: 60e4342e
 Discipline: ISSF AR Men (10710060) Athlete: Male, 4 Team: Last hit: 9.5
 Start list: ISSF AR Men Club: Position: Competition Result: 514.1

allocate firing point Hit Footnotes / Penalties

Hits

Position: Competition

No.	Relay	Series	Value	IT	Pos.	Divider	x [mm]	y [mm]	Status	Date	Time	Diff [s]
1	Competition	1	8.3		↓		658.55	-0.58	-6.56	valid	04.09.2024	12:40:42.53
2	Competition	1	9.7		↖		318.94	-2.03	+2.46	valid	04.09.2024	12:40:49.38
3	Competition	1	7.7		↖		814.38	-2.82	+7.64	valid	04.09.2024	12:40:59.34
4	Competition	1	7.4		↖		879.65	+4.18	-7.74	valid	04.09.2024	12:41:13.06
5	Competition	1	7.4		↖		883.45	-6.69	+5.77	valid	04.09.2024	12:41:20.92
6	Competition	1	10.5*	⊙	↖		114.63	+0.90	+0.71	valid	04.09.2024	12:41:34.06
7	Competition	1	9.3		↓		421.21	+1.32	-4.00	valid	04.09.2024	12:41:45.78
8	Competition	1	9.7		↖		324.81	+1.68	+2.78	valid	04.09.2024	12:41:58.73
9	Competition	1	8.6		↖		578.00	+2.72	-5.10	valid	04.09.2024	12:42:06.03
10	Competition	1	8.3		↖		666.63	-1.48	+6.50	valid	04.09.2024	12:42:17.95
11	Competition	2	7.5		↖		867.00	+4.83	+7.20	valid	04.09.2024	12:42:44.03
12	Competition	2	8.0		↖		730.62	-6.14	-3.96	valid	04.09.2024	12:42:44.67
13	Competition	2	8.8		↖		529.23	+0.93	+5.21	valid	04.09.2024	12:42:45.62
14	Competition	2	10.8*	⊙	↖		44.38	-0.43	-0.11	valid	04.09.2024	12:42:47.03
15	Competition	2	7.6		↖		826.70	-7.30	+3.88	valid	04.09.2024	12:42:48.01



Single hits All hits Series

Actions

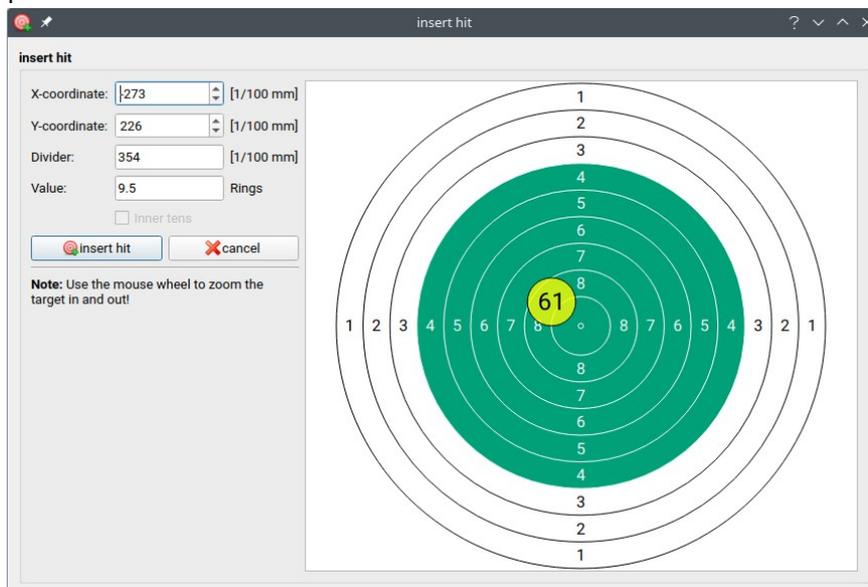
- delete hit
- change hit status
- Insert miss/frame hit
- insert hit

Insert miss/frame hit

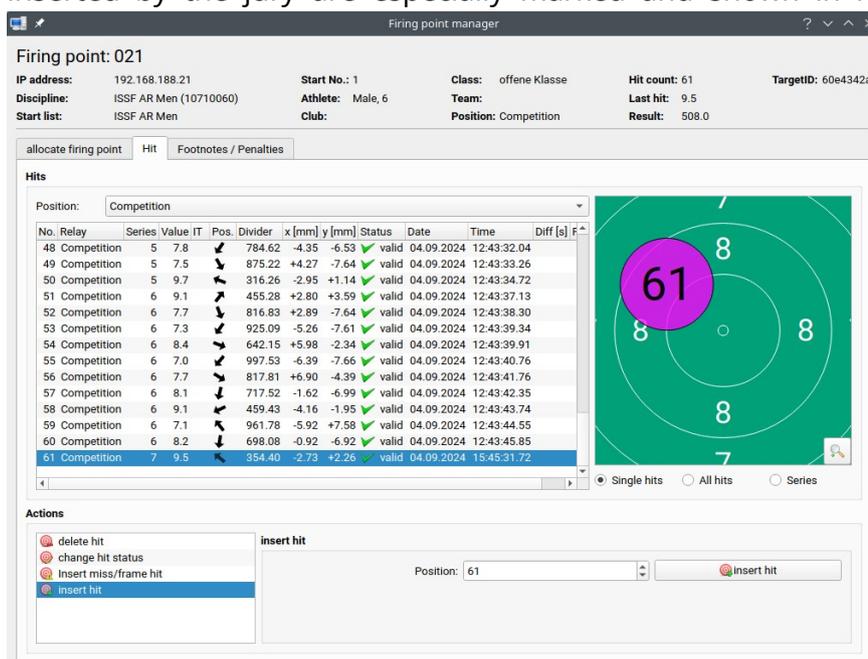
Position: 4 insert hit

6.7. Insert not registered shot (fly through)

1. Double click on the corresponding firing point in Competition Control.
2. Open the **Hit** tab.
3. Select the action **Insert hit** from the action table by clicking it.
4. Select the position where you want to insert the not registered hit in the **Position** field.
5. Click onto the button **insert hit** to insert a hit at the desired position.
6. A new window pops up. There type in the x- and y-coordinates of the hit in the corresponding fields or drag the hit with the mouse to the desired position.



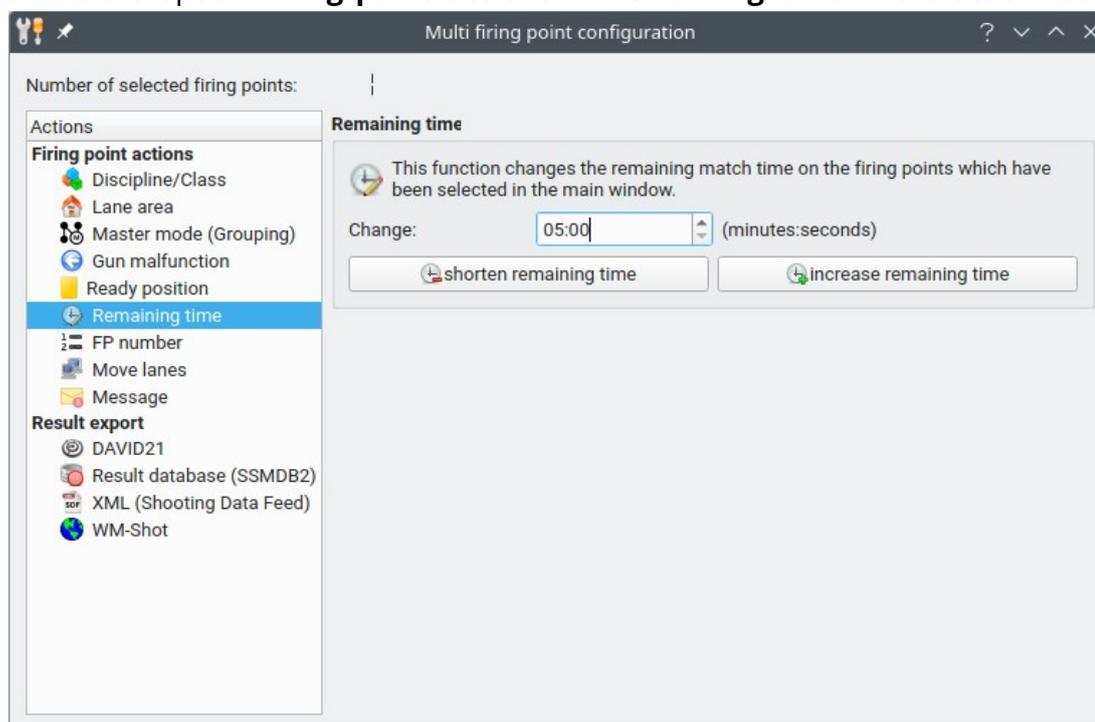
7. Click onto the **insert hit** button to insert the hit. Remark: Hits which are inserted by the jury are especially marked and shown in magenta color!



6.8. Change shooting time

In some cases it can be necessary to shorten or increase the sighting or competition shooting time of a firing point. In such a situation do the following steps:

1. Only mark the firing point(s) where you want to shorten or increase the shooting time in the firing point table of the Competition Control program.
2. Click onto the **safety** button  in the toolbar to switch the firing points to safety mode. This stops the time of the selected firing points and the lock symbol appears in the status column of the firing point table.
3. Right click on the firing point table to open the configuration window. There select the option **Firing point actions** → **Remaining time** in the action table.



4. Select the time change in the **Change** field and press the **shorten remaining time** or the **increase remaining time** button to shorten or increase the remaining time.
5. Click onto the safety button  in the toolbar to switch the safety mode for the firing points off. Directly after switching off the safety mode, the time starts running down again.

6.9. Interrupt a competition

In some cases it can be necessary to interrupt a competition and freeze the shooting time and actual state of the firing points. To interrupt a competition do the following steps:

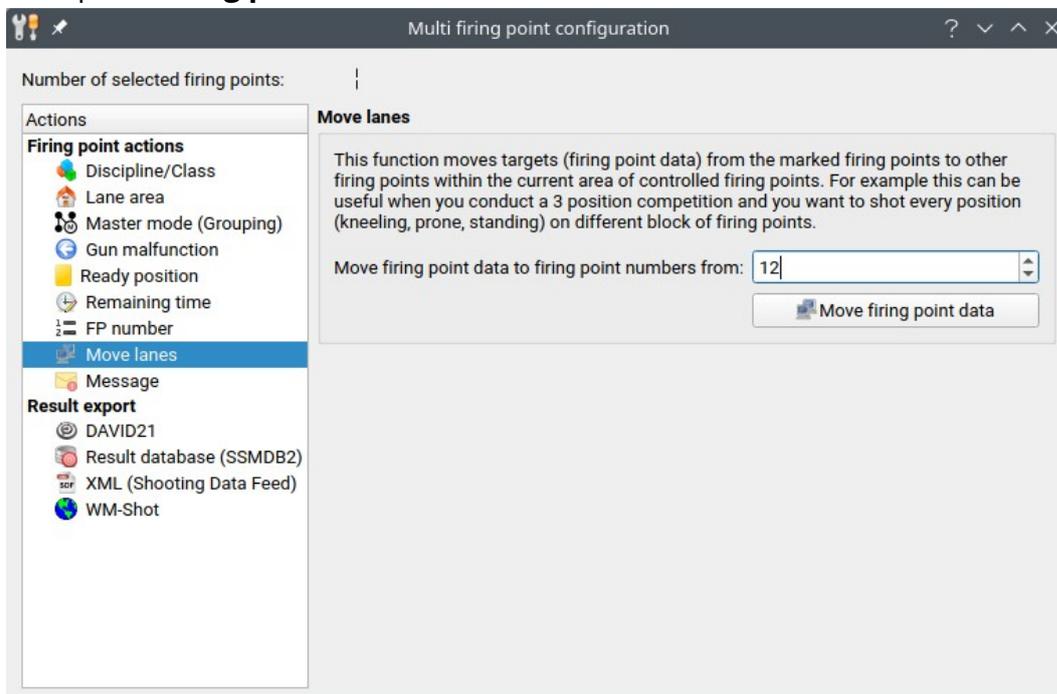
1. Mark all the firing points where you want to interrupt the competition in the firing point table of the Competition Control program.
2. Click onto the safety button  in the toolbar to switch the firing points to safety mode. A lock symbol appears in the status column of these firing points.
3. When you want to continue press the safety button  again to switch off the safety mode. The competition continues at the state the safety mode was activated. If it is necessary to extend to remaining shooting time, look in chapter 6.8..

6.10. Move an athlete to a spare firing point

6.10.1. Failed firing point still visible in Competition Control

If an EST or display computer fails in a competition, but is still visible in the competition control program, do the following steps to move an athlete to a spare firing point:

1. Make sure that the spare firing point is free. If not, mark only the spare firing point in the firing point table of the Competition Control program and use the function **Firing point actions** → **Free firing point**.
2. Then only mark the failed firing point in the firing point table.
3. Right click onto the firing point table to open the configuration window. There select the option **Firing point actions** → **Move lanes** in the action table.

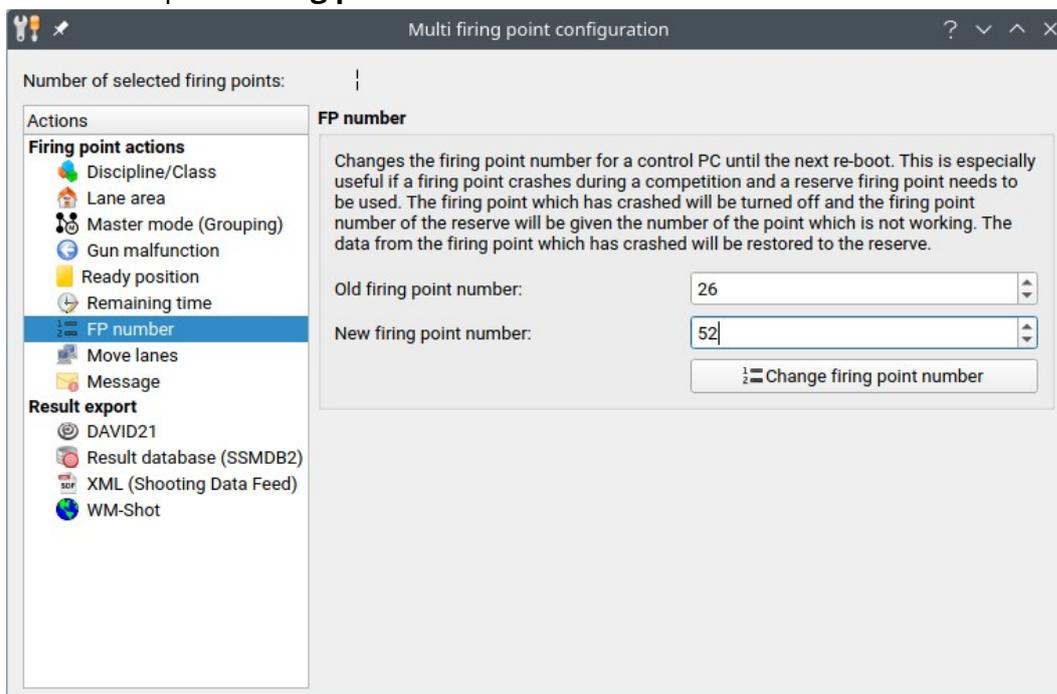


4. Type in the firing point number of the spare firing point in the field **Move firing point data to firing point numbers from**.
5. Press the **Move firing point data** button.
6. If necessary increase the remaining shooting time of the athlete as described in chapter 6.8.

6.10.2. Failed firing point not visible in Competition Control

If an EST or display computer fails in a competition and is not visible in Competition Control anymore, do the following steps to move an athlete to a spare firing point:

1. Switch off the control PC of the faulty firing point. No data will be lost!
2. Make sure that the spare firing point is free. If not, mark only the spare firing point in the firing point table of the Competition Control program and use the function **Firing point actions->Free firing point**.
3. Then only mark the spare firing point in the firing point table.
4. Right mouse click onto the firing point table to open the configuration window. There select the option **Firing point action** → **FP number** in the action table.



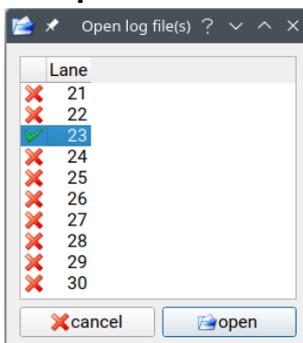
5. Type in the number of the faulty firing point in the **New firing point number** field.
6. Press the **Change firing point number** button. Then the spare firing point gets the number of the faulty one and automatically reloads the data of the faulty firing point.
7. If necessary increase the remaining shooting time of the athlete as described in chapter 6.8..

6.11. Print shot protocol

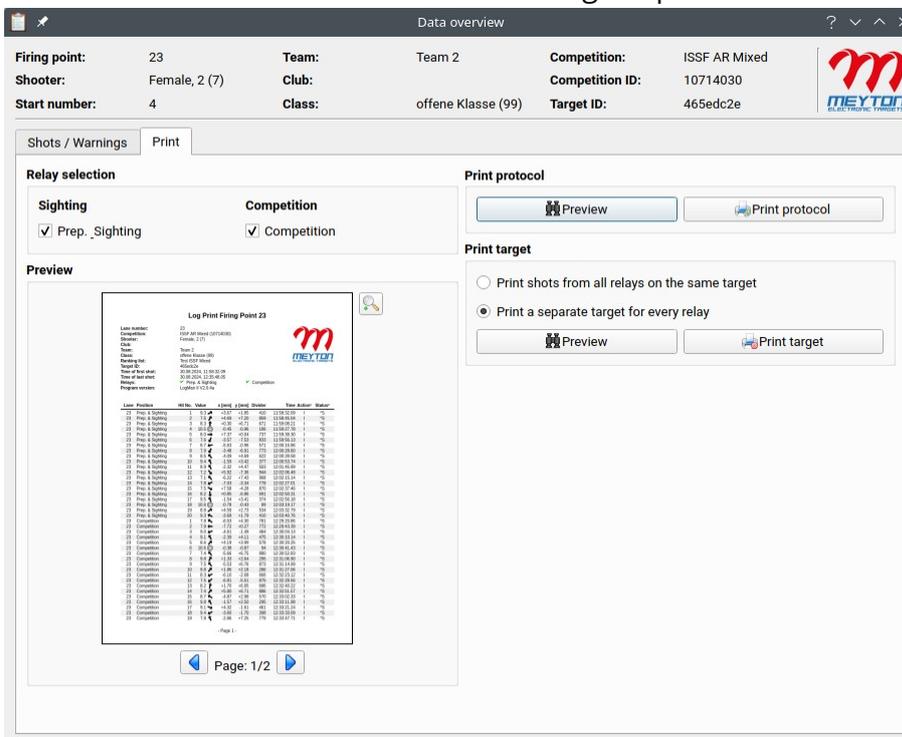
In some situations like when there is a cross shot or an athlete protests a shot value, it can be useful to print out a shot log. The shot log presents the data of all measured hits (coordinates, hit values, timestamps) of a single target in tabular form.

To create a shot log print, do the following steps:

1. Open the **Shot Protocol** program in the MEYTON Control Center.
2. Use the function **File** → **Open log file(s)** from the menu or click onto the button  in the toolbar.
3. Select the desired firing point in the lane overview table by clicking on it. Then click the **open** button.



4. Back in the main window double click onto the table line of the desired target.
5. A new windows with the data of the target opens. There click onto the **Print** tab.



6. To create the shot protocol printout click **Print protocol** button in the **Print protocol** area on the right. Before printing you can create a preview by clicking the **Preview** button.

6.12. Print target with one-to-one size

When using a control sheet behind the measuring frame it can be useful to print out a one- to-one size target with all the hits that were measured by the MEYTON system. Then you can put the control sheet with the shot holes on top of the one-to-one target printout and line them up. With this method you can confirm that the MEYTON system measured all hits correctly.



To get a fully accurate one-to-one printout of the target you have to calibrate the used printer first! You can do this with the **Printer calibration** function in the printer selection dialog.

To create a one-to-one target print, do the following steps:

1. Do the steps 1.-5. as described in the chapter 6.11.
2. Select if you want to print the shots of all positions on the same target or print a target for each position with the corresponding options in the **Print target** area on the right side.
3. To create the one-to-one target printout click **Print target** button in the **Print target** area on the right. Before printing you can create a preview by clicking the **Preview** button.

The screenshot shows the 'Data overview' window with the following information:

Firing point:	23	Team:	Team 2	Competition:	ISSF AR Mixed
Shooter:	Female, 2 (7)	Club:		Competition ID:	10714030
Start number:	4	Class:	offene Klasse (99)	Target ID:	465edc2e

The interface includes a 'Print' tab and a 'Preview' section. The 'Print protocol' section has buttons for 'Preview' and 'Print protocol'. The 'Print target' section has two radio button options: 'Print shots from all relays on the same target' (selected) and 'Print a separate target for every relay'. Below these are 'Preview' and 'Print target' buttons. The 'Preview' section shows a target printout with the MEYTON logo and a 'Page: 1/1' indicator.