

Manual

Cleaning the MF6R3

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1 Cleaning the MF6R3BM



DANGER

Lead dust

Avoid the creation of and the exposure to lead dust.

- a) Wear protective gloves, protective goggles, protective mask and suitable protective clothing.
- b) Use wet pieces of cloth for cleaning and for absorbing lead dust.
- c) Use a brush and pressurised air only if necessary.
- d) Do not consume, store or process food, beverages or foodstuffs during or close to the cleaning.
- e) Wash and rinse your hands and face thoroughly after cleaning the Electronic Scoring Target (EST).
- f) Separate strictly protective clothing from other clothing.
- g) Adhere to all applicable safety regulations and applicable regulations for avoiding lead dust on your shooting range.



NOTICE

Heavy pollution

If the Electronic Scoring Target (EST) is too heavily polluted, it cannot register shots. Shots can be missed.

- a) Calibrate the EST before competitions, important phases of competitions and before single positions of competitions.
- b) Verify the values for Amplification.
- c) If levels with medium amplification appear, clean the EST after the phase of the competition.
- d) If levels with maximum amplification appear, clean the EST immediately.
- e) Calibrate the EST again after cleaning.

Clean the perspex screens regularly to

- ensure optimal functioning
- avoid missed shots

MeYton suggests a cleaning every 1000 to 5000 shots and if required.

2 Verification of the EST with Control-PC

Verify if a cleaning of the EST is necessary. Verify the EST

- before competitions
- before important phases of competitions
- before single positions of competitions
- after competitions
- after training

Applicable to ESTs with ESTA-Control and ESTA-Pro.

2.1 Calibrating the EST

If you calibrate an Electronic Scoring Target (EST) the device is configuring for optimal functioning. The values for optimal functioning depend on the parameters of the environment. The EST is calibrating automatically while booting the Control-PC.



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- a) Calibrate the EST before competitions, important phases of competitions and before single positions of competitions.
- b) Verify the values for *Amplification*.
- c) If levels with medium amplification appear, clean the EST after the phase of the competition.
- d) If levels with maximum amplification appear, clean the EST immediately.
- e) Calibrate the EST again after cleaning.

Requirement: The program Competition control is open.

- a) Select the lanes. Draw the mouse while clicking left over the lanes that you want to select.

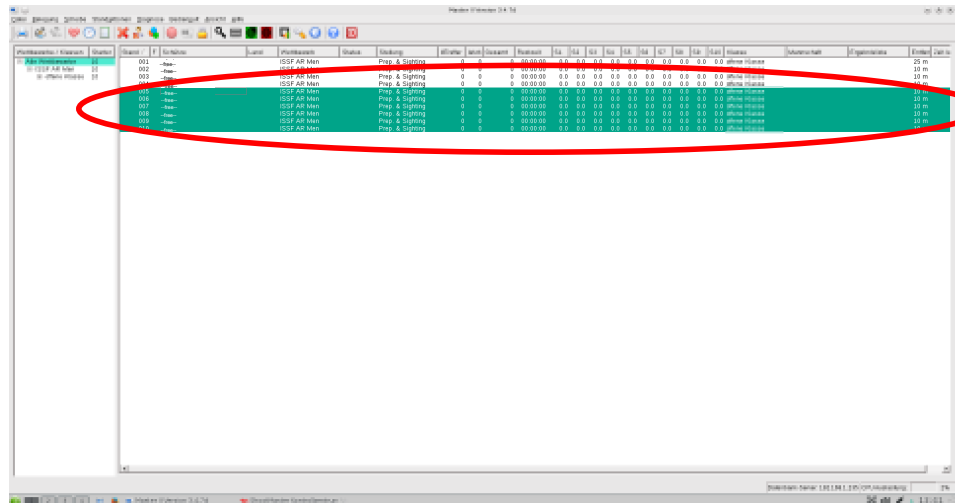


Illustration 1: Several lanes selected

b) Click on Diagnostics ->calibrate the measuring frame.

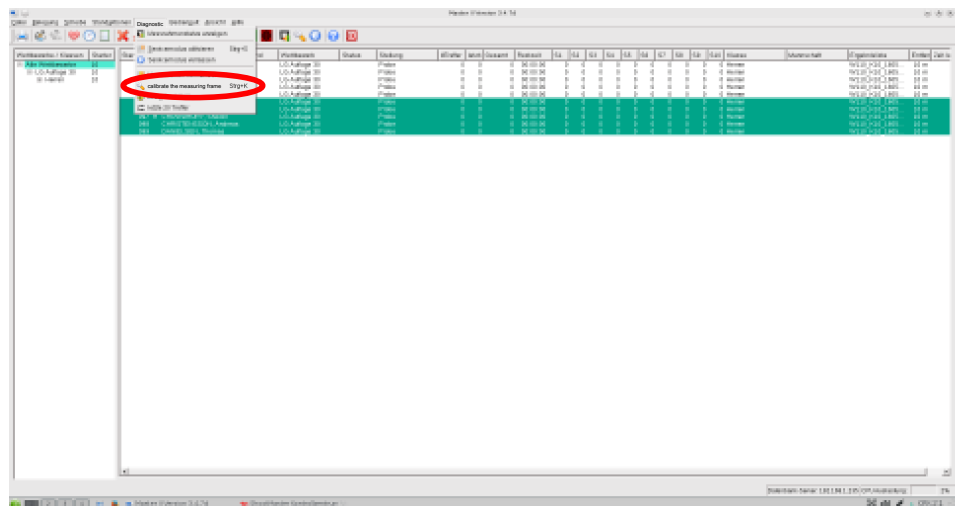


Illustration 2: calibrate the measuring frame

c) Confirm the calibration of the ESTs.

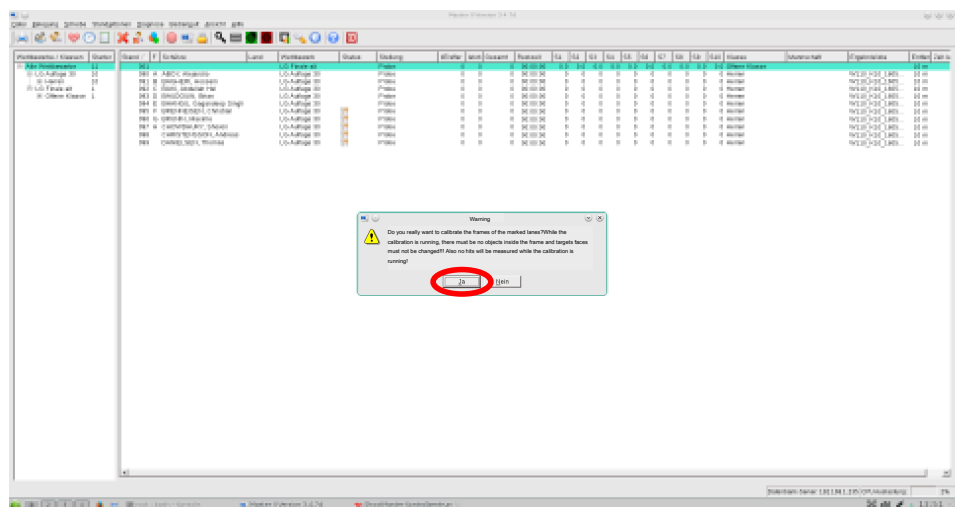


Illustration 3: Confirming the calibration of the EST

Result: The service mode is active. The ESTs are calibrating.

Display on the Control-PC

During the calibration of the EST the Control-PC is displaying the following screen:

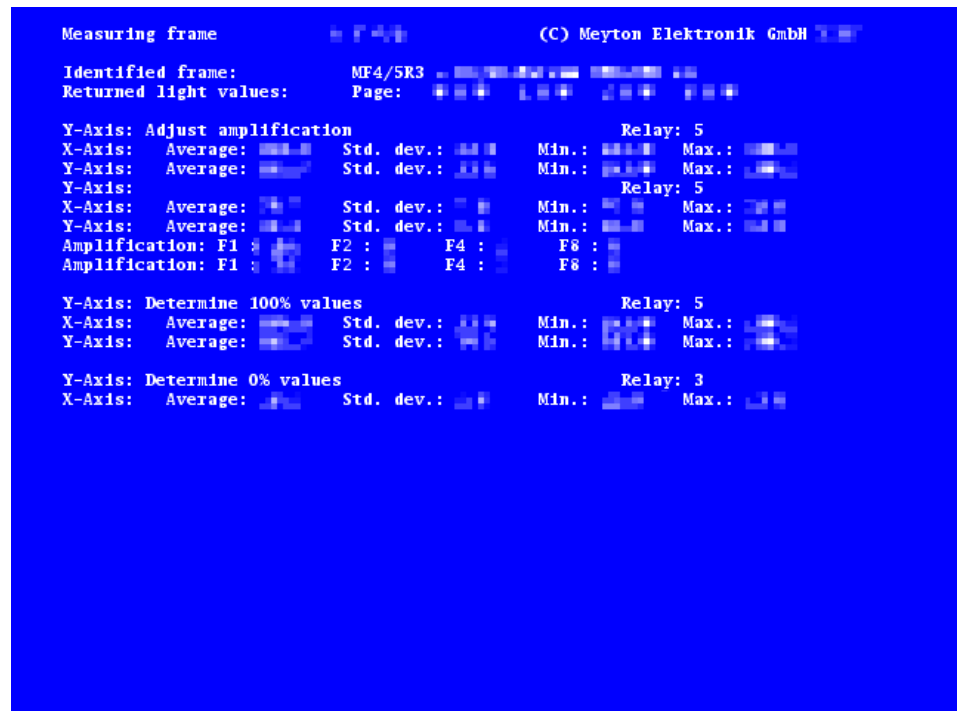


Illustration 4: Calibration of the EST on the Control-PC

2.2 Reading the display during the calibration



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- b) Verify the values for Amplification.
- c) If levels with medium amplification appear, clean the EST after the phase of the competition.
- d) If levels with maximum amplification appear, clean the EST immediately.
- e) Calibrate the EST again after cleaning.

Requirement: The EST is calibrating

Requirement: The Control-PC displays the following screen.

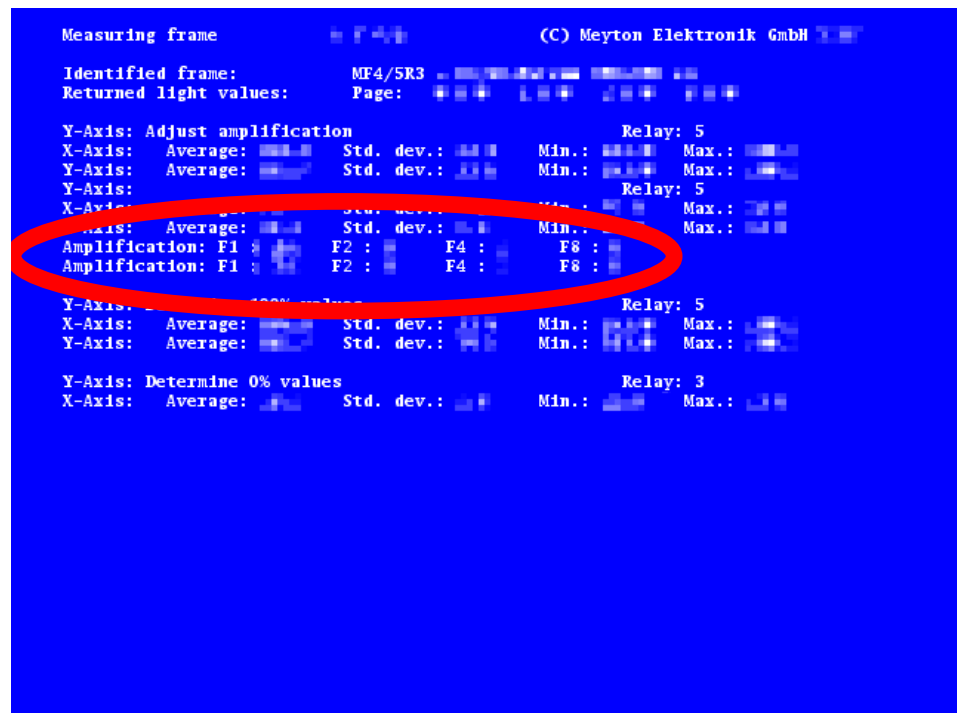


Illustration 5: Calibration of the EST on the Control-PC

- Verify the values for Amplification.
- Verify the values after F4.
- Verify the values after F8.
- Press the button Competition to leave the screen

The Amplification shows how much the light of a light barrier has to be amplified so that the light-barrier can detect hits. The amplification is measured in 4 levels:

- F1 is the level without amplification
- F2 is the level with the least amplification
- F4 is the level with the medium amplification
- F8 is the level with the maximum amplification

The display on the Control-PC counts how many light-barriers are in the different levels. The first line is counting the light-barriers on the horizontal axis of the EST. The second line is counting the light-barriers on the vertical axis of the EST. The sum of all numbers is the number of all light-barriers in the EST. The number of light-barriers depends on the model of EST.

A perfectly clean EST has only light-barriers with the amplification F1.

A clean EST has about 90% light-barriers with the level F1 and 10% light-barriers with the level F2.

Lightbarriers with more than 15% level F2 indicate pollution.

Light-barriers with the level F4 indicate heavy pollution.

Light-barriers with the level F8 indicate extremely heavy pollution.

3 Verification of the EST with ESTA5

Verify if a cleaning of the EST is necessary. Verify the EST

- before competitions
- before important phases of competitions
- before single positions of competitions
- after competitions
- after training

Applicable to ESTs with ESTA-Mobile.

3.1 Showing the light sensor values

Requirement: The menu is open.

- a) Press on `Technical Service Menu`.
- b) Press on `Sensor Values`.

Interim result: ESTA5 shows the condition of the light sensors.

- c) Press on `Exit` sub-menu to return to the menu.

3.2 Reading the light sensor values



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If the Electronic Scoring Target (EST) is too heavily polluted, it cannot register shots. Shots can be missed.

- a) Calibrate the EST before competitions, important phases of competitions and before single positions of competitions.
- b) Verify the values for `Amplification`.
- c) If levels with medium amplification appear, clean the EST after the phase of the competition.
- d) If levels with maximum amplification appear, clean the EST immediately.
- e) Calibrate the EST again after cleaning.

- a) Verify the values.

- b) Count the numbers of the light-barriers in the different levels.

The `Sensor Values` shows how much the light of a light barrier has to be amplified so that the light-barrier can detect hits. The amplification is measured in 4 levels:

- `Good`: is the level without amplification
- `A Bit Dark`: is the level with the least amplification
- `Dark`: is the level with the medium amplification
- `very dark`: is the level with the maximum amplification

The display shows how many light-barriers are in the different levels. The lines represent the different axes of the ESTs. The number of light-barriers depends on the model of EST.

A perfectly clean EST has only light-barriers with the amplification `Good:`.

A clean EST has about 90% light-barriers with the level `Good:` and 10% light-barriers with the level `A Bit Dark:`.

Light-barriers with more than 15% level `A Bit Dark:` indicate pollution.

Light-barriers with the level `Dark:` indicate heavy pollution.

Light-barriers with the level `very dark:` indicate extremely heavy pollution.

3.3 Calibrating the EST

Requirement: The menu is open.

- a) Press on `Technical Service Menu`.
- b) Press on `Calibrate EST`.
- c) Confirm with `OK`.
- d) Wait until the calibration is finished.

Interim result: ESTA5 shows the condition of the light sensors.

- e) Press on `Exit` sub-menu to return to the menu.

4 Cleaning the EST



DANGER

Lead dust

Avoid the creation of and the exposure to lead dust.

- a) Wear protective gloves, protective goggles, protective mask and suitable protective clothing.
- b) Use wet pieces of cloth for cleaning and for absorbing lead dust.
- c) Use a brush and pressurised air only if necessary.
- d) Do not consume, store or process food, beverages or foodstuffs during or close to the cleaning.
- e) Wash and rinse your hands and face thoroughly after cleaning the Electronic Scorint Target (EST).
- f) Separate strictly protective clothing from other clothing.
- g) Adhere to all applicable safety regulations and applicable regulations for avoiding lead dust on your shooting range.

Requirement: brush

Requirement: wet cloth

Requirement: The EST is accessible from the rear

- a) Clean the upper surface of the EST with a brush.

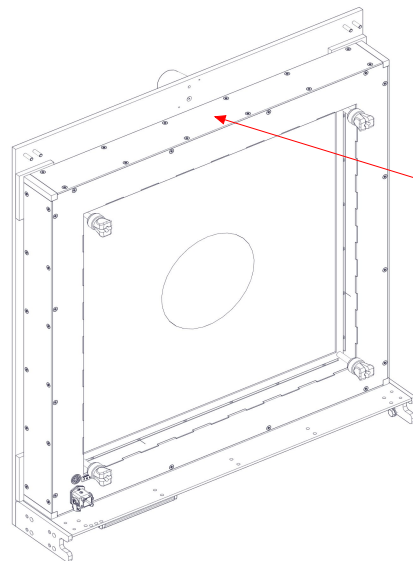


Illustration 6: Cleaing the upper surface of the EST

- b) Clean all perspex screens with a brush. Do not scratch the perspex screens.

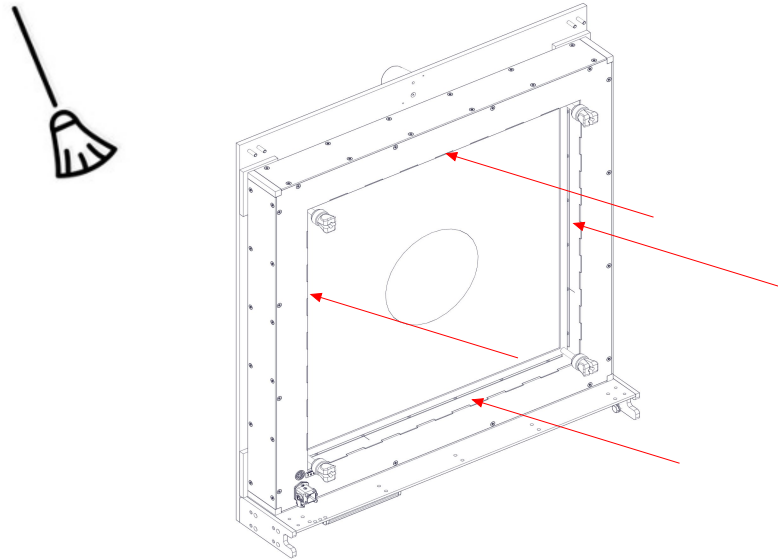


Illustration 7: Clean all perspex screens with a brush

- c) Clean all perspex screens with a wet cloth. Do not scratch the perspex screens.

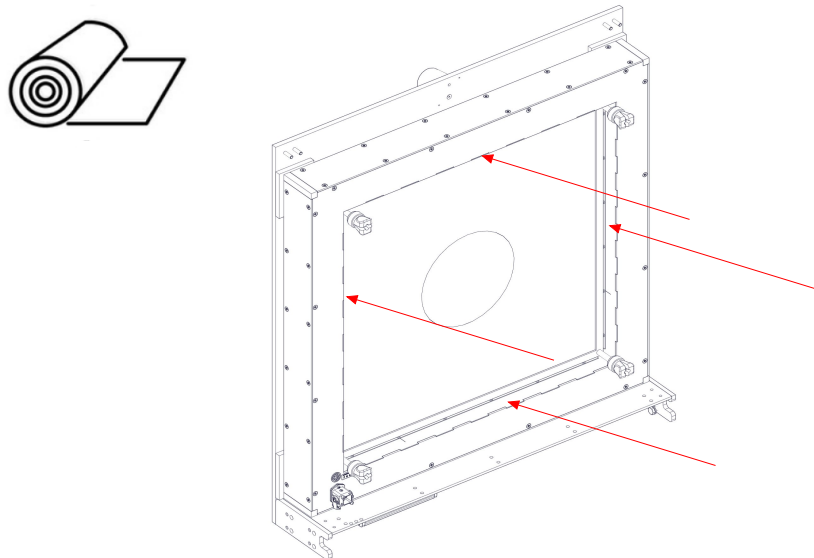


Illustration 8: Clean all perspex screens with a wet cloth

- d) Clean the exterior of the EST with a wet cloth.

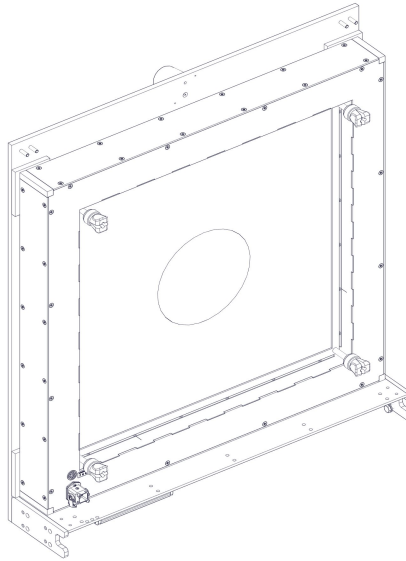


Illustration 9: Clean the exterior of the EST

Result: The EST is clean.