Troubleshooting

- Camera is not in focus
- Inconsistent laser detection
- No laser detection
- Invalid rapid shooting sounds
- Camera is upside down
- When firing I get double hit
- Hits are drifting to the edges

Camera is not in focus

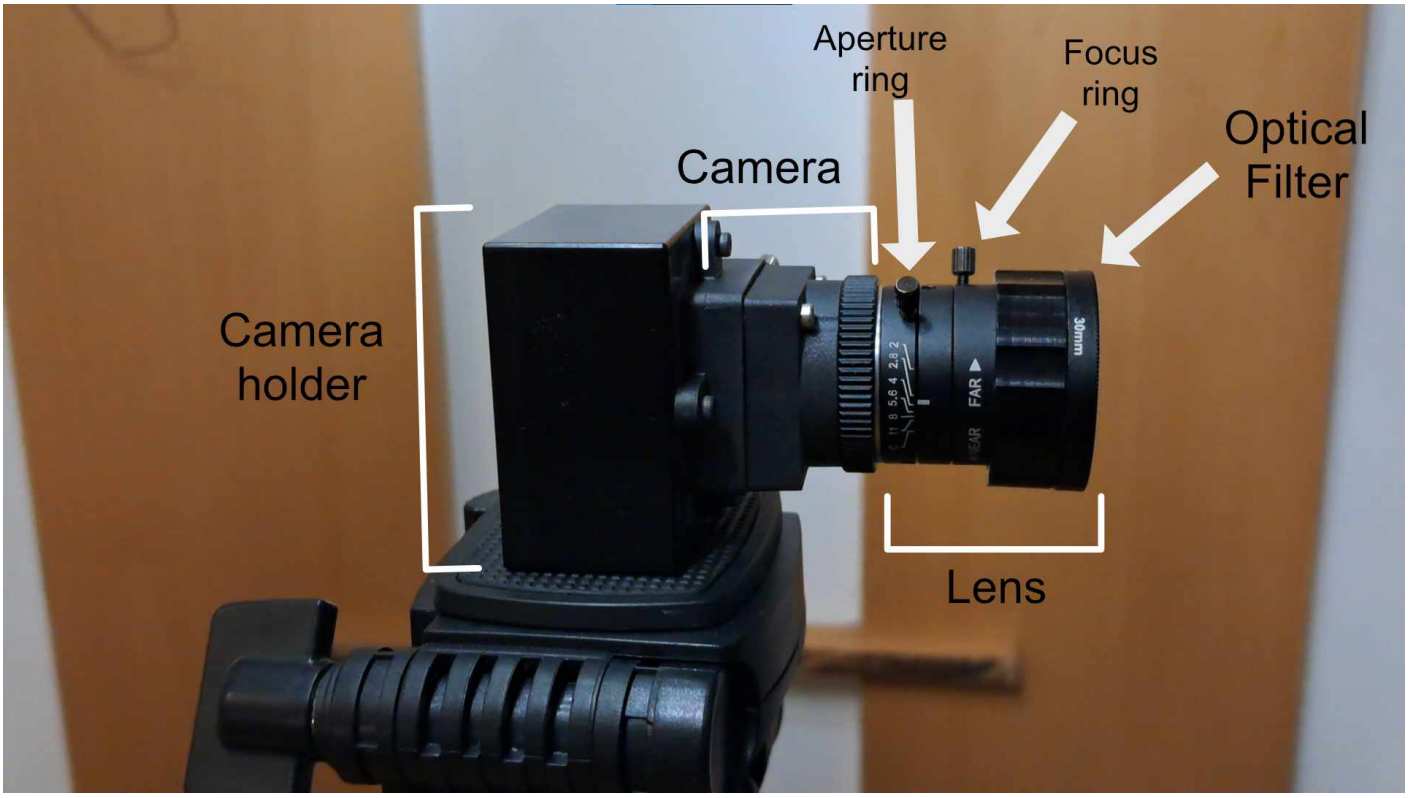
Symptoms

- Output of a camera is **blurred** in LATRAS Hub
- I can't get camera into focus
- Even after adjusting the focus ring on the lens camera is **not in focus**

Before troubleshooting

- **Remove optical filter** from the lens.
- Ensure that the camera is properly connected to the computer through USB3 port.
- Start the camera in LATRAS Hub and enable Preview.
- Set camera gain so that the camera has visible output.
- Now, you should see camera **output in a large window.**
- Do not focus in darkness. It will be way easier to get camera into focus with indoor light.

Camera description



Resolution

1. Rotate with the focus ring on the lens. This will change the camera's focus. Look at the main view in LATRAS HUB, the focus **change should be visible there right away**.
2. Check if the lens is **clean**.
3. Check if the lens is properly threaded into the camera. If not, thread it back in and go to step 1.
4. Take the camera and try focusing on everyday objects. Focusing against a white wall or a projection screen **can be very tricky**. If you manage to get into focus **try it again with your projection**.

Inconsistent laser detection

Symptoms

- I am shooting, but the shot count is not increasing.
- The detection stops in the middle of a scenario.

Cause

This problem is usually explained by following cases:

- Camera gain is set improperly
- Computer does not have enough memory
- Computer does not keep up with the simulator

Resolution

1. Try **increasing camera gain**, but do not overshoot. Output image should not be overexposed, but not completely black. Check our tutorial: https://youtu.be/4PJ1UsyNxTY
2. Lower graphics settings in Range 1 or any other plugin. If you experience these issues we recommend dropping quality settings to Medium or Low. This can be done from the main menu in Range1 -> Settings
3. Open task manager(Ctrl + Shift + Escape) and check if there is enough system memory, This is especially problematic on systems with 8Gb of memory. If you are using over 80% of system memory, try turning off other processes that take up memory.

Related problems

No laser detection

May be caused by malfunction of laser device

Check the funktionality of laser:

> **Never point directly into your or other people's eyes.**

- Red laser by pointing to a wall or other safe surface,
- IR laser by pointing to a running cellphone's camera - small flashes appear.

When the laser doesn't function - try changing batteries. If it doesn't help, contact the producer of the laser device for repair.

When the laser functions properly - see camera settings for help.

Invalid rapid shooting sounds

When invalid rapid shooting sounds or single false hits appear (false detection):

Check the light condition in the room. The camera is capable to deal with wide range of conditions, but it needs to be properly set.

Dim ambient light, remove direct light pointed to the projection screen.

When dimming the room is not possible **lower the camera gain setting,** but not too much.

Most common problems with gain setting:

Hits are not detected or only some are - increase the Gain

Hits appear much lower than they should be - increase Gain

There are False hits or two hits per one shot - decrease Gain

Camera is upside down

Symptoms

Cause

Resolution

Related problems

When firing I get double hit

Symptoms

- When shooting on a simulator, sometimes. The simulator shoots 2 shots instead of 1.
- Sometimes I get 2 rapid hits after I shoot.

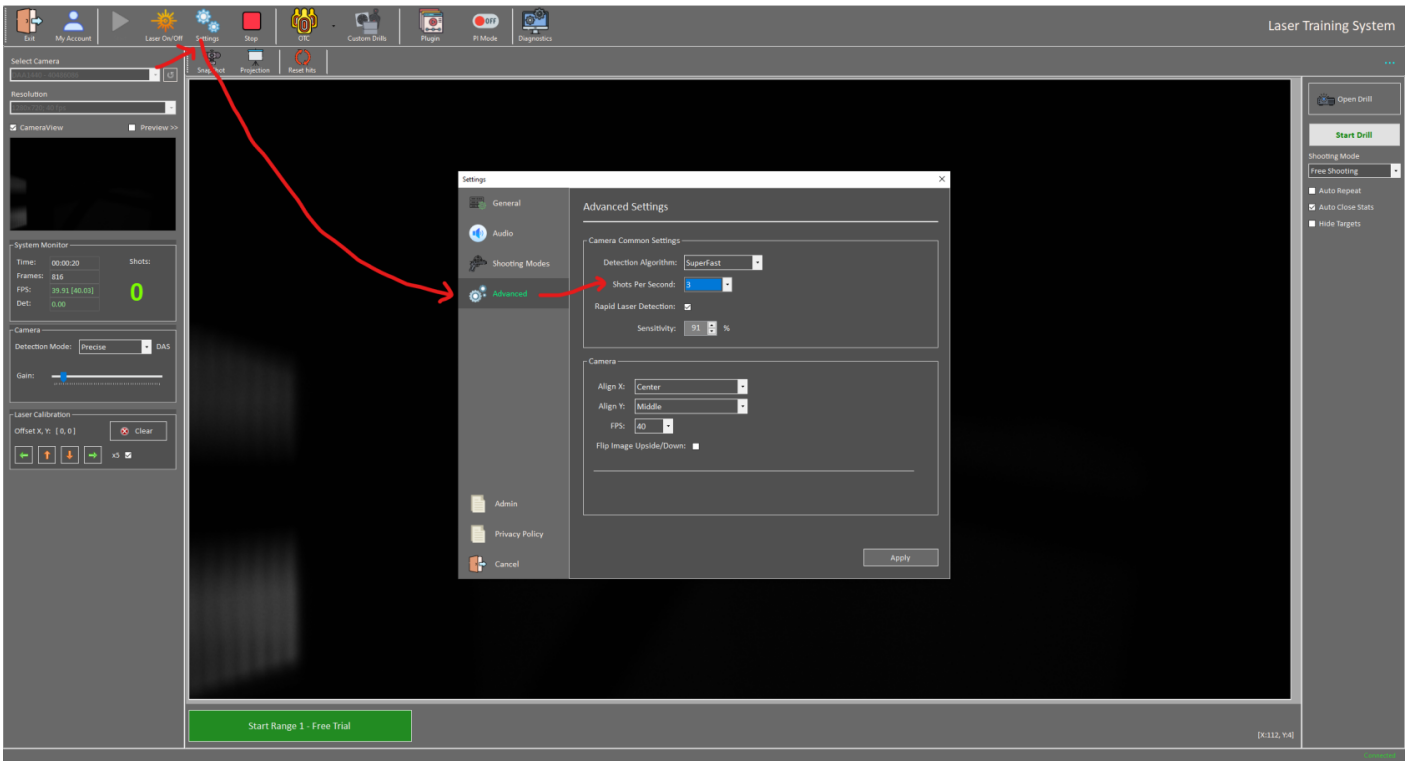
Cause

This is usually caused by the laser's internal sensitivity setting. For example, if you were using Cool Fire Trainer with our simulator, this sometimes happens when you release the trigger.

Resolution

Navigate to Settings -> Advanced -> there will be an SPS or Shots per second drop-down box. This setting says how many shots will be allowed in a second. So if you set it to 3, that means the minimal interval between two shots is 333ms. If the second hit is rapid, it can fall into this time frame. We recommend setting it to 3 when dealing with double hits, but you can of course increase or decrease this number depending on your preference.

> Note that the camera must be turned on to set this setting.


Laser Training System
Exit
My Account
Laser On/Off
Settings
Stop
Custom Drills
Plugin
PI Mode
Diagnostics
Select Camera
Resolution
CameraView
Preview >>
System Monitor
Time:
Frames:
FPS:
Det:
Shots:
0
Camera
Detection Mode:
Precise
DAS
Gain:
Laser Calibration
Offset X, Y: [0, 0]
Clear
x5
Snap Shot
Projection
Reset hits
Settings
General
Audio
Shooting Modes
Advanced
Admin
Privacy Policy
Cancel
Advanced Settings
Camera Common Settings
Detection Algorithm:
SuperFast
Shots Per Second:
3
Rapid Laser Detection:
Sensitivity:
91
%
Camera
Align X:
Center
Align Y:
Middle
FPS:
40
Flip Image Upside/Down:
Apply
Open Drill
Start Drill
Shooting Mode
Free Shooting
Auto Repeat
Auto Close Stats
Hide Targets
Start Range 1 - Free Trial
[X:112, Y:4]

Hits are drifting to the edges

Symptoms

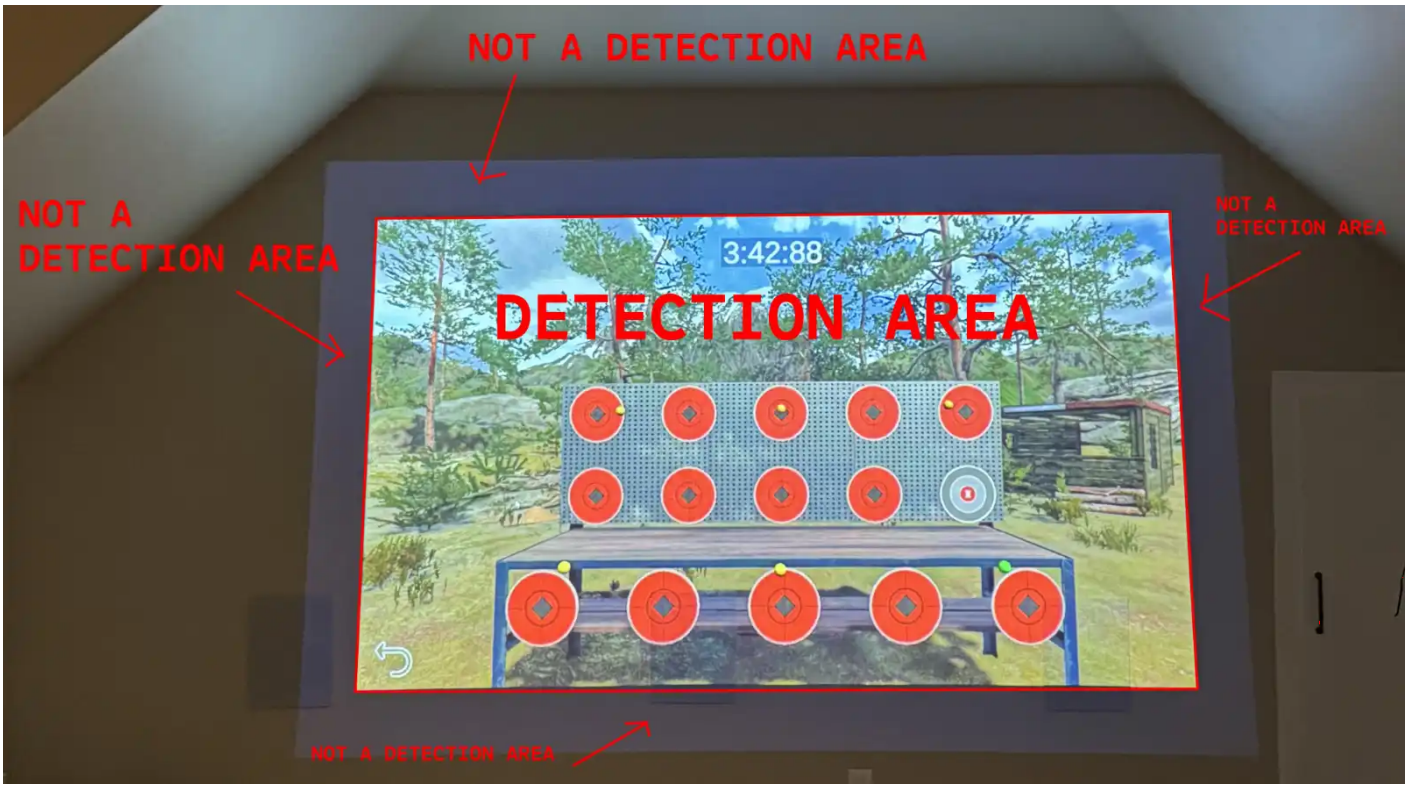
- When the laser is fired, it does not hit the spot I shot at, but it is slightly shifted towards the edges. This happens across the entire screen.

Cause

If your hits drift towards the edges, it usually indicates a wrong detection area. However, if the laser movement is consistent throughout the entire screen, laser calibration should fix the problem(laser not shooting straight)

Resolution

1. Ensure that the detection area is selected correctly. Follow the tutorial here.



Related problems