Advanced Settings Guide

Content

Advanced settings

If you adjust the camera and projector before starting the calibration, it will be smoother when you start the calibration. First, select the camera to be set up in steps (1)-(8).
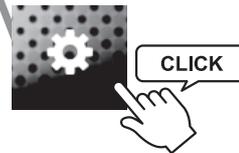

*Before setting up, ensure the camera's USB cable is plugged into the USB port on the PC and FOCUS power cord is plugged into an outlet.

*Before setting up, ensure the projector cable is plugged into the PC.
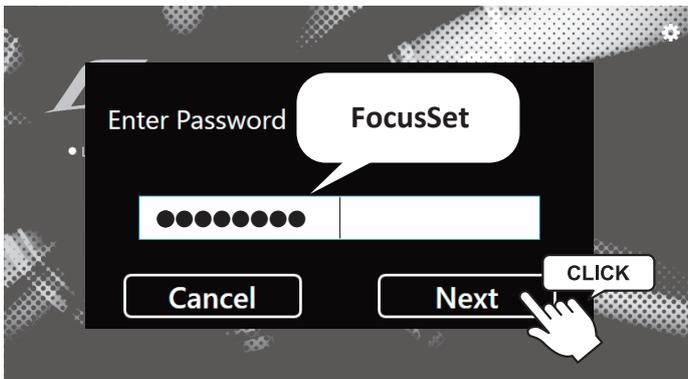
①

Click the "FOCUS" icon on DeskTop to launch the "FOCUS" application.
Click the Settings icon on the upper right corner of the HOME screen.
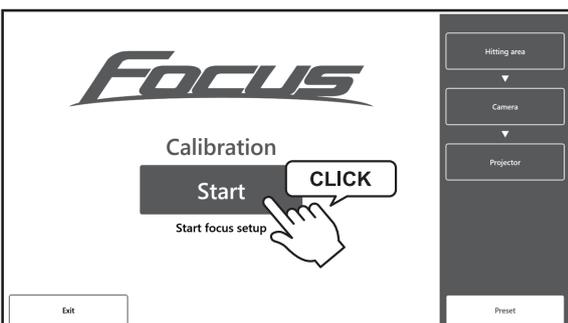
②

 A password pop-up box will appear, type "FocusSet".
After typing "FocusSet", click "Next".
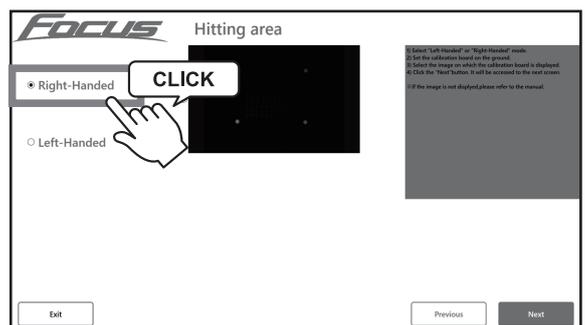*You can also rest the password in the Settings.

③ Click the "Start" button.

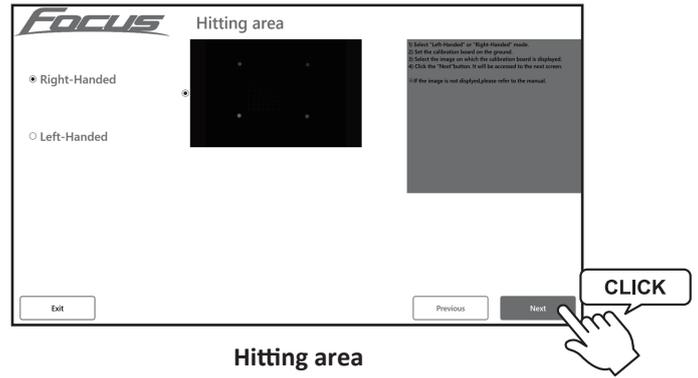
④ Select "Left-Handed" or "Right-Handed" mode.

Hitting area
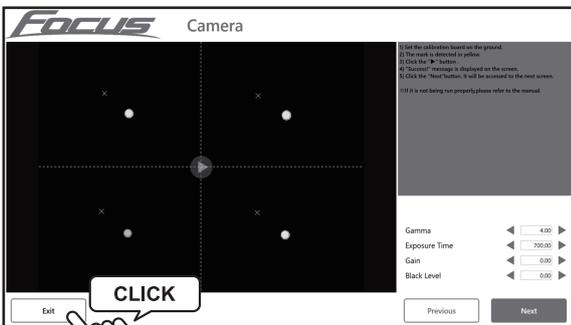
⑥ Select the image on which the calibration.

Hitting area

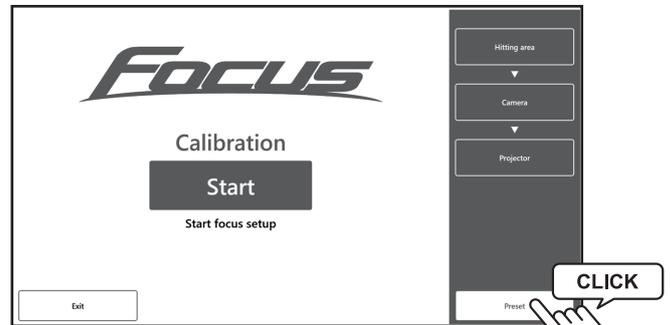⑦ Click the "Next" button. It will be accessed to the next screen.

Hitting area

⑧ Click the "Exit" button on the next page to return to the Top page of the calibration.

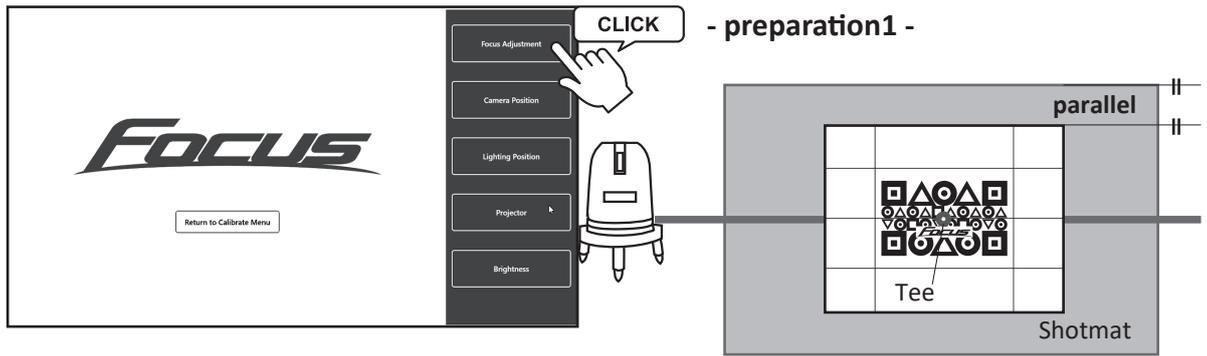**Camera**

⑨ Click the "Preset" button.
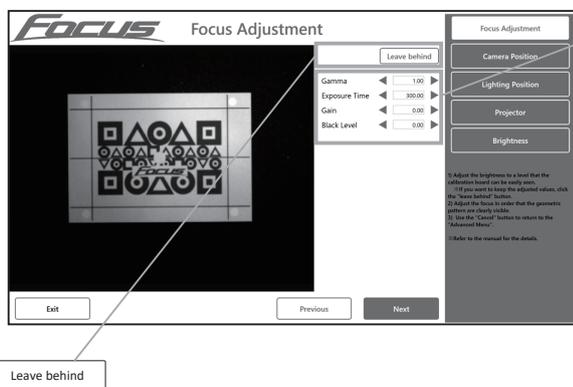

Calibration TOP Page

Focus Adjustment

Click the "Focus Adjustment" button to adjust the focus of the camera.
*This part is refer to adjusting the focus of the camera, not the "FOCUS" of the product name.

- preparation1 -

Place the laser marking device in order that the laser light can pass through the top of the tee.
Place the laser light parallel to the shotmat.
Place the calibration board in order that the center of the board is aligned with the laser light.

- preparation 2 -

Leave behind

Before adjusting the focus of the camera, if the screen is too bright or too darks , follow the steps bellow to increase or decrease the brightness values by using ◀ or ▶ button to make the screen can be clearly seen.
1.Gamma
2.Exposure Time
3.Gain
4.Black Level

*If you want to keep the current values that you just adjusted and use them next time , click the "Leave Behind" button.

① Adjust the focus in order that the geometric patterns can be clearly seen.
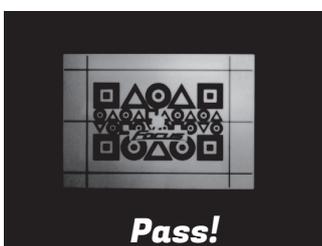

Gently unscrew the top lens lock screw on the camera in counterclockwise.

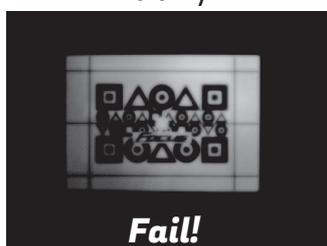② Adjust the focus in order that the geometric patterns can be clearly seen.

To adjust the focus, manually rotate the lens left or right until the geometric patterns can be seen clearly on the screen. After adjusting, gently lock the top lens by turning the lens lock screw in clockwise.
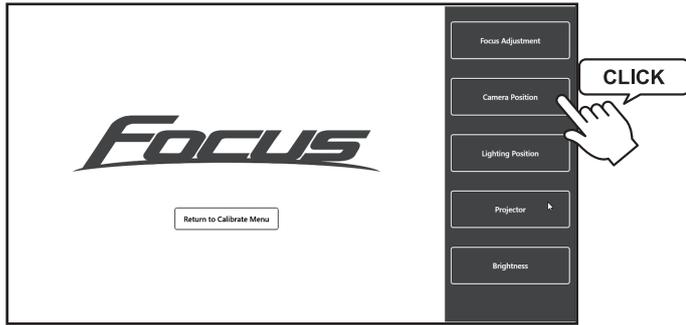
Example

Pass!

blurry

Fail!

blurry

Fail!

Camera Position Settings

Click the "Camera Position" button to adjust the position of the camera.
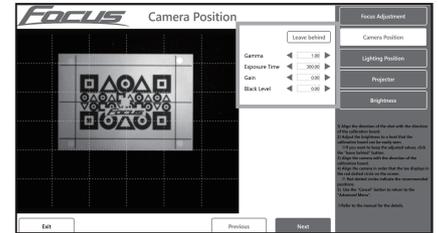
*The calibration board used for Focus Adjustment
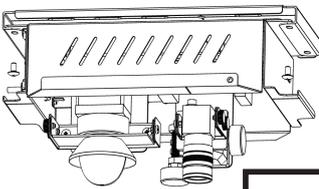

CLICK

- preparation -

Before adjusting the position of the camera, if the screen is too bright or too darks , follow the steps bellow to increase or decrease the brightness values by using ◀ or ▶ button to make the screen can be clearly seen.

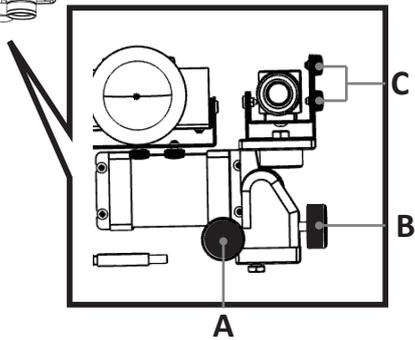1. Gamma
2. Exposure Time
3. Gain
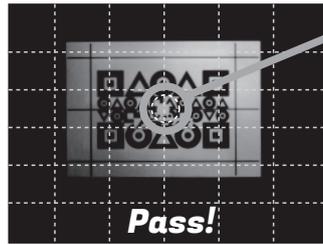4. Black Level

Leave behind

*If you want to keep the current values that you just adjusted and use them next time ,click the "Leave Behind" button.

If the calibration board is not in the center of the screen, use the knobs on the FOCUS to center it on the screen. Please remove the FOCUS cover.

C

B

A

Example

Pass!

Align the camera in order that the tee is displayed in the red dotted circle on the screen.
*Red dotted circles indicate the recommended positions.

- A knob -

Turning the A knob to the right moves the board in the screen to the right.

Turning the A knob to the left moves the board in the screen to the left

.

- B knob -

Turning the B knob backward (right) rotates the board in the screen to the left.
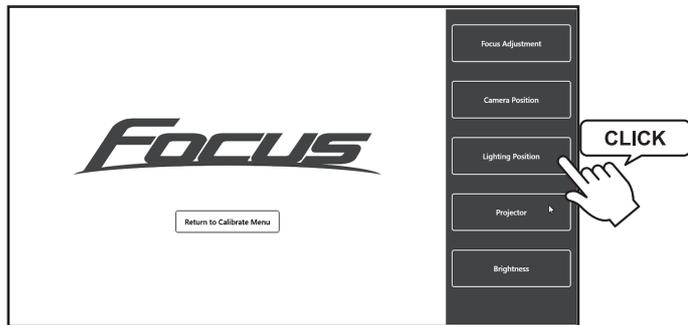

Turning the B knob backward (left) rotates the board in the screen to the right.

- C knob -

Loosen this screw, then adjust and Tighten it firmly when you are done.

Loosen this screw, then adjust and Tighten it firmly when you are done.

LED Position Settings

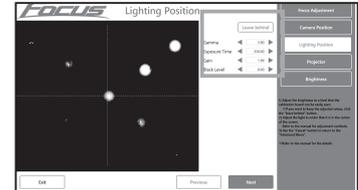Click the "LED Position" button to adjust the position of the LED.

It is recommended to shut off any halogen spotlights or sunlight in the room before starting the adjustment.

Focus Adjustment

Camera Position

Lighting Position **CLICK**

Projector

Brightness

Return to Calibrate Menu

- preparation 1 -

Before adjusting the position of the LED, if the screen is too bright or too darks , follow the steps bellow to increase or decrease the brightness values by using ◀ or ▶ button to make the screen can be clearly seen.
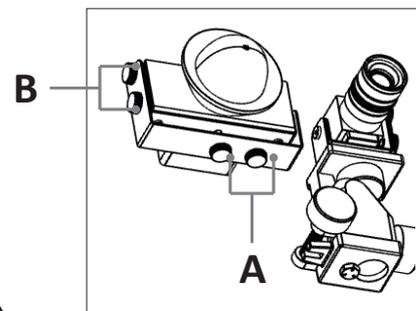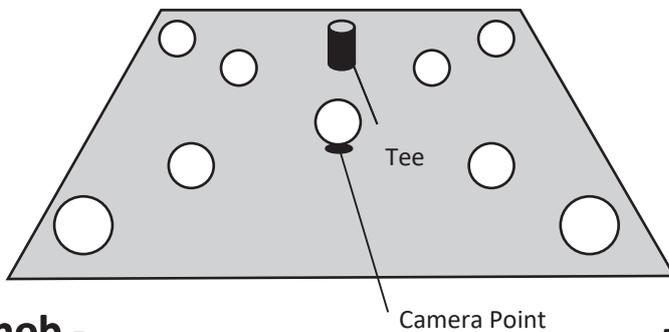
1.Gamma
2.Exposure Time
3.Gain
4.Black Level

Leave behind

*If you want to keep the current values that you just adjusted and use them next time ,click the "Leave Behind" button.
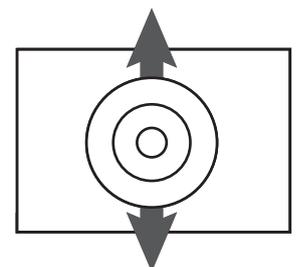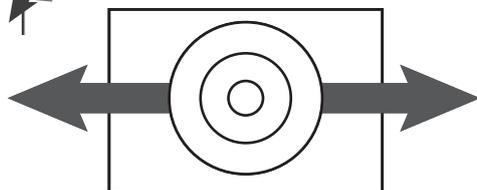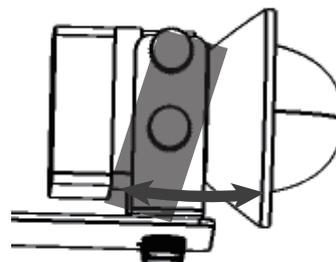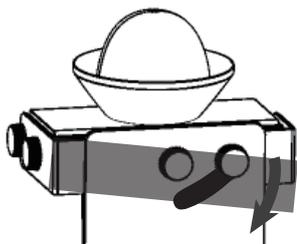
- preparation 2 -

Place the ball in the center, middle and edge of the shotmat while looking at the screen.

Tee

Camera Point

B

A

Adjust the LED position in order that it is in the center of the screen.

- A knob -

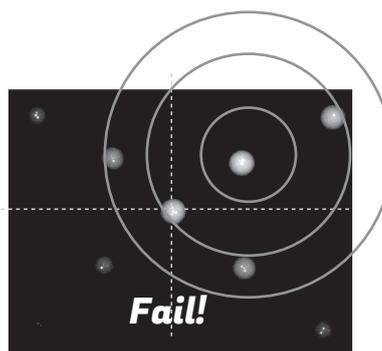## - B knob -

Example Adjust the LED position in order that it is in the center of the screen.

Pass!

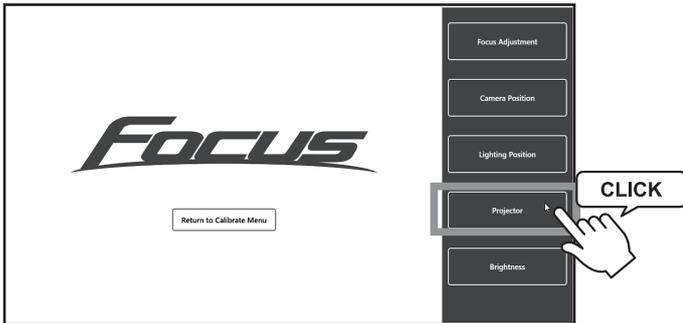The brightness is in the center.

Fail!
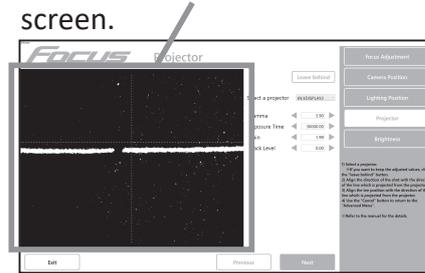
The brightness is out of the center.

Refer to the example on the left side. In this case, the brightness is focused out of the center of the screen. It needs to use the knob A and knob B on the FOCUS to adjust the LED position to make it on the center of the screen.

Projector Position Settings

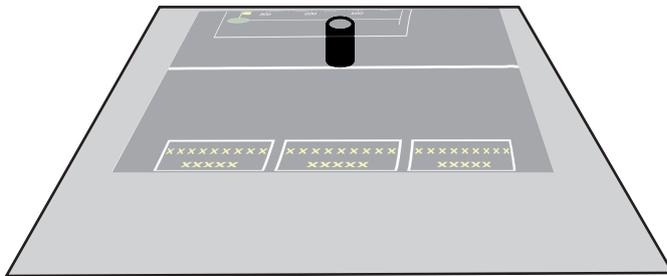Click the "Projector Position" button to adjust the position of the LED.

Look directly at the image which is projected on the shot mat instead of looking at the PC screen.
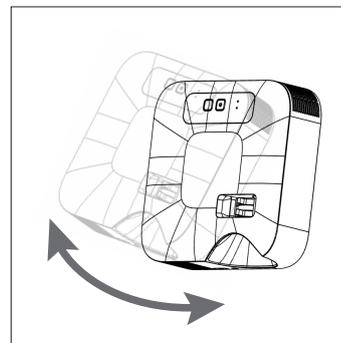

- preparation -

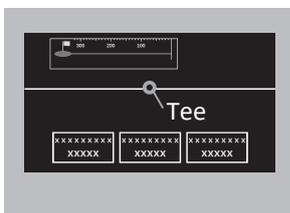Refer to the example below. The image is projected directly on the shot mat.

Move the projector to make the white centerline which is projected on the shotmat align with the tee on the shot mat.
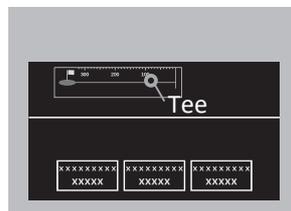

Example

Refer to the example below. The white centerline is approximately the same height as the tee and parallel to the shot mat.
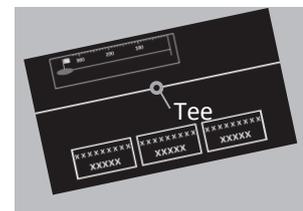
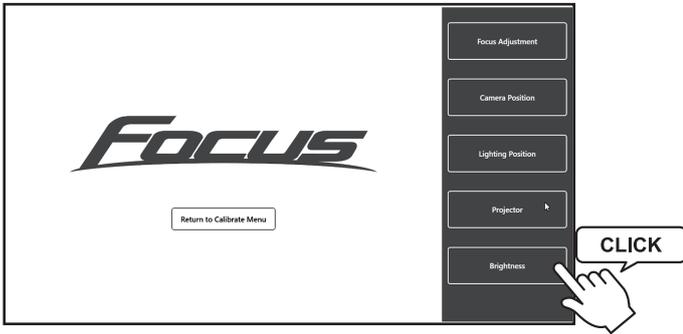Refer to the example below. The white centerline is lower than the tee position.

Refer to the example below. The white centerline is not parallel to the sho tmat.

Best!

Fail!

Fail!
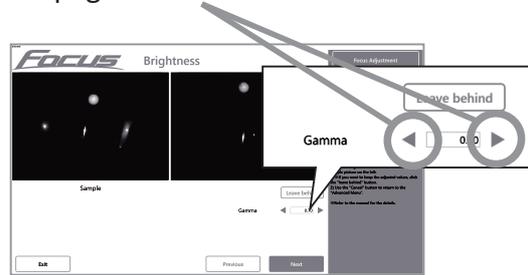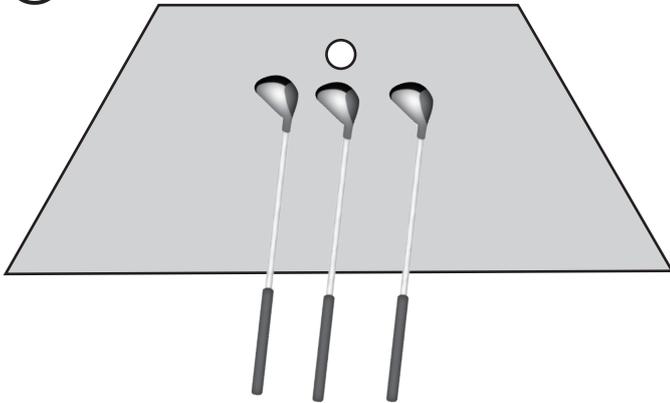
Brightness Adjustment

Click the "Brightness" button to adjust the brightness of when the camera is shooting.
This part should adjust only if measurement was not possible. Usually, it is not necessary to adjust.
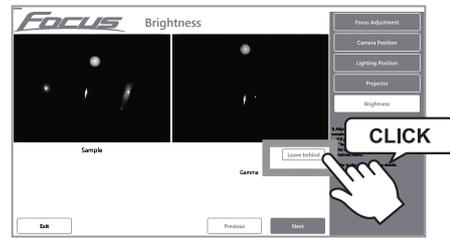

CLICK

① Adjust the gamma value so that it is the same as the example at the bottom of the page.
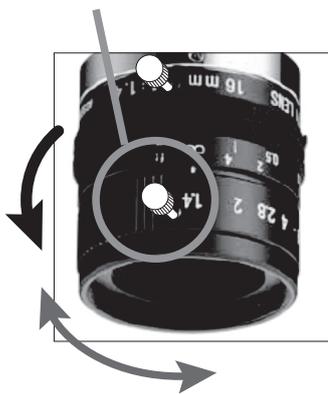

② Place a ball or a club on the shot mat first.

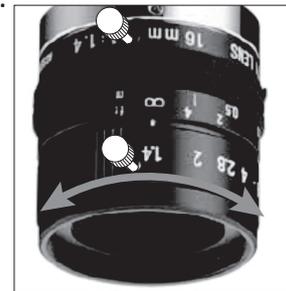③ Click the "leave behind" button.

CLICK

④ Even after adjusting the gamma value, the brightness is still different from the example at the bottom of the page, adjust the camera aperture directly.

⑤ To adjust the aperture, manually rotate the lens left or right until the brightness is the same as the example at the bottom of the page. After adjusting, gently lock the lens by turning the bottom lens lock screw in clockwise.

Example

Pass!

Too dark.

Fail!

Too bright.

Fail!