



# Installation Guide

FOCUS  
AMPLUS Co., Ltd.  
Ver 1  
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# AMPLUS

## FOCUS

### Installation Guide

FOCUS-V3-S



#### Safety Guidelines

Please read the following before use. Failure to follow the instructions could result in serious injury, property damage and/or void the device warranty.

##### All Installations Should Be Performed By A Licensed Contractor

All installation work described in this guide should be performed by licensed contractors. Improper installation may result in personal injury, property damage, and void any product warranty. The installation work should be performed by at least two (2) qualified installers.

##### FOCUS Ceiling Mount Precautions

- 1) The ceiling bracket is designed specifically for mounting a FOCUS to a ceiling. Do NOT attempt to mount additional items to the provided mount, as the additional weight may result in damage and/or failure.
- 2) Do NOT install the ceiling bracket in a location where vibration or impact shock may occur. This may result in damage to or failure of the mount.
- 3) Prior to installing the ceiling bracket, make sure the ceiling area is strong enough to hold the FOCUS and ceiling bracket and projector. If the ceiling area is not strong enough, reinforce the area prior to installation.
- 4) Never modify the ceiling bracket, assembly components, projector, or FOCUS.
- 5) Do NOT install the ceiling mount and FOCUS and projector in a location where the operating temperature for the FOCUS may be exceeded. Excessive temperatures may damage the FOCUS. Install the ceiling bracket in a place free from excessive dust and humidity to prevent the lens or optical components of the FOCUS from becoming clouded or dirty.
- 6) Do not use excessive force when adjusting the ceiling bracket or FOCUS or projector.

##### Components

- 1) Handle and install the power cord carefully. Incorrect installation may result fire or electric shock. Observe the following precautions when installing:
  - Do not handle any electrical components with wet hands.
  - Do not use a power cord that appears to be damaged or modified.
- 2) Tighten all screws firmly after installation and final adjustment.
  - Do NOT use adhesives, lubricants, or oils to install and/or adjust the ceiling bracket.
  - Do NOT loosen the screws after installation.
  - When performing electrical installation, make sure that no wiring comes into contact with mounting or assembly screws.

## Check accessories

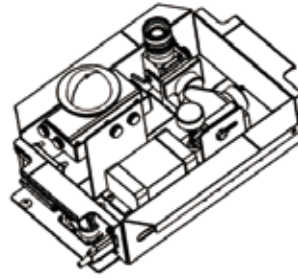
Please check the attached parts first before installation



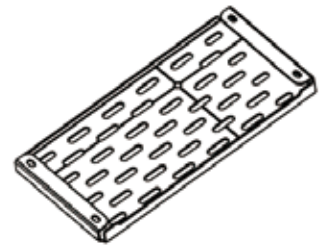
Top cover x 1



Frame x 1



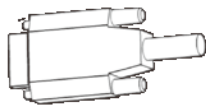
FOCUS x 1



Ceiling bracket x 1



Power Supply x 1



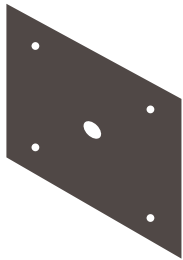
USB Cable x 2



HUB x 1



knurled screw x 2

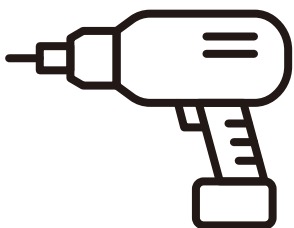


Calibration board x 1

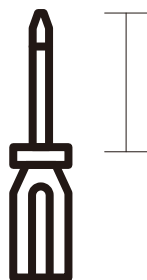
PLEASE NOTE: This installation package does NOT include screws for securing the FOCUS mount into the ceiling. Selected installation screws must be able to support a minimum of 50 lbs.

Types of screws may vary depending on ceiling material. Consult your carpenter for the right choice of screws.

## Required Tools

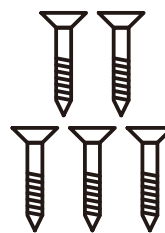


Impact screwdriver

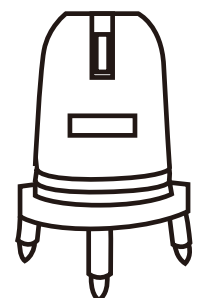


Phillips screwdriver

not less than  
3 inch



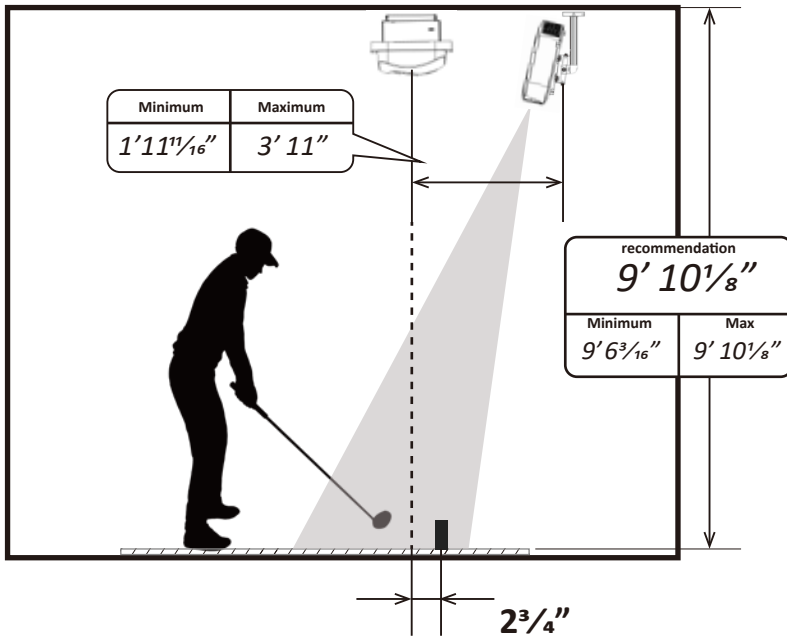
Screws for ceiling x 5



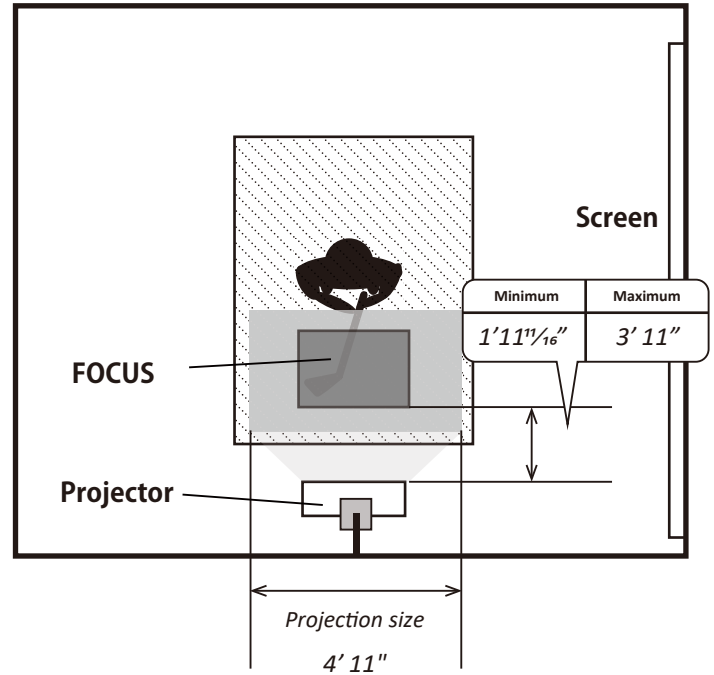
Laser marking device  
(Optional)

# Installation Layout

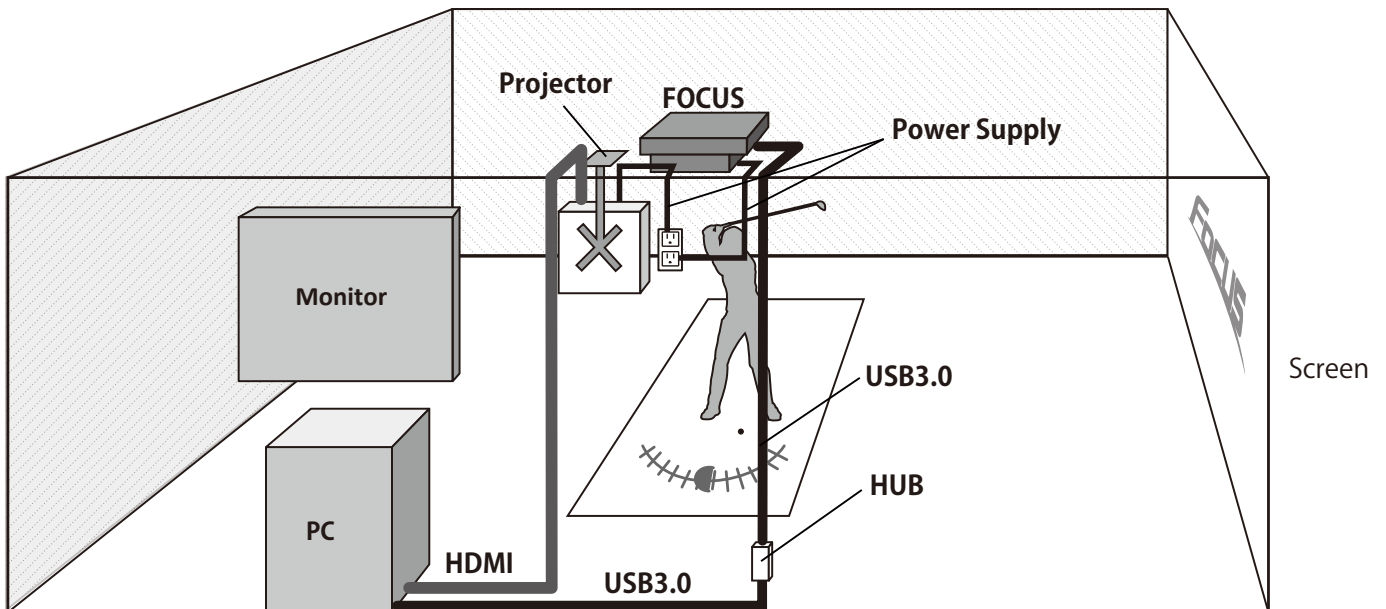
BACK VIEW



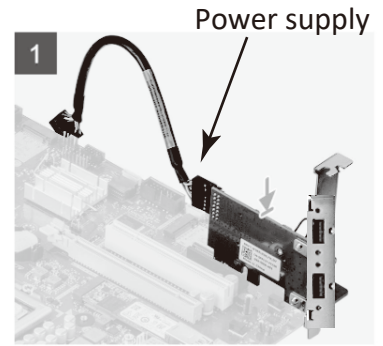
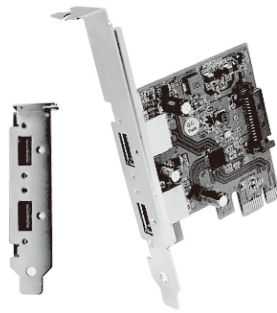
TOP VIEW



## Wiring Layout



- Plug the USB cable into the USB hub and plug it in the 3.0 port on the PC.
- FOCUS is recommended to be installed at a height approximately 9' 10<sup>1</sup>/<sub>8</sub>" feet from the surface of the shot mat.



If you intend to use more than one USB-powered device on the same PC, we recommend adding a USB 3.0 to PCI Express x1 Gen 2 Host Card. When adding more host cards, do not forget to connect them to the power supply inside the PC. If the power supply supplied with the main unit interferes with the graphics board or other components, please use a SATA cable of a different type.



SATA Cable

## Power Supply

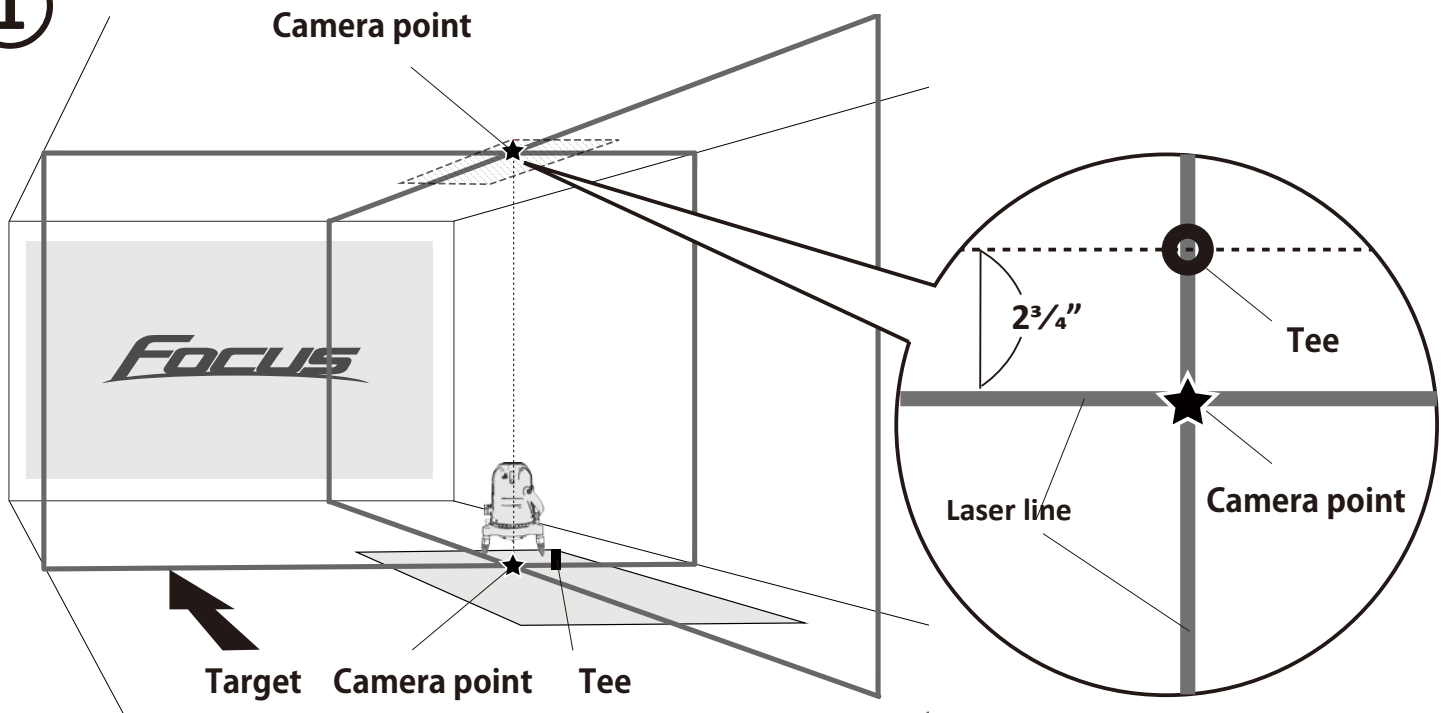
- There is no power switch on FOCUS. Unplug FOCUS after use. It is recommended to using a power strip with shut off switch or using a wireless remote control outlet power strip. (Sold separately)
- The power cord included with this device is an integral part of the FOCUS main unit and is not universal. Never use it with other electrical equipment.



# Installation procedure

Please refer to the pre-installation checklist and safety guidelines before proceeding.

1



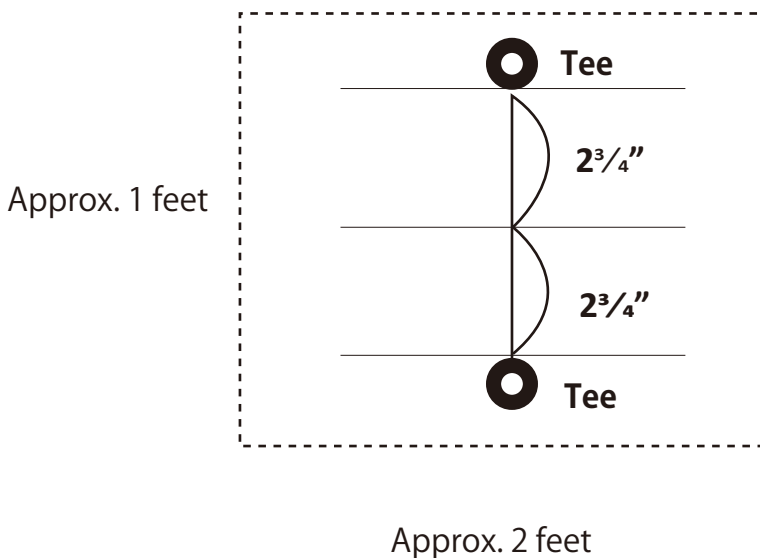
## Identify camera points with a laser marker.

The FOCUS should be placed so that the center of the camera is  $2\frac{3}{4}$ " below the tee. Therefore, a laser marker is used to locate the exact camerapoint.

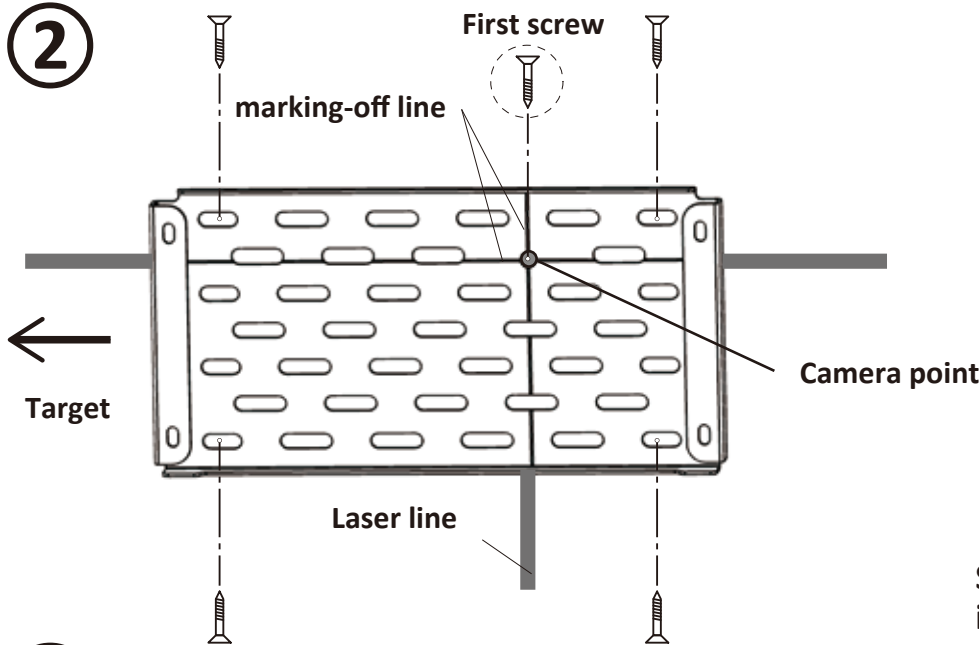
## About the area of camera

The range that FOCUS can capture is shown in the figure on the left.

For left and right-handed range, it is recommended to position the tees as shown in the diagram on the left.



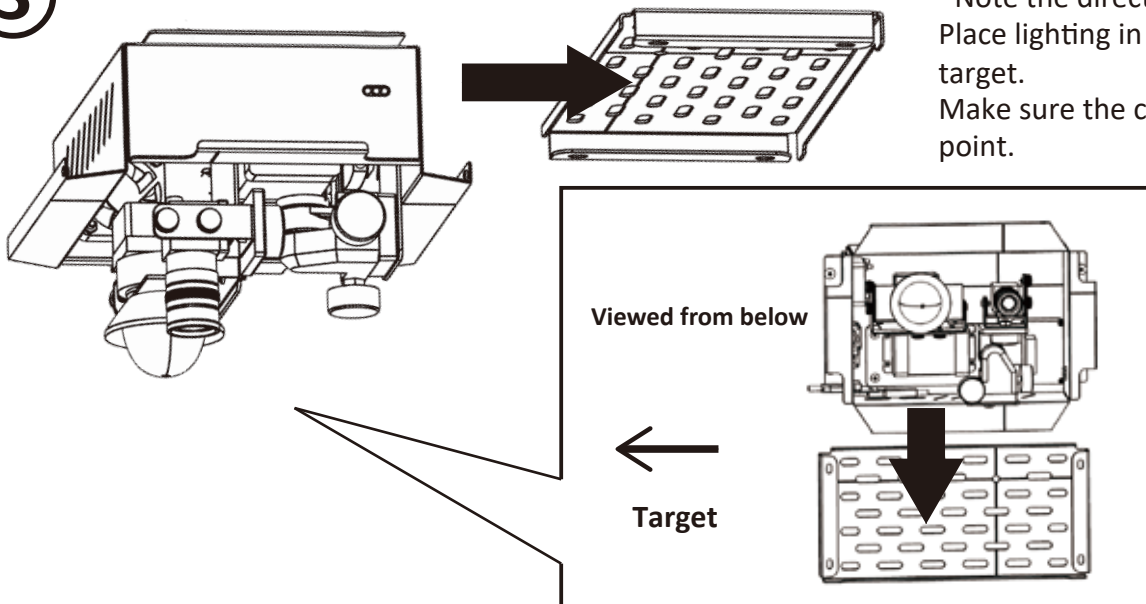
2



**Install the ceiling bracket.**

Align the tee points and fasten the screws.  
Then, align the laser and marking-off line and fasten with 4-point screws.

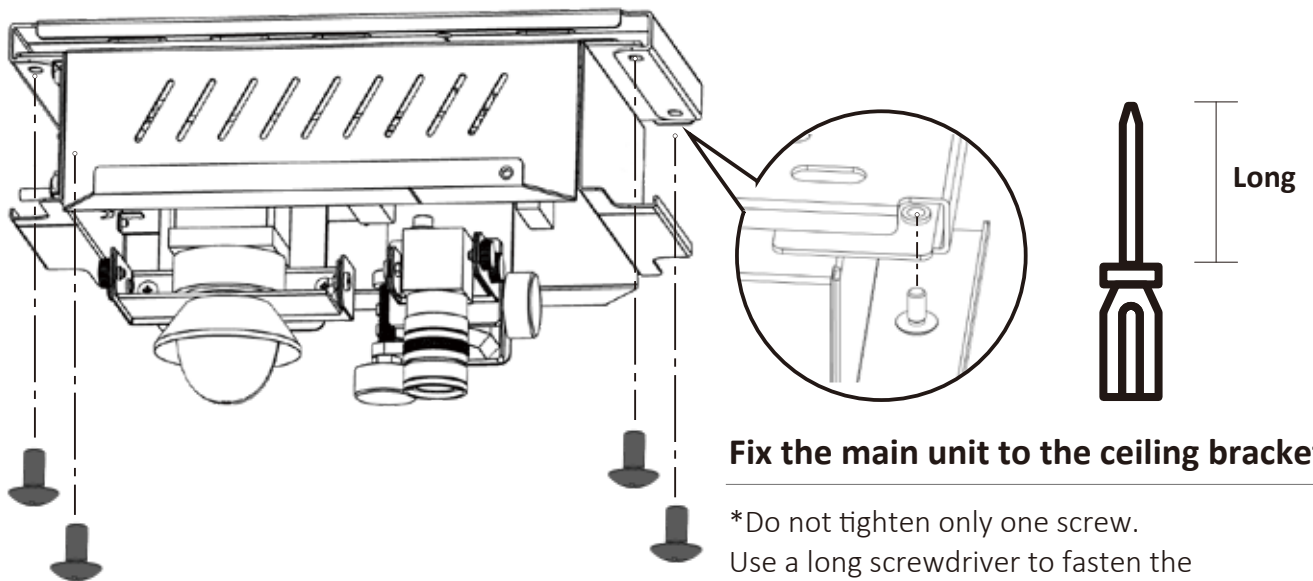
3



**Slide the main unit and insert it into the ceiling bracket.**

\*Note the direction.  
Place lighting in the direction of the target.  
Make sure the camera is on the tee point.

4

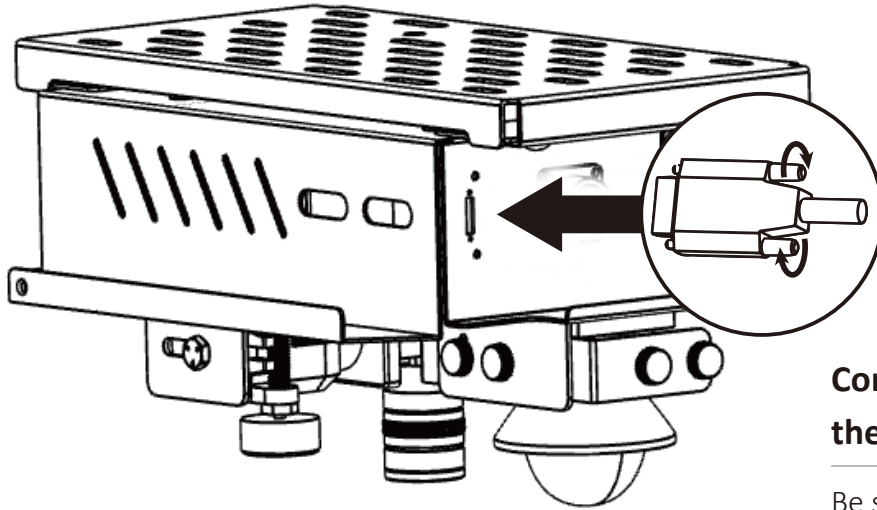


**Fix the main unit to the ceiling bracket.**

\*Do not tighten only one screw.  
Use a long screwdriver to fasten the four screws a little at a time.



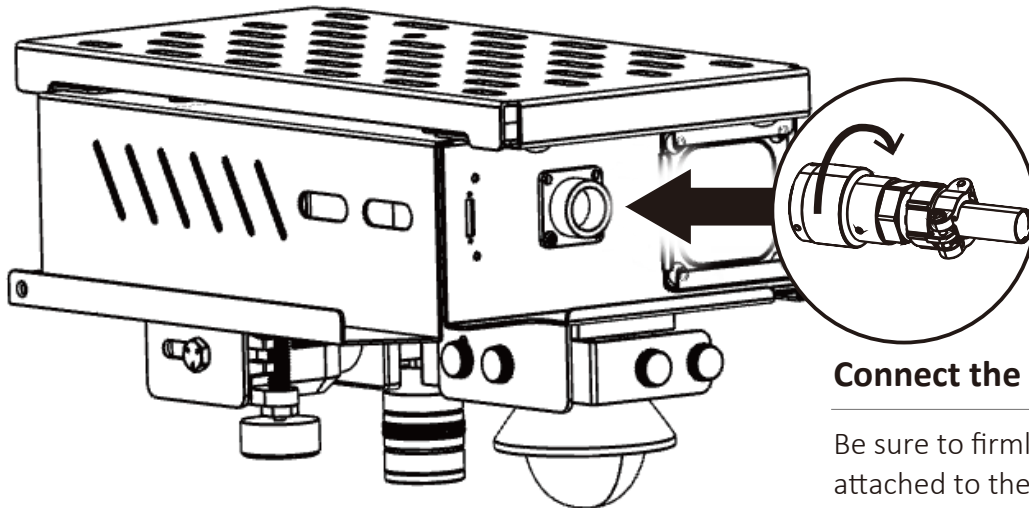
5



**Connect the USB cable for the camera.**

Be sure to fasten the screws attached to the cable body securely.

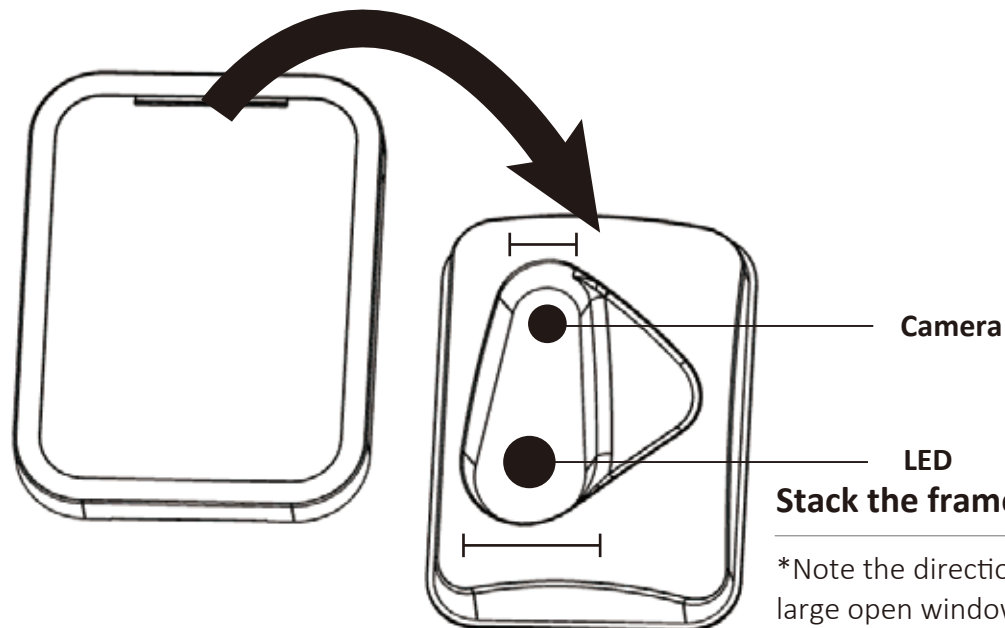
6



**Connect the power cable.**

Be sure to firmly fasten the lock attached to the cable body.

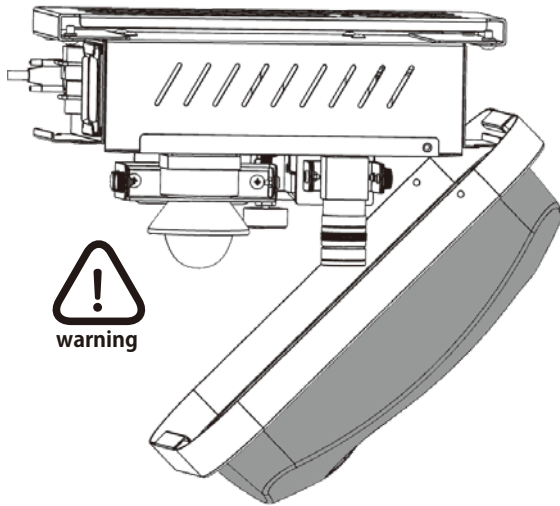
7



**Stack the frame on the top cover.**

\*Note the direction. The side with the large open window is the target side (LED).

8

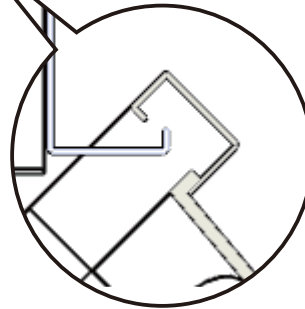


**Install the case from the camera side.**

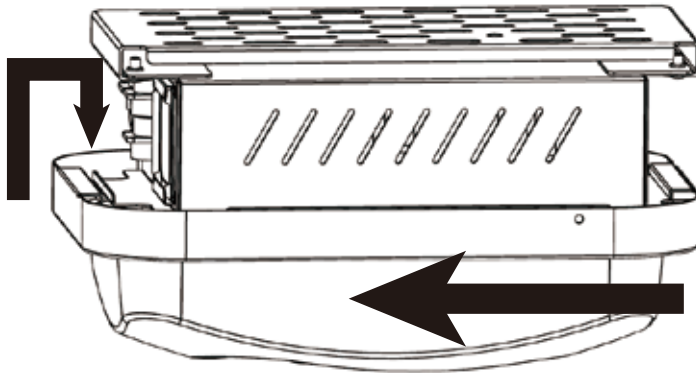
Reversing the case may damage the LED.

**! warning**

Be careful not to let the edges hit the LED.



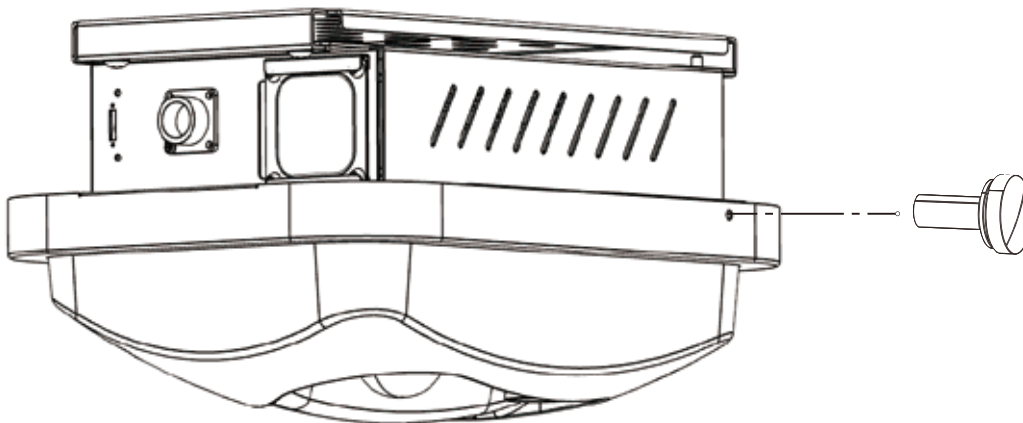
9



**Pull it over to the LED side once.**

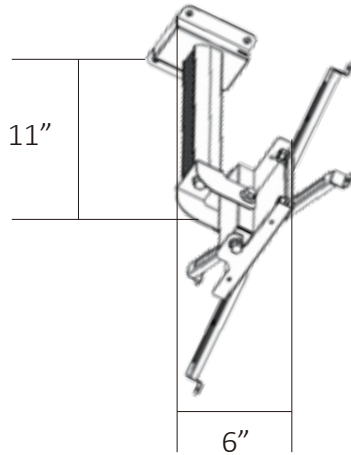
After hanging the camera side of the cover to the corresponding side of the handle on the main unit, slide the cover to the LED direction for an easier placement.

10



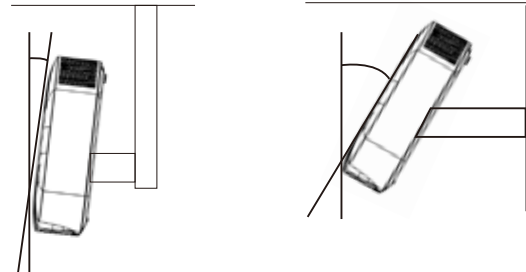
Then, secure the frame to the main unit with 2 knurled screws to prevent it from falling.

# Installation of projector



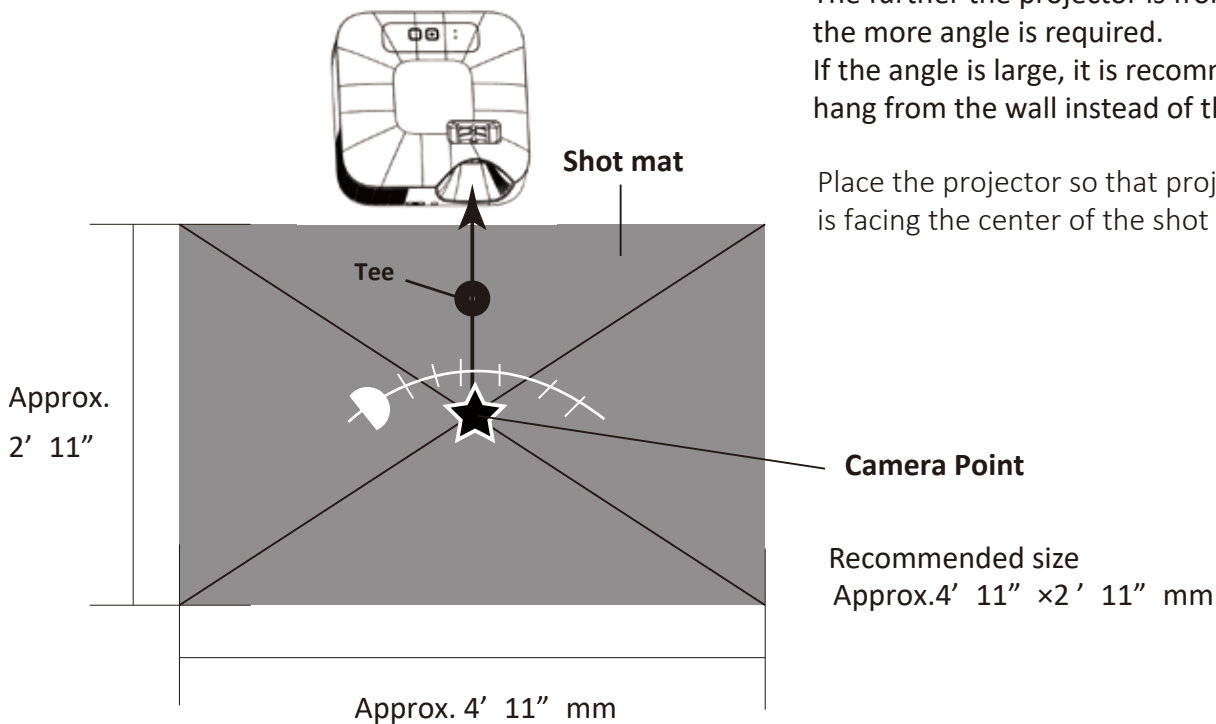
## PROJECTOR SUSPENSION DEVICE

Reference example: Projector mounting bracket currently used in Japan.



The further the projector is from the FOCUS, the more angle is required. If the angle is large, it is recommended to hang from the wall instead of the ceiling.

Place the projector so that projector lens is facing the center of the shot mat.



## Projector setup

For FOCUS to accurately perform the projection mapping, it is necessary to understand that;

- the aspect ratio of the projector is set to 16:9
- the projector has a correct keystone adjusted for the projected image
- the projector mounting bracket allows projector to be tilted for the projector calibration
- for the size of the image of the projection mapping, the width of the projected image is approximately the same for the width of the shot mat.
- the height of the ceiling to which the projector is to be mounted matches the throw-distance available in a given projector.