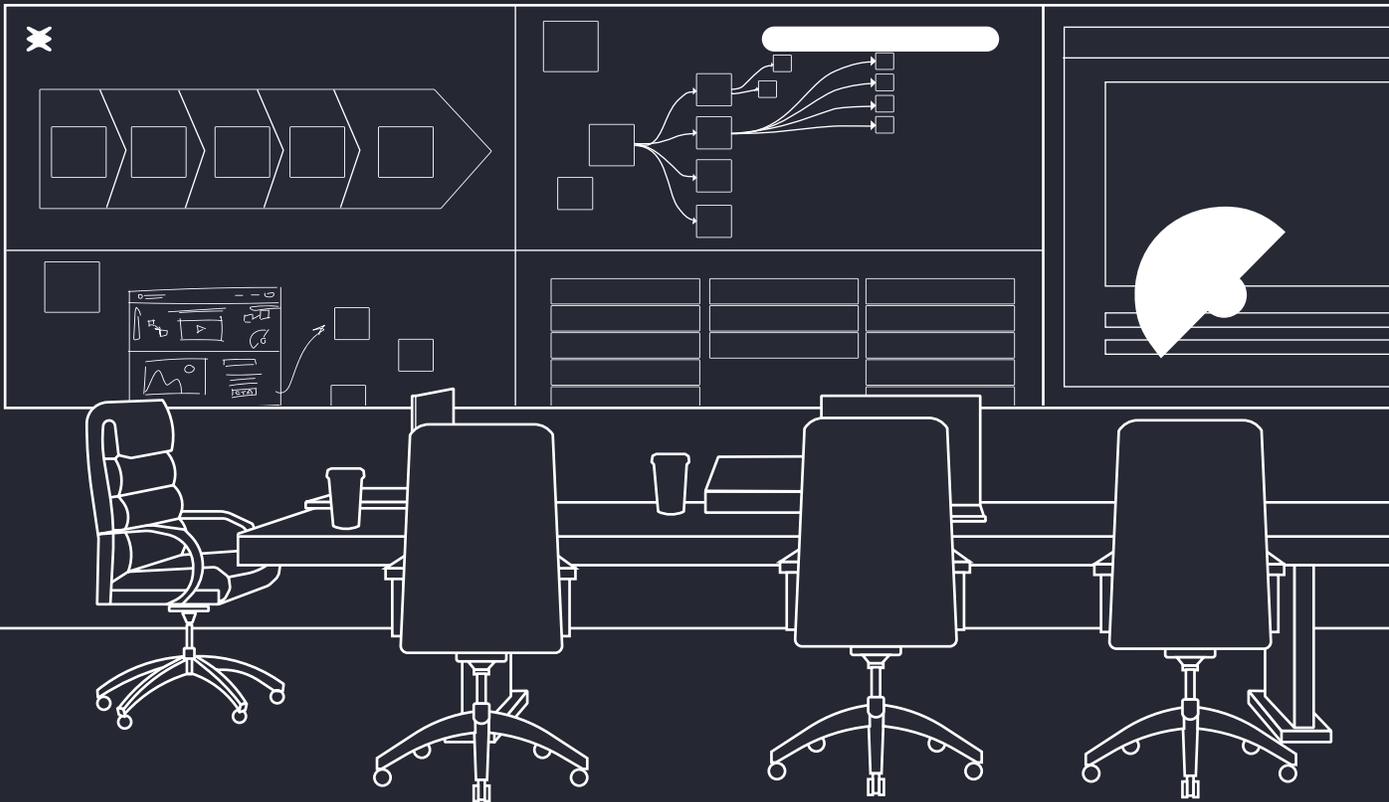




# HOYLU WALL™



INSTALLATION MANUAL

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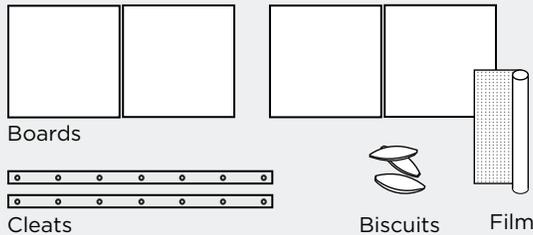


# EQUIPMENT

## What equipment am I expecting?

With your HoyluWall™ purchase, you will receive the standard hardware components as well as an accessories box. You are also given the option to add on the Projector Bundle, the PC Bundle, and an Edge-Blending Bundle. These bundles are highly recommended. However, if you decide to source your own projectors and/or your own PC, please note the specification requirements and recommendations on page 11.

## Hardware Components



	1-CH	2-CH	3-CH	4-CH
BOARDS	2	4	6	8
FILM	1	1	1	1
CLEATS	2	4	6	8
BISCUITS	5+	15+	25+	35+

## Need Something?

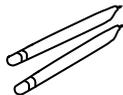
If any part of your order is missing, or if you'd like to purchase additional items, contact us at:

[order@hoylu.com](mailto:order@hoylu.com)

## Accessories



Demo Paper Pack



Digital Pens



Tool Palettes



Bluetooth Dongle

- Ink Tips (1 Pack)
- Plastic Tips (1 Pack)
- Plastic Tip Remover
- Plastic Eraser
- Charging Station
- Charging Station Adapters
- Charging Station Cables (x2)

### Projector Bundle (RECOMMENDED)

+



- Optoma ZH500 Ultra Short-Throw Projector
- HDMI Cables for Projectors
- HDMI to DisplayPort Adapter
- Power Cables for Projectors

### PC Bundle (RECOMMENDED)

+



- PC
- HDMI Cables for Projectors
- HDMI to DisplayPort Adapter
- Power Cable for PC

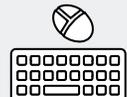
### What you will need to supply:



Ladder



Drill



Mouse & Keyboard (Wireless)



Anchors & Screws



Warm Water

### Edge-Blending Bundle

+



Configuration Webcam



Edge-Blending Software License



USB Extender

### Q: What is Edge-Blending?

Edge-Blending is an optional configuration for your HoyluWall™ that requires a modified installation as well as a few extra accessories. Each projection will blend into one seamless display.

# PREPARATION

## Location

Make sure there is enough space in front of the HoyluWall™ to take a step back for an overview of the Wall as well as enough wall space - the HoyluWall™ can be up to 8 meters wide. We recommend leaving at least 20 cm from any adjacent wall.

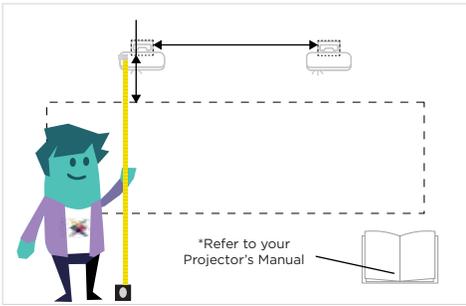
Do not place a HoyluWall™ on a wall with a door, this will throw off the calibration of projections over time.

## Edge-Butted vs Edge-Blended

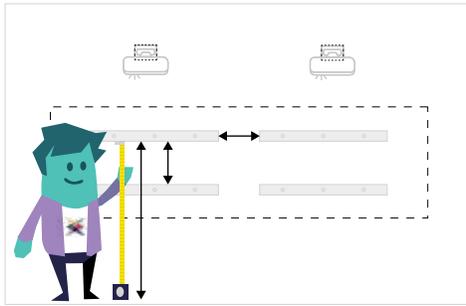
The HoyluWall™ comes in two different configurations. “Edge-Butted configurations will align the channels as closely as possible to each other. An Edge-Blended configuration will use projector and display settings to blend the edges of the channels together to create a seamless experience. Note that Edge-Blended systems will need to account for overlap.”



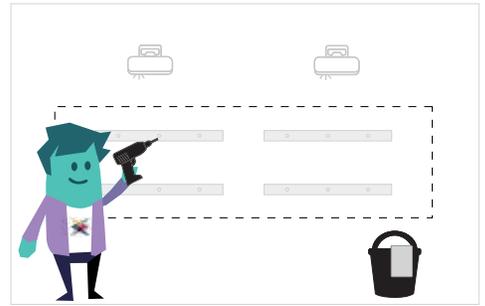
# INSTALLATION



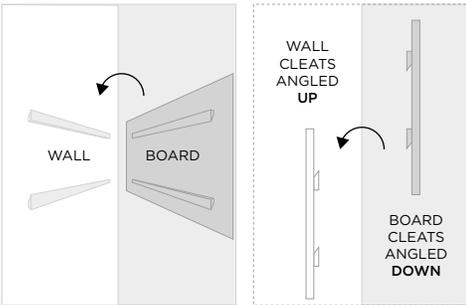
Measure, mark, and install your projector(s) in relation to where the Boards will be placed.



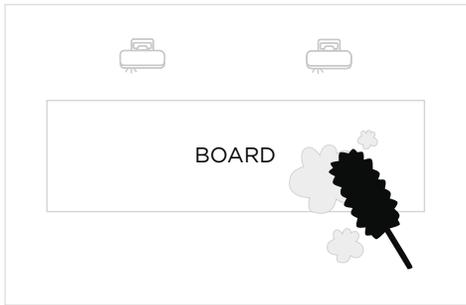
Measure and mark the placement of the Wall Cleats.



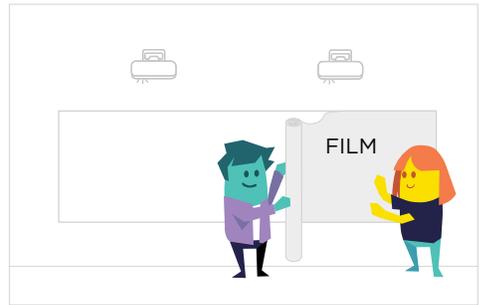
Install the Wall Cleats - Board Cleats are angled **DOWN** while Wall Cleats are angled **UP**. (See next)



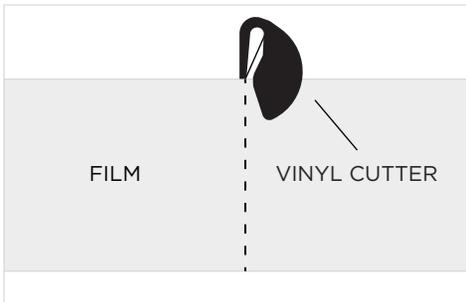
Hang Boards and use Biscuits to join the Boards. TIP: Soak biscuits in warm water for 2-3 minutes to make them more pliable.



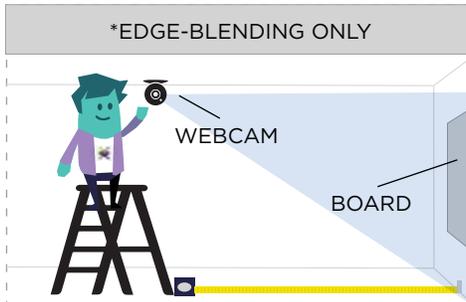
Clean Boards to make sure no dust is present before applying Film.



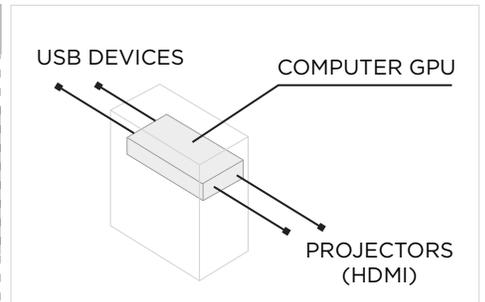
Roll Film directly onto the board. Have a buddy help you keep the film steady.



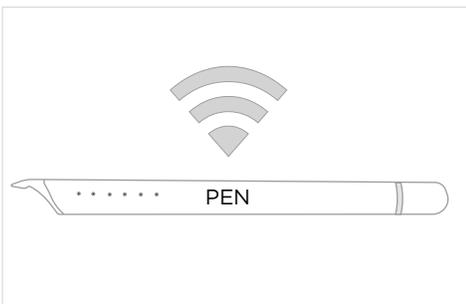
After applying the Film, cut the Dot Pattern material to fit the Boards. Use a vinyl cutter. Be exact.



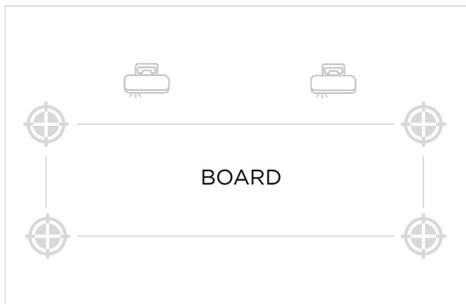
Mount the webcam so that it has a clear, unobstructed view of the HoyluWall™.



Connect your PC to all devices- Bluetooth Dongle (USB), Projectors (HDMI), and optional Edge-Blending Camera (USB).

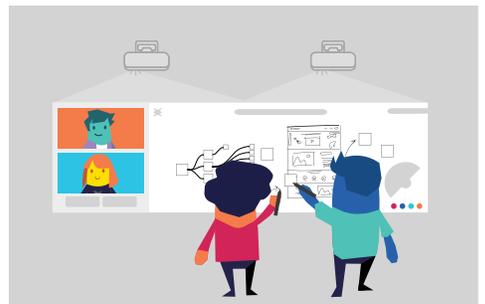


Set up and connect your Hoylu Pens. (page 8)



Calibrate Dot Pattern via Hoylu Central.

\*Edge-Blending: Configure (page 8)



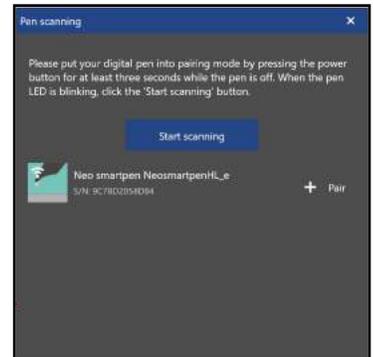
Start Collaborating!

# CALIBRATION

## Hoylu Central

### Pen Calibration

Hoylu Central connects the interactive pens to the system and manages the multiple pen interactions in the Hoylu Software Suite applications. Central is set to start up and run in the background. If Central stops working, then the pens will lose communication with the computer.



1

Power on Pens by pressing the Power Button until Pens flash BLUE

2

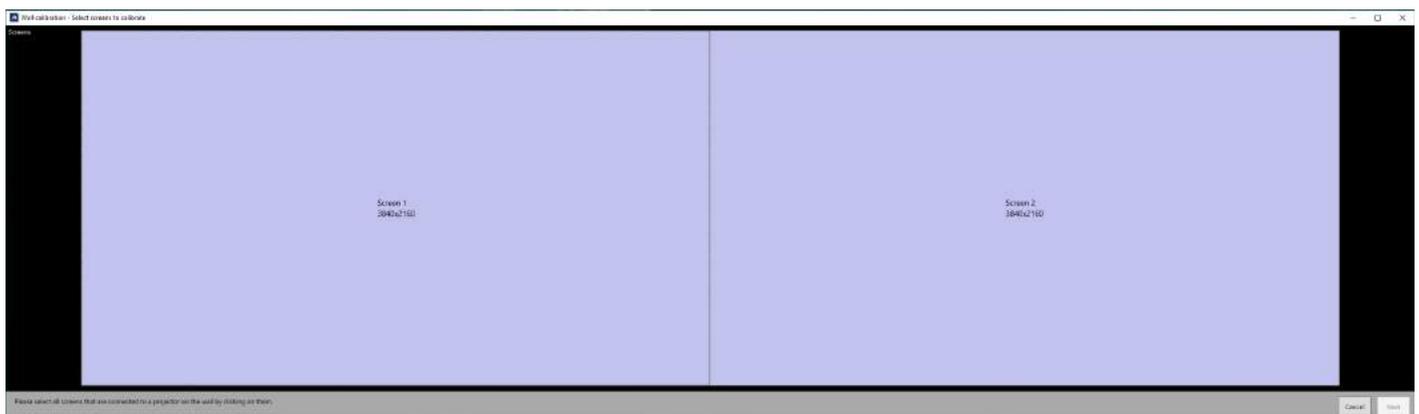
In Hoylu Central, open "Add Pens"

3

In the Pen Scanning dialogue, click "Start Scanning"

4

Click "Pair" for each Pen. Pens will flash TEAL when paired successfully.

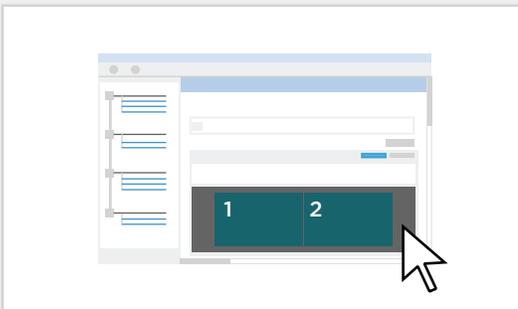
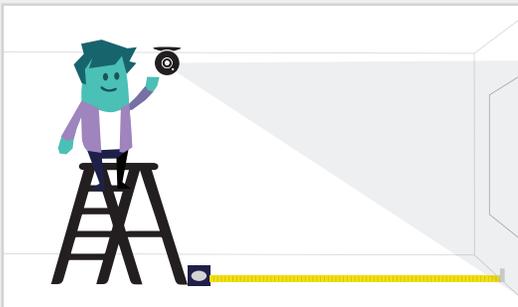


### Calibrating the Screen

- Click the  icon on the Task bar to reveal hidden icons
- Right click the Hoylu Central Icon and select "Calibrate Wall"
- Select all screens you would like to calibrate
- Tap the dots that appear and be as accurate as possible. If you mis-click, hit ESC and start over.
- When you are done, click "Save and Close"

# EDGE-BLENDING

## Setting Up Edge-Blending



## Edge-Blending

### Edge-Blending Camera Installation

For Edge-Blending systems, a webcam is required for running an automatic alignment tool. The webcam should be permanently mounted so that it has a clear, unobstructed view of the HoyluWall™. Connect the webcam to the PC via the USB extender.

### Nvidia Mosaic

Mosaic creates a single desktop from multiple displays.

- Desktop > Nvidia Control Panel > Setup Mosaic > Create New Configuration
- Select # of displays
- Select the topology (columns by rows)
- Select Orientation (landscape)
- Next
- Set refresh rate to max (60hz)
- Set resolution to projector resolution (typically 1920x1080)
- Drag the displays in the order you want them to display.
- Apply

If you prefer a video walk-through, watch the following video:

<https://youtu.be/ZhUOvDHpl6E>

### ScalableDesktop Calibration

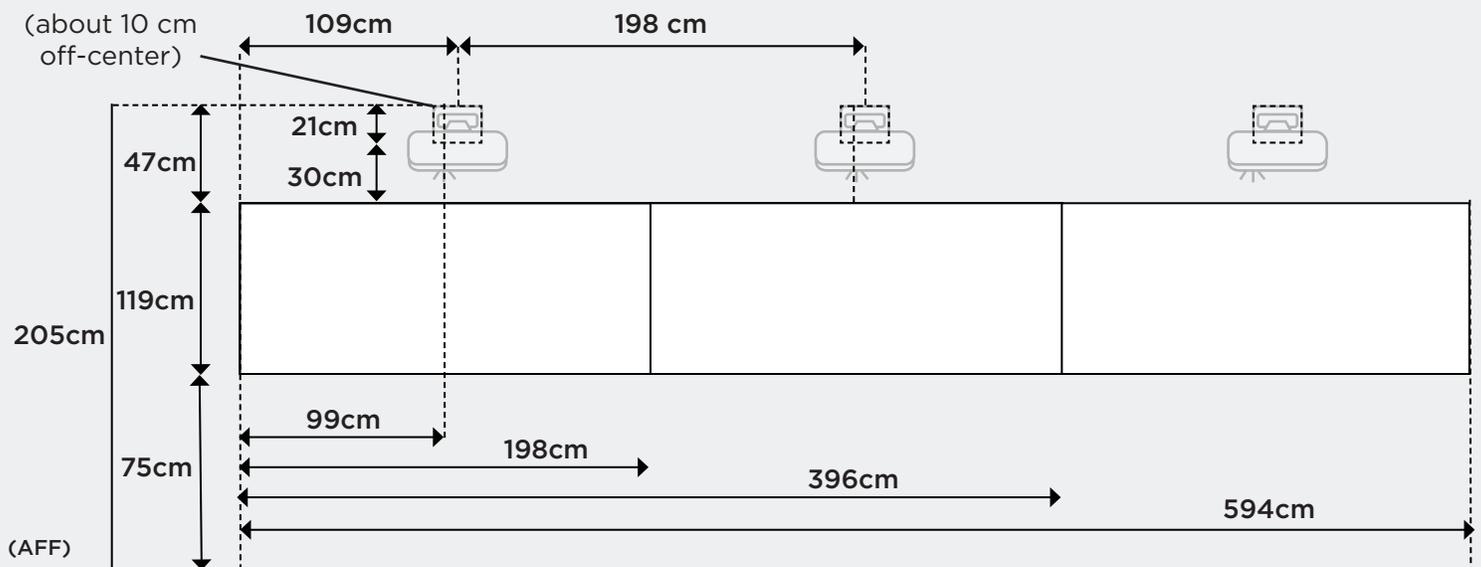
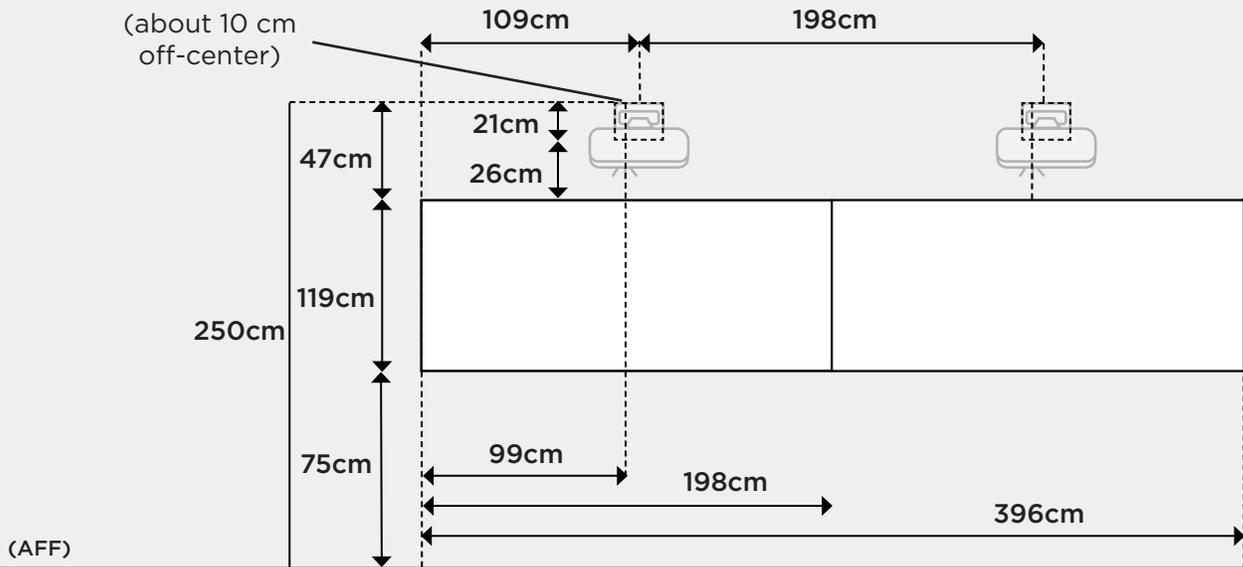
Next, you will install and configure the ScalableDesktop application. The ScalableDesktop interface will guide you through the process.

- Follow this link:  
<http://scalabledisplay.com/downloads/documentation/officialrelease/scalabledesktop/6.0>
- When asked for username and password use this:  
**Username: sdtcustomerdocs**  
**Password: getwarped**
- Download ScalableDesktop on the PC connected to the projectors & Install
- Start the Software — Once you see the “license helper” window, click on “request license key”
- Once you receive your license key, start up the software again and enter your details into the “Install a Software License Key” window.

An installation of an Edge-Blended HoyluWall™ will vary depending on the projectors you use and your personal preferences surrounding the projections themselves. Make sure to consult your projector manuals and the ScalableDesktop manual for further information.

\* Make sure a PO has been submitted to Scalable or Vioso for edge-blending. They will use a temporary license until the invoice has been paid. The system will not be complete until the invoice is paid and you are assigned a permanent license key.

# MEASUREMENTS



\*These measurements are based on an installation with Optoma ZH500 UST Projectors

## Interactive Pens

The Hoylu collaboration software works in conjunction with the micro-dot pattern screen material and interactive pens. The dot pattern is 600 dpi and each dot has its own coordinates. The pens have a small sensor in the tip that detects the dot pattern on the screen and printed dot pattern paper. The dot pattern then tells the pen where it is in relation to the entire screen. The pens then talk to the PC via Bluetooth, so their interaction is then reflected on the screen.

The pen has two sets of tips to use. The first is the plastic tip used for interaction with the HoyluWall™ screen. The second is a pen tip used for writing on the printed micro dot pattern paper. **It is very important that you do not use the pen tips on the HoyluWall™ itself. The marks made may be permanent and could damage the surface.**

For the optimal performance when using the pen on the HoyluWall™, make sure that the pen camera (recessed part of the front the pen) is under the pen tip and you are angling the pen between 50 and 80 degrees to the HoyluWall™ surface.

When using the pen with the printed micro dot pattern paper, ensure that the paper is laying flat and not curved, which can cause the pen to misread the dot pattern.

STATUS	LED COLOR
Power ON	Illuminating 
Connected	Dimming/Pulsing 
Low Battery	Flashing 
Pairing Mode	Flashing 
Tip Error	Flashing 

Do **NOT** use the pen tips on the HoyluWall™. Only use the plastic tips on the HoyluWall™.



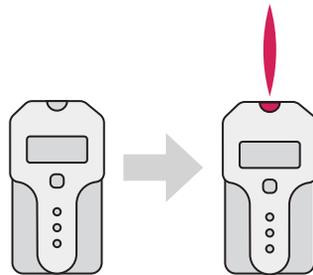
## Installation FAQ

**Q: I used the pen tips, or other permanent ink, on the HoyluWall™. What is the best way to clean off the HoyluWall™ screen?**

A: In most cases the best thing to use is the white eraser that comes included with your accessories box. If that does not work, you can use a clean rag or paper towel and an ammonia-free spray cleaner.

**Q: Can I mount the HoyluWall™ Wall Cleat or Projector Mounts into a plaster wall?**

A: It is recommended that you attach the HoyluWall™ cleat to a stud to guarantee the stability of the screen over time. For the projector mounts, it is required that at least one half of the mounting bolts are drilled into a stud. Scan a stud finder device across your wall for best results.



Use a stud finder device to scan a wall for studs.

**Q: I'm not installing any shelving beneath the HoyluWall™ and I'd prefer to have the HoyluWall™ projection extend to the very edges of the boards ("fitted view"). Are there adjustments to the installation measurements I should make?**

A: This configuration can be accomplished by extending the projectors outward from the wall. Extend until the projection displays as desired.



Standard 16:9 Ratio  
(Room for pen shelving)

"Fitted" View

## Frequently Asked Questions

**Q: How do I get in contact with Hoylu?**

A: Contact us at support@hoylu.com.

**Q: How do I order new interactive pens for my HoyluWall™?**

A: Pens can be ordered by contacting your HoyluWall™ reseller or Hoylu directly at order@hoylu.com.

**Q: Is there an easy way to prevent the pen tips from being used on the HoyluWall™ screen?**

A: We suggest using the colored pen sleeves to separate the pens using ink tips versus plastic tips.

**Q: What software can the HoyluWall™ use? Are there any limitations on the applications I can use?**

A: The HoyluWall™ is application independent. If it runs on Windows, then it will run on the HoyluWall™. Our recommended PC will cover most use cases.

**Q: Can I use the Logitech HD Webcam for a video conference?**

A: We suggest using the webcam provided with the HoyluWall™ for calibration purposes only. Using a different model for video conferencing will eliminate any potential confusion within the ScalableDesktop application.

**Q: How do I get more paper for the Paper application?**

A: Open the Paper application. Go to the drop-down menu. On the left-hand side of the menu, find and select the “Get Paper” option and follow the directions.

**Q: What Projectors are recommended?**

A: Optoma ZH500UST Projectors. If you purchase the Projector Bundle, these are the projectors that will be sent to you.



**Q: What kind of PC do I need?**

A: If you're sourcing your own PC for your HoyluWall™ installation, please note the following specification requirements:

PC MANUFACTURER - HP Z240 TOWER	
CPU	Intel Core i7-8700 3.2 Ghz 6 core 12 thread
GPU	Nvidia Quadro P2000
RAM	16GB
PSU	250 Watt
HDD	1 TB 7200 RPM
SSD	500 MB Solid State with OS Loaded
OS	Windows 10 64bit

## Warranty, Support, and Maintenance

Hardware supplied by Hoylu (the “Hoylu Hardware”) are warranted to be free from defects in material and workmanship, and to substantially conform to Hoylu’s published specifications, packaging, or documentation accompanying the products for a period of twelve (12) months from the date the products were delivered by Hoylu (the “Warranty Period”).

**Hoylu Hardware:** Hoylu will use its best efforts during the Warranty Period to replace defective Hoylu Hardware within 30 days of the receipt of the defective item.

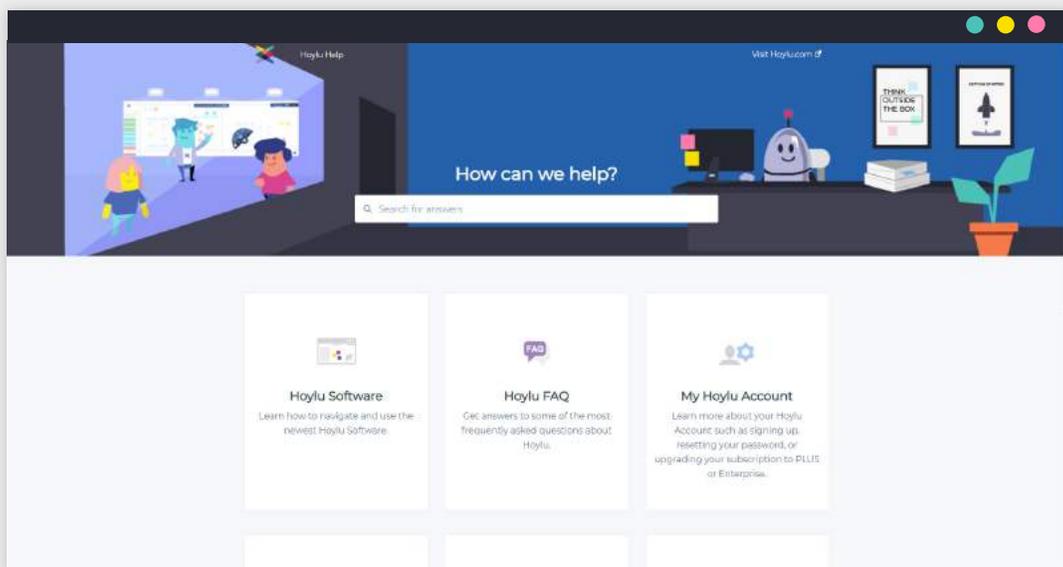
**Hoylu Software:** Hoylu provides a 99.9% uptime commitment for customers with regard to the Hoylu Connected Workspaces™ (our Service Level Agreement or SLA). If Hoylu falls short of our 99.9% uptime commitment and your Hoylu Connected Workspaces™ is affected, Hoylu will apply a Service Credit equal to the monthly amount that was billed for the Hoylu Connected Workspaces™ during the period Hoylu was down (we call these Service Credits).

Service Credits are not refunds and cannot be exchanged into a cash amount, are capped at a maximum of 30 days of paid service, and expire upon termination of the customer contract. Service Credits are the sole and exclusive remedy for any failure by Hoylu to meet its obligations under Hoylu’s SLA.

**RMA Process:** Reseller shall promptly request a return material authorization (“RMA”) from Hoylu for return of products and upon Hoylu’s receipt of notification and classification of the reason for return, Hoylu shall issue an RMA number to Reseller.

## Knowledge Base

Visit [support.hoylu.com](http://support.hoylu.com) for any additional questions. Scroll down to navigate to the section on HoyluWall™ FAQs and Troubleshooting. You are also able to contact our support team at [support@hoylu.com](mailto:support@hoylu.com).



[www.help.hoylu.com](http://www.help.hoylu.com)

## Software Version

In-document references to software are assuming the following versions of the software that may be present in your system. If the software version is newer than the mentioned version number, please consult the updated documentation.

### **Hoylu Wall Edition**

Version 3.11.88.0  
Hoylu Inc.

### **Update your Hoylu Software**

<https://www.hoylu.com/app-downloads/>

### **Nvidia Quadro Driver**

Version 441.28  
Nvidia Inc.

### **ScalableDesktop**

Version 6.0  
Scalable Display Technologies Inc  
<http://scalabledisplay.com/downloads/documentation/officialrelease/scalabledesktop/6.0/>

## Contact Information

### **Hoylu AB**

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### **Phone**

(877) 554-6958

### **Sales**

[hello@hoynu.com](mailto:hello@hoynu.com)

### **Customer Support**

[support@hoynu.com](mailto:support@hoynu.com)

### **Online FAQ**

[www.help.hoynu.com](http://www.help.hoynu.com)

### **Website**

[www.hoynu.com](http://www.hoynu.com)

<https://support.hoylu.com/hoyluwall>