

**LUMOpay**

Make any display interactive

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# Software Setup

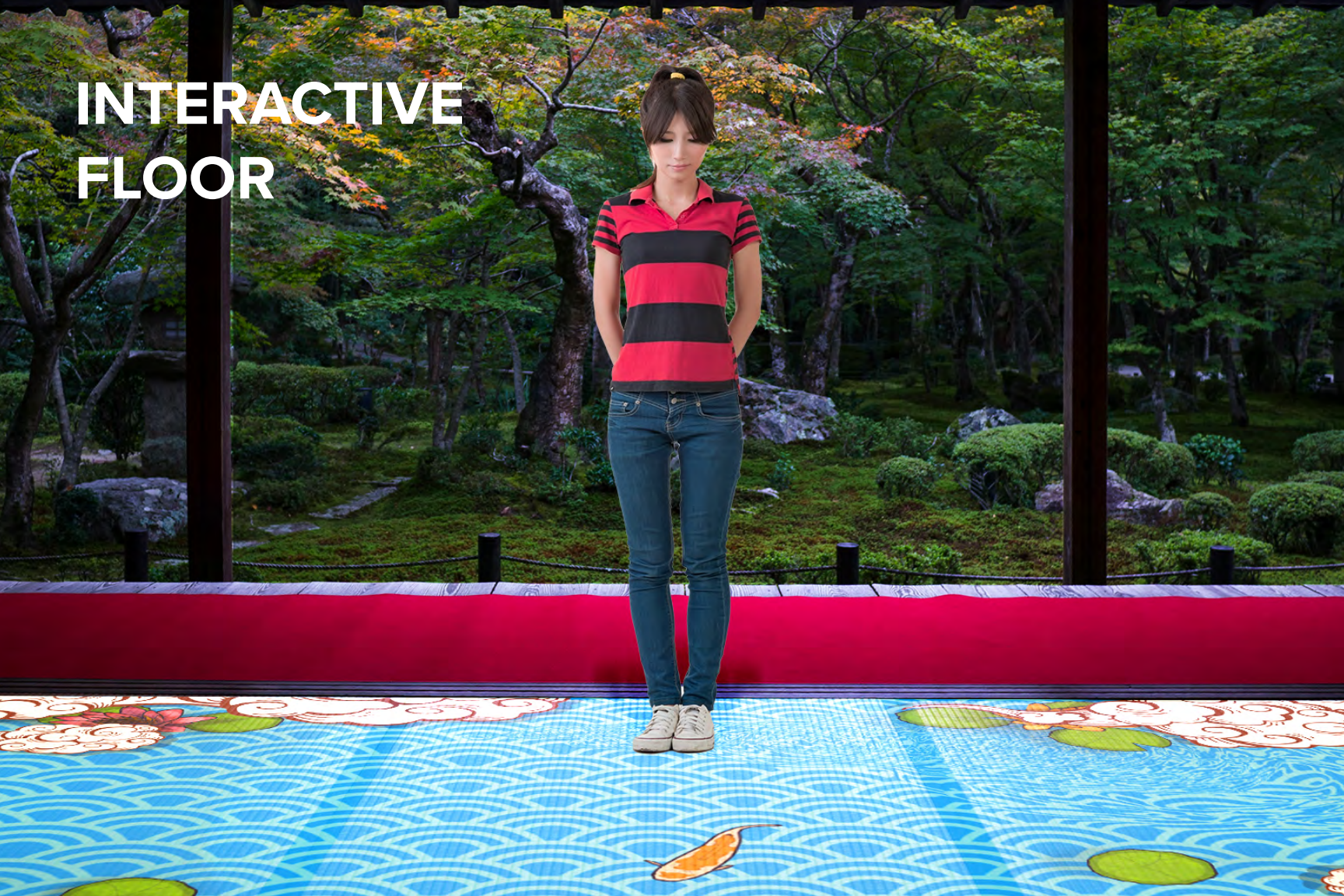
## Downloading & Activating LUMOplay

- Register an account (required to activate the software): [www.LUMOplay.com](http://www.LUMOplay.com)
- If you are redeeming a discount for a free month of unlimited apps and content creation, add [LUMO Playmaker](#) to your cart, and enter the code provided with your hardware kit. You will be asked to enter a credit card. To prevent being rebilled when your free month is over, you can [cancel your subscription](#) right away (it will continue working until the end of the month).

## Installing LUMOplay

1. Locate the LUMOplay icon on your desktop.
2. Double-click the icon to launch Lumo Play.
3. Use the email and password you set for your LUMOplay website account to activate the software. If you do not yet have a paid license, you can activate the free version of LUMOplay, which includes samples of games for many common types of systems.
4. Give your Installation a **name** and **description** to help identify it when managing your account online. (e.g. 'Livingroom Floor' or 'Daycare01').
5. Consent to allow diagnostic data to be collected. We collect information to improve our software and fix driver and performance issues. [Review our Privacy Policy](#).

# INTERACTIVE FLOOR



## Setup Instructions - Retail Interactive Floor

These instructions are for the LUMOplay Retail Kit. You can adapt this setup if you choose different equipment for your installation. You may need a filter for your RealSense™ camera if you use a projector that is 4000 lumens or brighter. [Contact SimplyNUC](#) for information about how to get a filter.

Install your floor system in a area where you can reduce the lighting. Do not install near windows or direct lighting. You will need approximately 2.7m x 2m (9' x 7') of open floor space. The display size will vary based on the height of your projector.

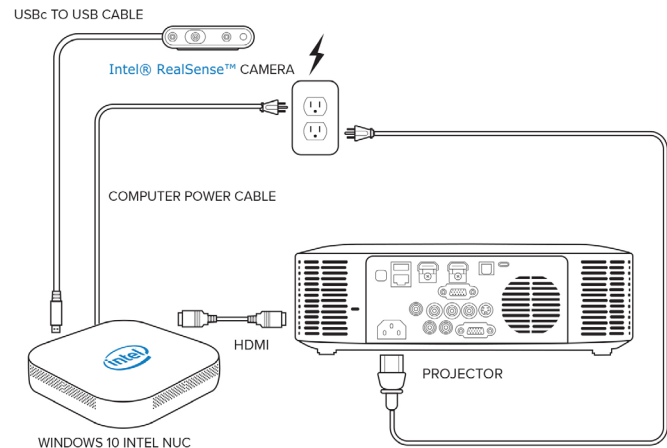
### Connect your equipment

Mount the projector on the wall at least 2.4m (8') from the floor and turn it on.

Center and mount the camera over the center of the display area. Connect the camera to your computer using the long USBc cable.

Connect the projector to your computer using the HDMI cable.

Plug in and turn on the computer and the projector and launch LUMOplay. Proceed to calibration.

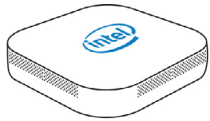




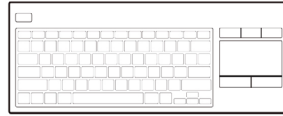
# Interactive Floor

## Retail Installation Kit

Included in retail hardware kit



WINDOWS 10 INTEL NUC



WIRELESS KEYBOARD



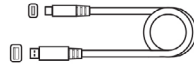
CAMERA MOUNT



COMPUTER POWER CABLE

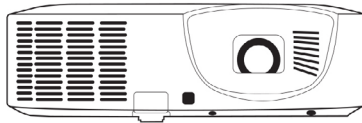


Intel® RealSense™ CAMERA

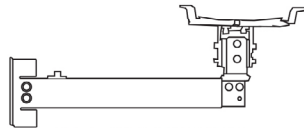


USBc TO USB CABLE

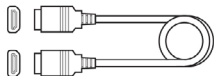
**Not included** in retail hardware kit



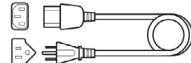
PROJECTOR



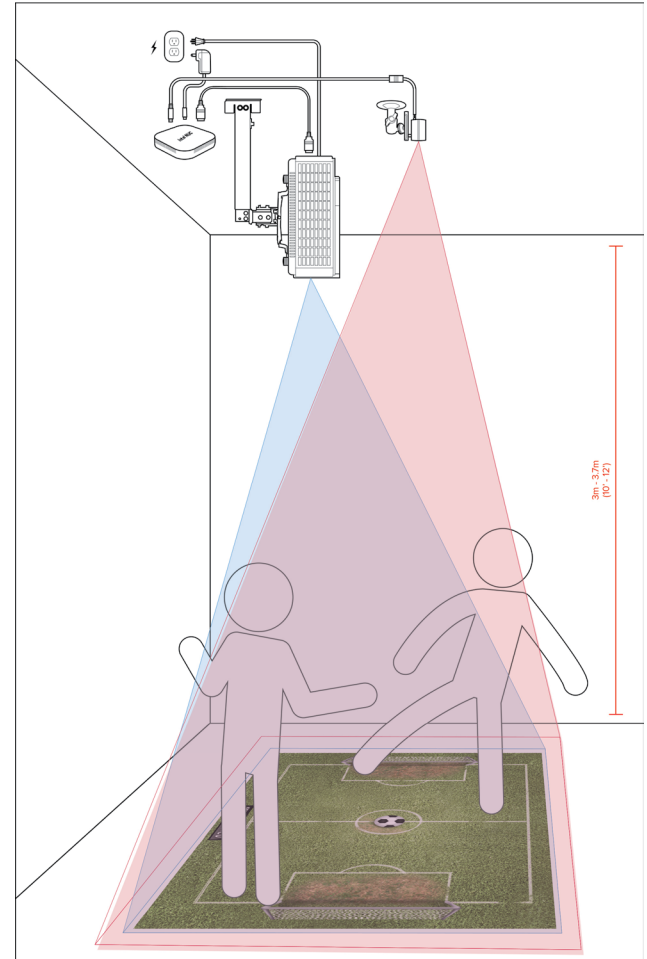
PROJECTOR CEILING MOUNT



HDMI



PROJECTOR POWER CABLE



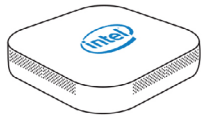
# INTERACTIVE WALL



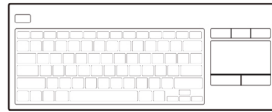
# Interactive Wall

## Retail Installation Kit

Included in retail hardware kit



WINDOWS 10 INTEL NUC



WIRELESS KEYBOARD



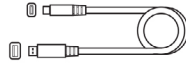
CAMERA MOUNT



COMPUTER POWER CABLE



Intel® RealSense™ CAMERA

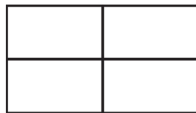


USBc TO USB CABLE

### Supported displays (not included in kit)

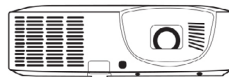
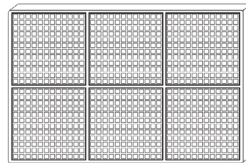


FLATSCREEN TV

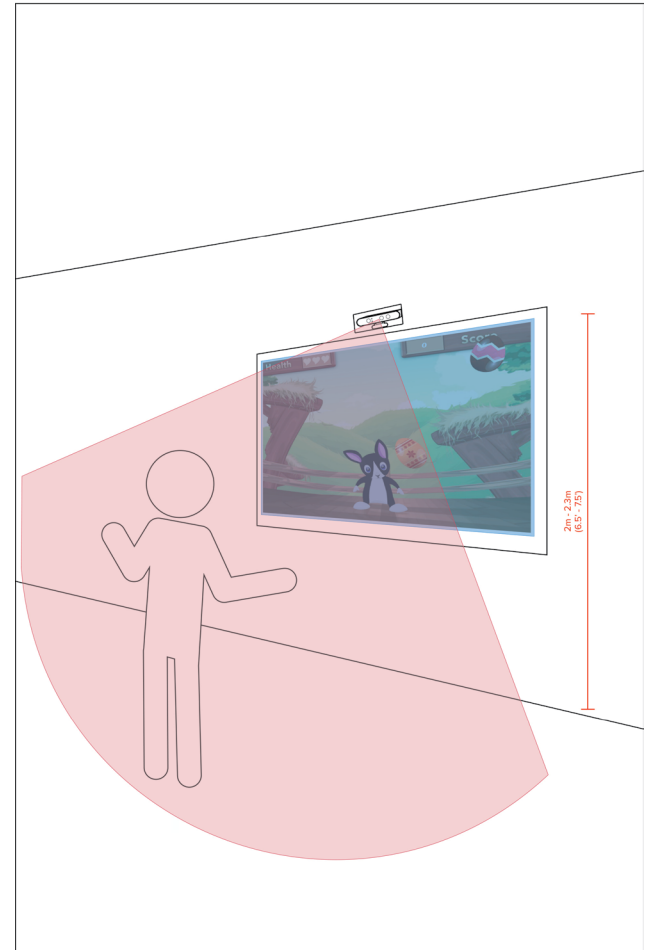


FLATSCREEN ARRAY

LED DISPLAY



PROJECTOR





## Setup Instructions - Interactive Wall

These instructions are for the LUMOplay Retail Kit. You can adapt this setup if you choose different equipment for your installation. This setup is ideal for most motion or gesture reactive walls and windows. Please see Interactive Wall Ball or Touchscreen installation setup instructions if you want to use your system for Wall Ball or Touchscreen apps.

Most LUMOplay apps are ideal for displays up to 4.9m (16') wide, and 16:9 or 16:10. If you want to use a larger display, it is possible to use multiple cameras and order custom content. [Contact us](#) for more information.

### Connect your equipment

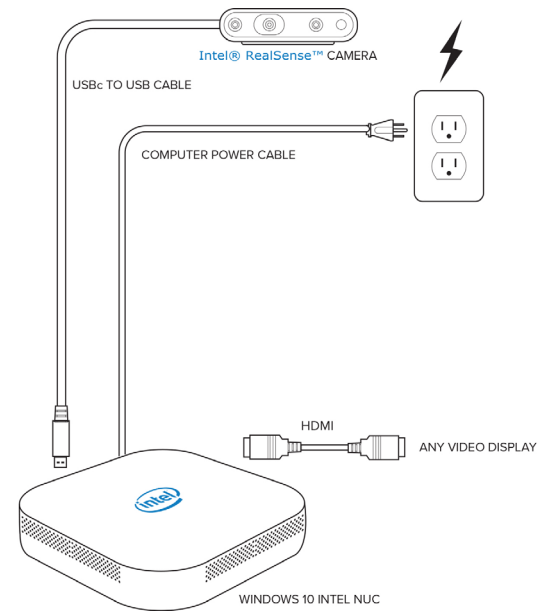
For best results, the camera should be mounted above the display, 2m - 2.3m (6.5' - 7.5') from the ground.

Mount the camera over the center of the display area. Connect the camera to your computer using the long USBc cable.

Connect the display to your computer using an HDMI cable.

Plug in and turn on the computer and the projector and launch LUMOplay.

Proceed to calibration.



# INTERACTIVE WALL BALL

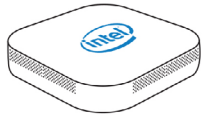


Time  
80

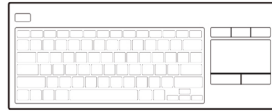
# Wall Ball

## Retail Installation Kit

Included in retail hardware kit



WINDOWS 10 INTEL NUC



WIRELESS KEYBOARD



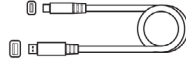
CAMERA MOUNT



COMPUTER POWER CABLE



Intel® RealSense™ CAMERA

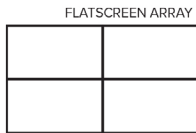


USBc TO USB CABLE

### Supported displays (not included in kit)

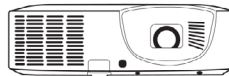
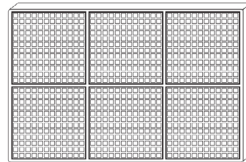


FLATSREEN TV

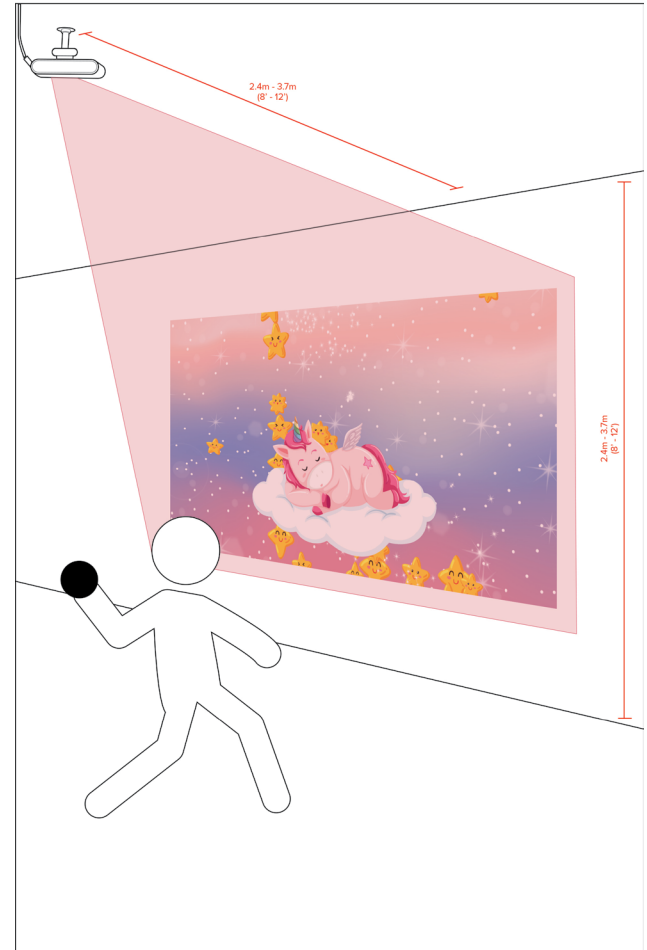


FLATSREEN ARRAY

LED DISPLAY



PROJECTOR



## Setup Instructions - Interactive Wall Ball

These instructions are for the LUMOplay Retail Kit. You can adapt this setup if you choose different equipment for your installation.

If you use LED tiles, flatscreens, or any kind of display that may be sensitive to impact, you should invest in impact protection such as tempered glass or acrylic. If you use a projector, avoid positioning the projector directly behind players to avoid shadows.

Use soft or inflatable balls a minimum of 23cm (9") in diameter. Your display area should not be larger than 4.8m (16') wide.

### Connect your equipment

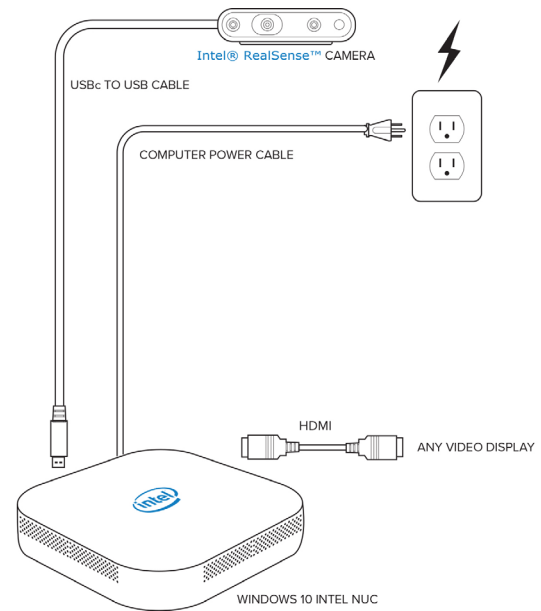
Mount the camera on a ceiling that is 2.4m - 3.7m (8' - 12') from the floor, positioned 2.4m - 3.7m (8' - 12') from the wall where the display is.

Connect the camera to your computer using the long USBc cable.

Connect the display to your computer using an HDMI cable.

Plug in and turn on the computer and the display and launch LUMOplay.

Proceed to calibration.





# TOUCHSCREEN



CINEMA

## INSTRUCTIONS

Select tiles to find the matching pairs. Try to beat the best time.

**YOUR SPEED:** 00:37

**TOP SPEED:** 02:20

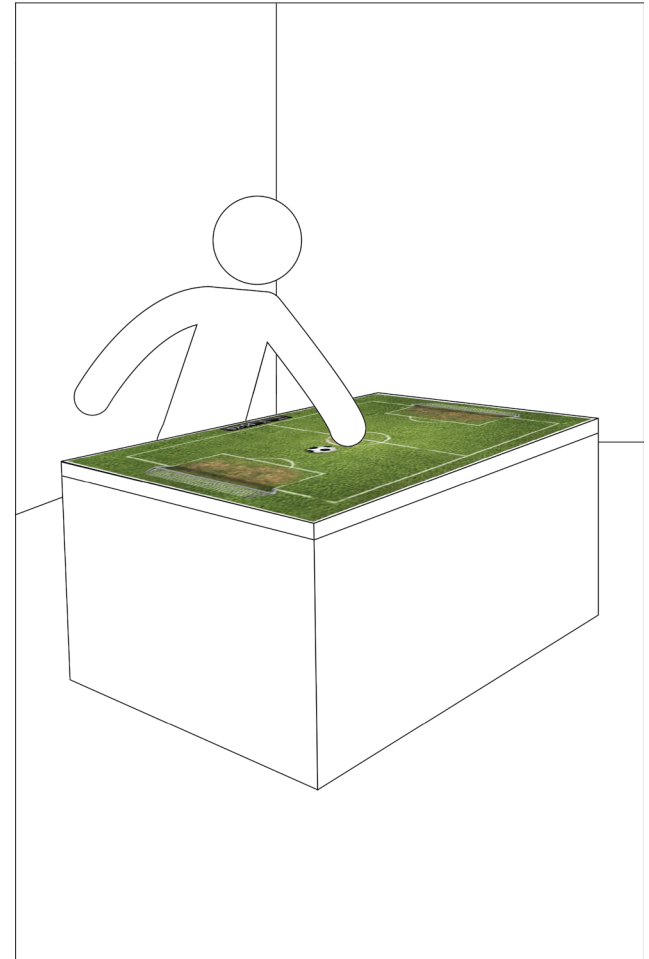
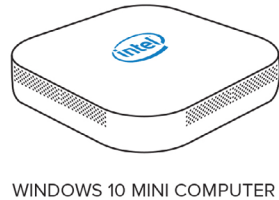
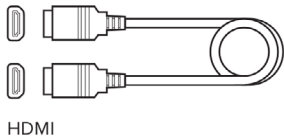
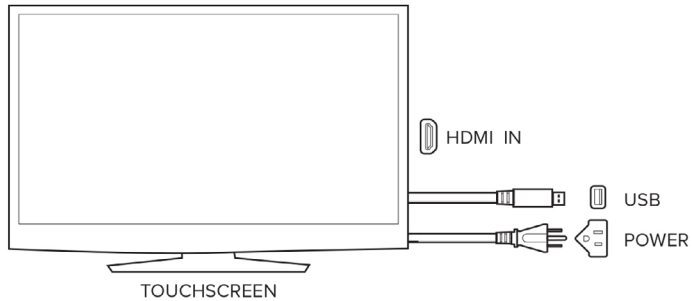
RESET



# Touchscreen

## Recommended Equipment

Use any touchscreen with the Retail Kit (camera not required)



## Setup Instructions - Touchscreen

LUMOplay's Touchscreen apps are not designed for projection displays. These apps will work with any touchscreen display that works with Windows 8.1 or higher, or with Windows Surface Pro tablets that meet our minimum equipment requirements.

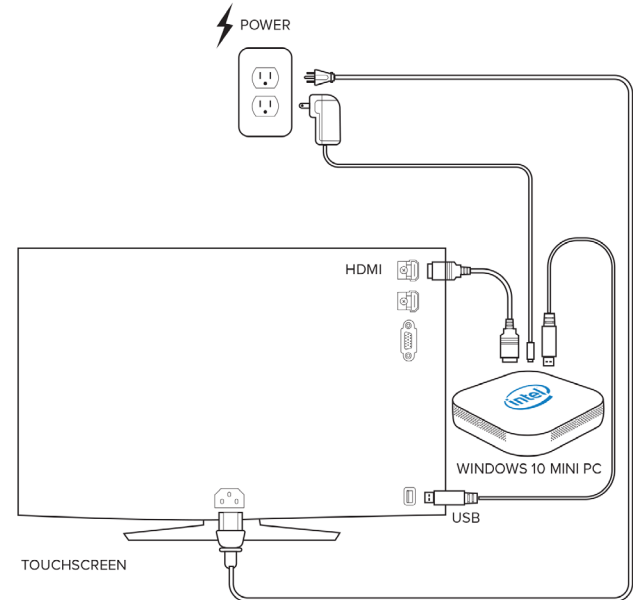
LUMOplay can create advanced touchscreen experiences for lead generation, wayfinding, product ordering, and more. If you want to order a custom Touchscreen app, please [place a custom order](#).

### Connect your equipment

Connect the touchscreen display to your computer via USB and HDMI.

Plug in and turn on the computer and the display and launch LUMOplay. Proceed to calibration.

**NOTE:** Touchscreen displays do not require camera setup, so you will not need to go through the camera calibration steps. Once you choose your touchscreen as your LUMOplay display, your calibration will be complete.



# Calibrating LUMOplay

If you need help with calibration, LUMOplay offers an **optional remote calibration service** for \$150. Sessions must be scheduled a minimum of 1 business day in advance. Your computer will need to be online during the session, and someone must be physically present at the installation to communicate with our technician. Remote calibration is highly recommended for systems using multiple cameras.

If you want to schedule a remote calibration session, please [contact us](#).

## Choose your setup

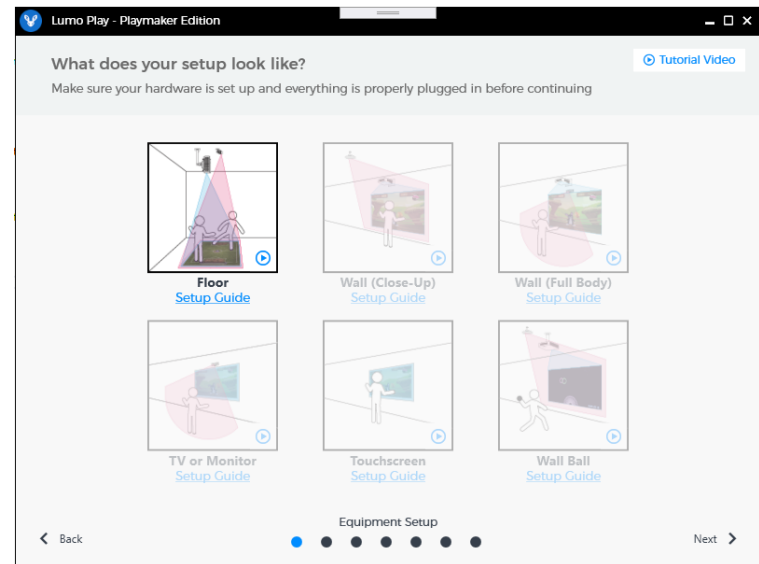
Your hardware and equipment should be set up, plugged in and ready to go. **Do not attempt to calibrate LUMOplay until your equipment is connected.**

Once your equipment is set up, choose the option closest to your system.

## Alternative system setups

- Table: Choose floor
- Photo Booth: Choose 'Wall Full Body' (remember that you need to use a Kinect for Xbox One camera)
- Touch reactive LED floor: Choose Touchscreen

Click 'Next'.



## Choose your sensor

Choose the **Intel™ RealSense®** camera or touchscreen display.

If you do not see your camera or touchscreen, make sure it's connected to your computer, powered on, and that you've installed the latest device drivers.

If you want to schedule a remote calibration session, please [contact us](#).

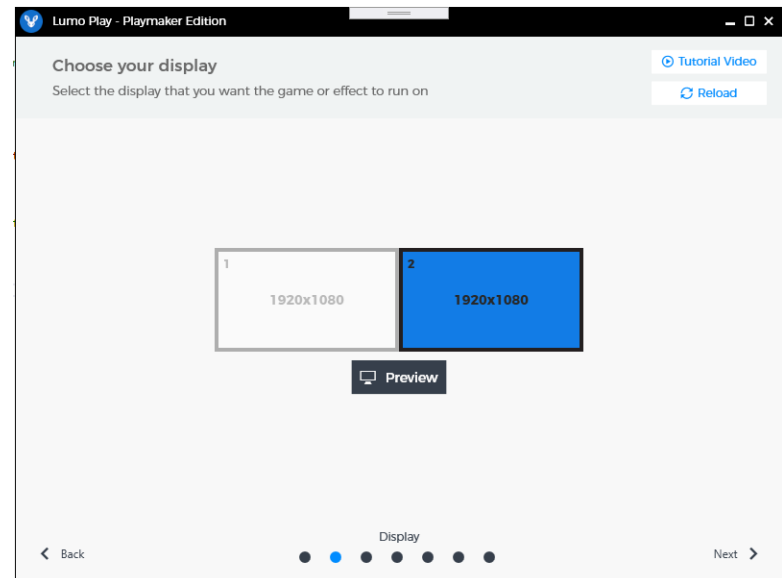
## Choose your display

Choose the display that you want LUMOplay apps to appear on. If you're using multiple displays, you'll need to choose which one will display your apps, and which one will display the LUMOplay desktop software interface.

If you're only using one display (there is no laptop monitor or second monitor), you will only have one display available. Each connected display is identified by a number in the top left-hand corner of the display.

Click 'Preview' to see the numbers appear on your displays - this will help you identify which display to choose.

When you're done, click 'Next'.



## Mask the Game Area

If you are setting your camera up so that it points away from the display, or you are using a touchscreen, you do not need to change this setting.

This step allows you to draw an exact rectangle around the display area on a floor, so that only this area is tracked by the camera. You will see blue dots and red lines appear on your chosen display when movement occurs. If the blue dots are appearing on the side of the screen opposite of the movement, you can use the Flip Vertically and Horizontally toggles (to the left of the main camera window) to properly align the movement with your camera.

## Floor and Wall Masking

The masked area must match the game display area as closely as possible so LUMOpay can track motion accurately.

Make sure the orientation of the top left-hand corner (the one with a dot) on your display matches up with the corner marker in the live video feed. If it doesn't, use the Flip toggles to the left of the camera view window to rotate the video until the dot position is the same on the screen as it is on your display.

Click and drag the blue mask handles from the corner until they line up exactly with the corners of the projection in the live video feed. Then click 'Next'.





## Camera Alignment

If your camera is level to the floor or wall, if your camera is pointed away from the display, or if you're using a touchscreen, you do not need to change this setting.

The camera alignment tool allows you to correct for a slight vertical or horizontal tilt in the camera. For floor projection and wall displays where the camera is pointed at the display, you should install your camera so that it is in the middle of the display, and as straight as possible. If you are unable to center or straighten the camera perfectly, the Camera Alignment step will help you correct this so your tracking is as accurate as possible.

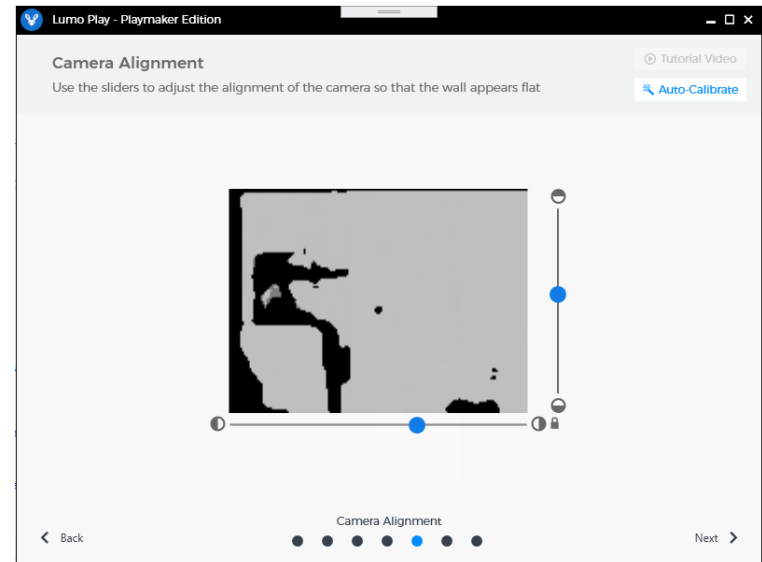
### Aligning your camera to the display surface

Clear all people and objects from the display area and press Auto-Calibrate (the button in the upper-right corner).

Auto-calibration is more precise than adjusting the sliders, but it won't work unless you clear all the people, furniture and objects (e.g. ladders, boxes, tools) from the entire area that the camera can see.

You can manually adjust the alignment using the side and bottom sliders until the wall appears as a flat, uniform shade of grey.

When you're done, click 'Next'.



## Camera Settings

The **Intel™ RealSense®** camera included with the Lumo Play Retail Kit works well in most lighting conditions except direct sunlight and with displays up to 3500 lumens. For brighter displays, please use the bandpass filter included with your kit.

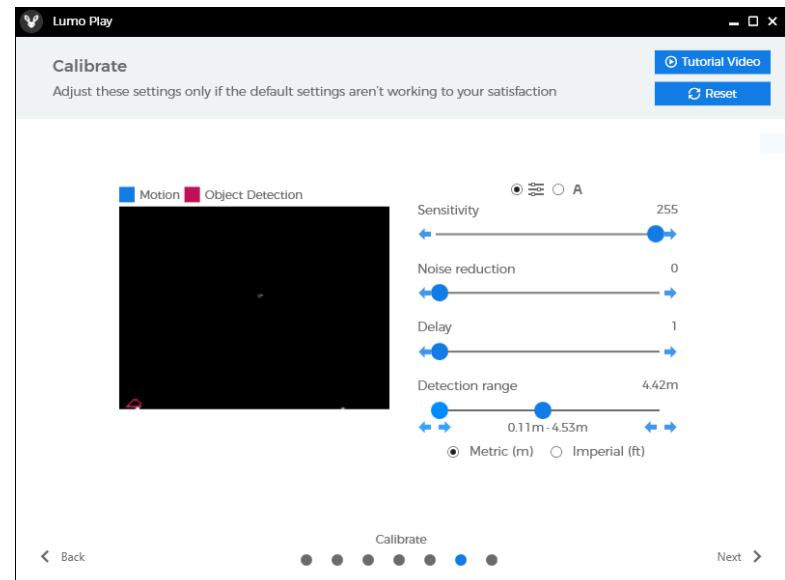
*NOTE: The tools described in this guide are for the Intel™ RealSense® 3D camera. If you use a web camera, the camera settings will be different than those shown in this guide. We do not recommend that you use a web camera for floor installations or any setup where the camera is pointing directly at the projection or display. Web cameras aren't officially supported, so if you choose to use a web camera in your installation and it doesn't perform well, we'll advise you to upgrade your camera before requesting support.*

Have a friend to help you if you plan to change the default settings. Adjust the settings while your friend moves in front of the camera. You will see blue and red areas when your camera settings are properly calibrated.

### Settings Definitions

- Sensitivity: increases or decreases sensitivity to changes in depth (how near / far something is).
- Noise Reduction: Removes noise from the camera feed.
- Delay: **Do not change this setting** - it is only used for specific custom games.
- Detection Range: Defines the tracking distance and range.

When you're done adjusting these settings, click 'Next'.



## Object Detection

Clear the display area of objects and people and take a picture. This reference image tells LUMOplay what your installation area looks like when no one is playing. If this area changes because of objects like furniture, or if direct sunlight travels across the area throughout the day, you may need to recalibrate your installation.

## Changing the Calibration

The main software interface will load when the installation is calibrated. You can return to the calibration stage at any time by selecting 'Calibrate' from LUMOplay's dropdown menu in the top left corner of the software.

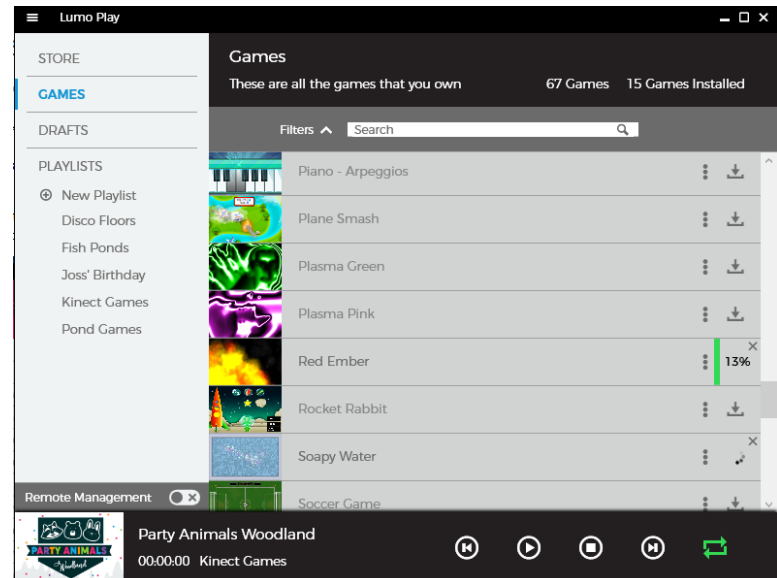
## Installing Games

The software interface shows you all the games available with your subscription. Before you can run the games you need to install them.

Click the download icon next to the name of the game you want to download. Once the game is downloaded, double click the game icon to launch it. Press "ESC" to close the game.

## Playlists and Remote Content Management

Learn how to create and manage local and remote playlists here: <https://help.lumoplay.com/hc/en-us/sections/360004951073-Games-Playlists>



# Maintenance Best Practices

Follow these guidelines so your LUMOplay installation works as well as possible. [Click here for our full Best Practices.](#)

**Commercial Installers:** *If you manage installations on behalf of a customer, consider incorporating a maintenance contract as part of your service fee.*

## 1. Update LUMOplay once a month

We release software updates approximately once per month to keep up with feature requests, driver updates, and bug reports.

## 2. Update your system software regularly

Make sure to install Windows updates, as well as updates for device drivers such as graphics cards.

## 3. Reboot your computer regularly

We recommend rebooting your LUMOplay system at least once every 24 hours.

## 4. Install your hardware correctly

Follow the manufacturer's guidelines for mounting cameras and projectors.

## 5. Maintain and clean your hardware regularly

You will find instructions for cleaning your equipment in the manufacturer's user manual.

## 6. Let us know if you have problems

We want to help! You can report a bug directly from LUMOplay, or by [using our online form.](#)

## Make Custom Apps

If you have a LUMO Playmaker subscription, you're ready to start making unlimited custom games and effects using our patented Motion Maker templates. It's easy! If you can upload a picture to social media, you have the skills to make custom apps for your special events, advertising, or artistic installations!

### **Don't have a Playmaker subscription? No problem!**

You can still use Motion Maker templates if you have a LUMO Free or LUMO Playground subscription. Custom apps are \$59 each.

### **Recommended browser**

We recommend using the latest version of Google Chrome with Flash enabled when you use the Motion Maker templates.

### **Image file format**

Graphics should be png format. Particles should have alpha channels. If you don't know what this means, here's an article: <https://help.lumoplay.com/hc/en-us/articles/360038496854>

### **Design resources**

Color is important when you're designing graphics for an interactive projection! Here's an article about choosing the best colors for projected apps: <https://help.lumoplay.com/hc/en-us/articles/360002854853-Choosing-the-right-colors-for-projection>

Motion Maker Templates allow you to make a wide variety of games and effects for LUMOplay. Using the templates is free - you only pay when you're ready to download the custom app to your system. Learn more about the templates here: <https://help.lumoplay.com/hc/en-us/sections/360000980673-Templates>

To take the guesswork out of making art for your custom app, we've provided a number of design templates for Photoshop that you can use to get started. We've also prepared some pre-made graphics you can use. You'll find everything you need to get started here: <https://help.lumoplay.com/hc/en-us/articles/360002825794-Using-the-Motion-Maker-templates>



# Get Help

## **We want to help you!**

LUMOplay is a friendly team of devoted developers and designers. We launched our interactive display software in 2011 with just 6 games. Today, we're proud to support tens of thousands of interactive display experiences worldwide.

Whether you're installing a LUMOplay system in a small business, or installing LUMOplay interactive experiences across hundreds of retail locations, we want to help you create the most amazing installation possible.

## **Ask a sales question or book a remote calibration session**

Contact us by email: [info@LUMOplay.com](mailto:info@LUMOplay.com)

Contact us by phone to leave a message, and we'll call you back (Toll Free in North America): 1 833 438 5866

## **Report a software problem**

The fastest way to get support for a software problem is to use the 'Report a Bug' option in the LUMOplay software dropdown menu. This will send our technical team all the information they need about your system along with your software error logs. Your report will be answered within 24 hours on business days.

## **Report a hardware problem**

LUMOplay Home or Retail kit hardware problems should be reported to [Simply NUC](#).

If you're having trouble with hardware that was not part of a kit, please report this to your manufacturer.



**LUMOplay**  
contact: [info@lumoplay.com](mailto:info@lumoplay.com)