

**LUMOp**lay

# INTERACTIVE FLOOR EDUCATION KIT



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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](#).

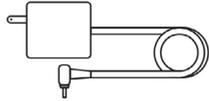
# Interactive Floor

## Education Kit

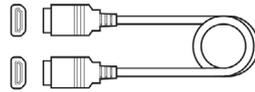
Hardware included:



PROJECTOR



PROJECTOR POWER CABLE



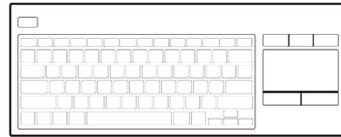
HDMI VIDEO CABLE



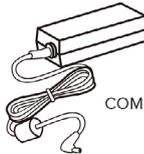
PROJECTOR MOUNT



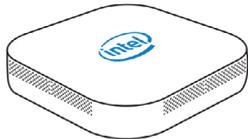
CAMERA MOUNT



WIRELESS KEYBOARD



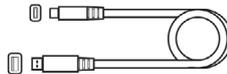
COMPUTER POWER CABLE



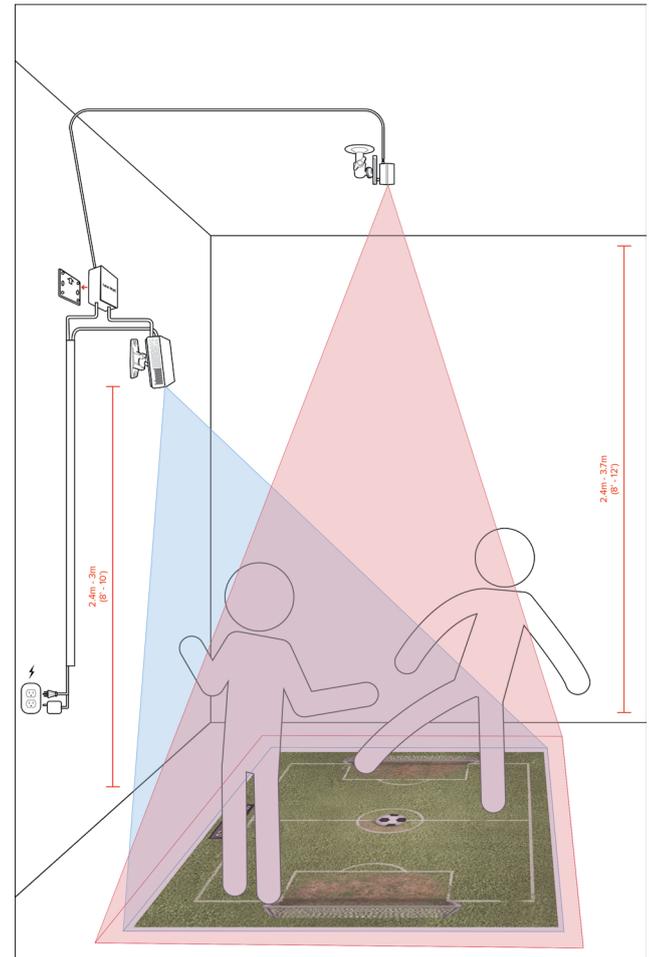
WINDOWS 10 INTEL NUC



Intel® RealSense™ CAMERA



USBc TO USB CABLE



## Setup Instructions - Education Interactive Floor

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

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.

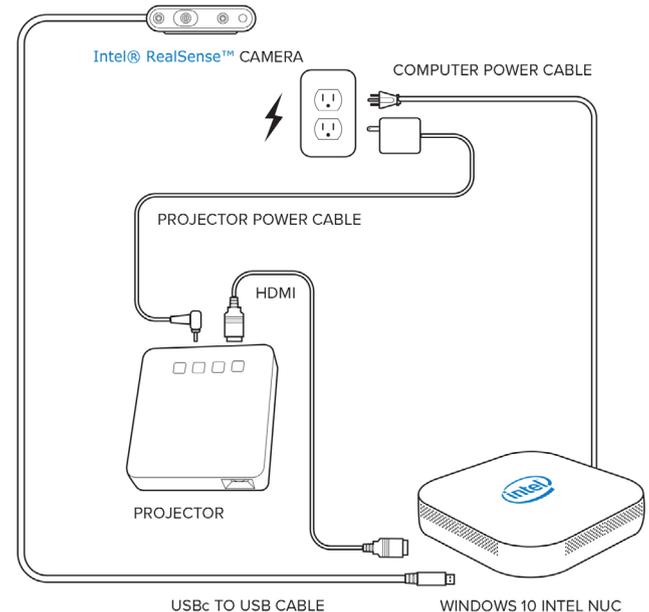
### Connect your equipment

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

Mount the camera over the center of the projected 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.



# Calibrating LUMOplay

If you need help with calibration, LUMOplay offers an **optional remote calibration service** for \$50. Sessions must be scheduled at least 1 business day in advance, and your computer will need to be connected to the internet during the session. We offer email support for free, so unless you're in a rush, it's always better to [contact us by email](#) before you schedule a paid session. :)

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

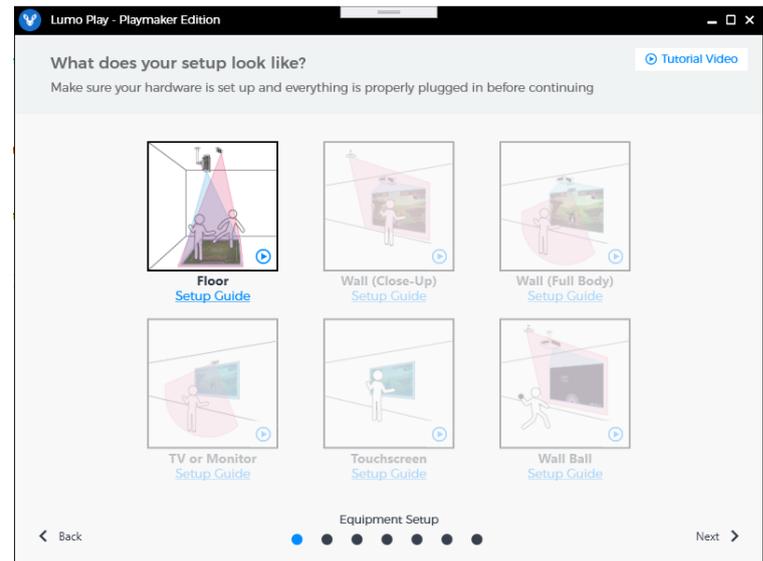
## Choose your setup

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 'Floor' as your setup.

Click 'Next'.



## Choose your camera

Choose the **Intel™ RealSense®** camera.

If you do not see your camera, make sure it's connected to your computer, powered on, and that you've installed the latest device drivers (these should already be installed when LUMOplay is installed).

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

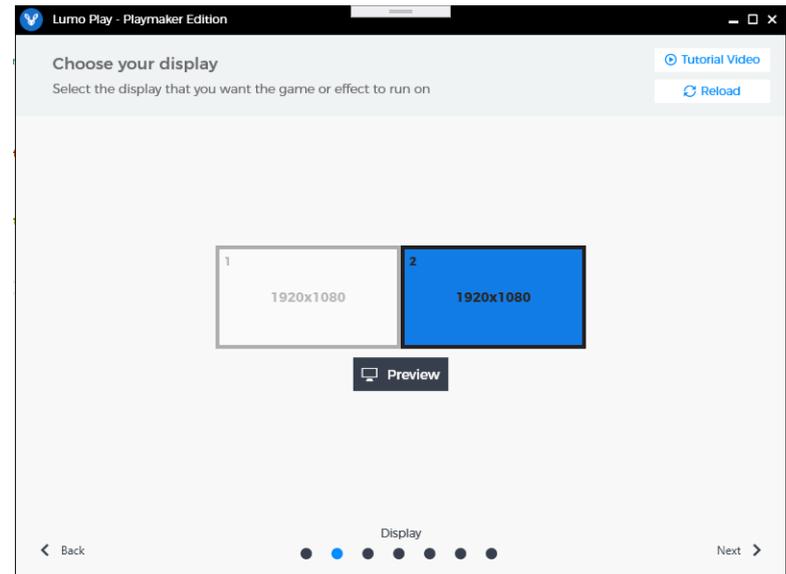
## Choose your display

If you're using a laptop or connecting a second monitor to your kit, you'll need to choose which display to use to play your apps.

If you're only using one display (there is no laptop or second monitor), you will only have one display available to choose.

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

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 need to make sure your projector is powered on and connected to your computer for this step.

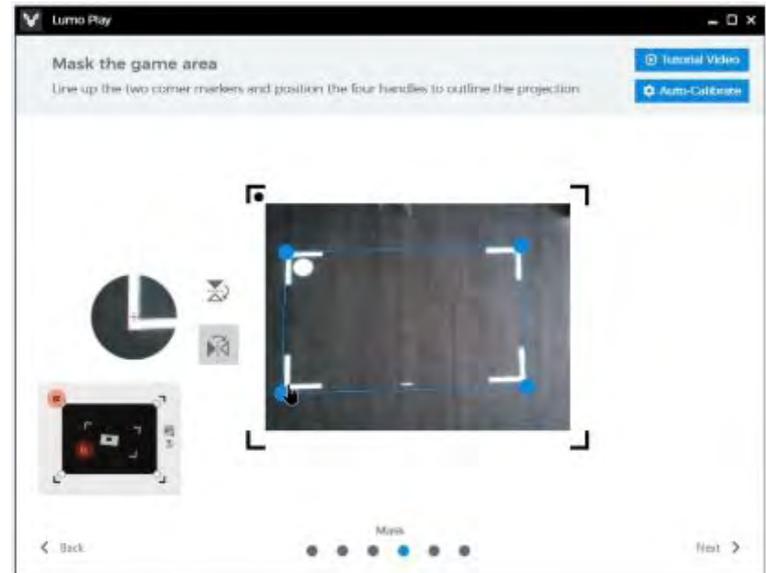
This step is critical to the accuracy of floor games. Make sure the orientation of the top left-hand corner (the one with a dot) on your projector matches the corner marker in the video feed in LUMOplay. If it doesn't, use the Flip toggles to the left of the camera view window to rotate the video until the dot position is the same on the setup screen as it is on your floor.

## Floor Masking and Setting Orientation

You will see blue dots and red lines appear on the projected area when you wave your foot over it. If blue dots are appearing on the side of the screen opposite of where you are moving, 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.

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

The camera alignment tool allows you to correct for a slight vertical or horizontal tilt in the camera.

You should install your camera so that it is in the middle of the display, and as straight as possible, but if you are unable to center or straighten the camera perfectly, the Camera Alignment step will allow you to correct this so your tracking is as accurate as possible.

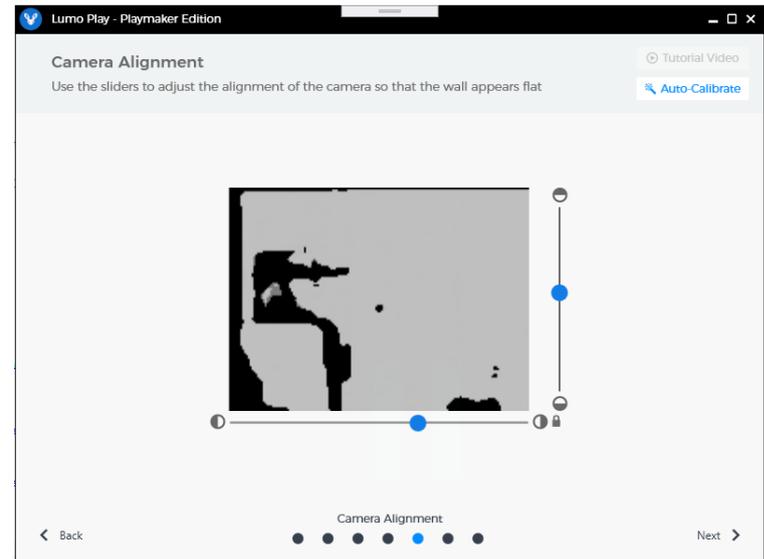
### Aligning your camera to the display surface

Clear all people and objects from the projection 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 pets, people, and objects (e.g. furniture, toys, ladders) from the entire area that the camera can see.

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

When you're done, click 'Next'.



## Camera Settings

The Intel™ RealSense® camera included with the LUMOplay Kit works well in most lighting conditions except direct sunlight. You should not need to adjust the default settings, but if you do, a description of each setting is provided.

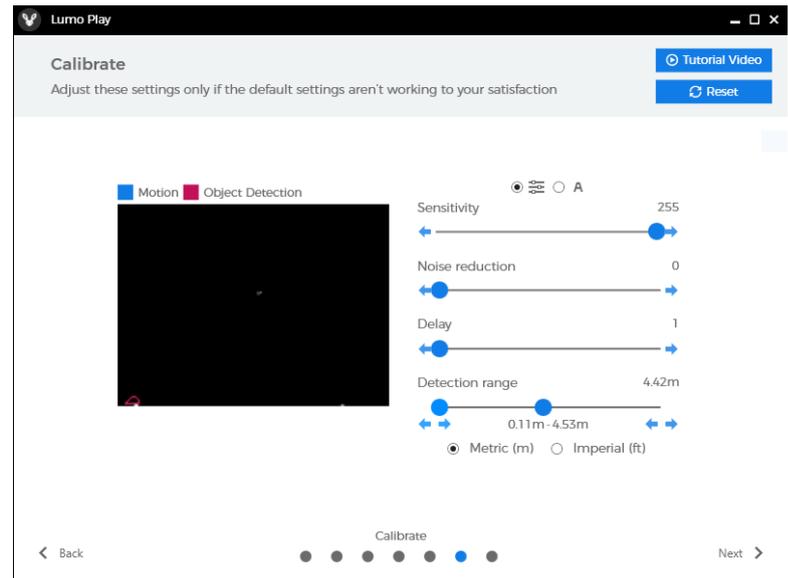
*NOTE: The tools described in this guide are for the Intel™ RealSense® 3D camera. If you use a web camera, the camera settings will be different than those shown in this guide. We do not recommend that you use a web camera for floor installations or any setup where the camera is pointing directly at 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 floor of objects and people and take a picture. This reference image tells LUMOplay what your floor looks like when no one is playing. If this area changes because of objects like furniture or large toys, or if direct sunlight travels across the area throughout the day, you may need to recalibrate your installation. Click 'Next' to proceed to the fun part. :)

## 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.

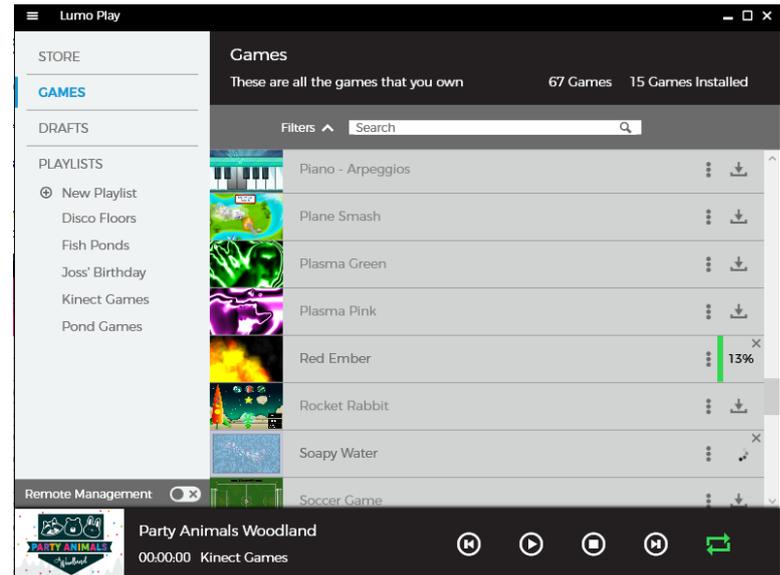
## Installing Games

Before you can run any 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 Game Menu

Learn how to make playlists and turn on the Game Menu so players can choose the game they want to play: <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 want to make interactive floor games affordable for every school and home. Please reach out if you need help!

## **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 Education 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.



**LUMO**play

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

