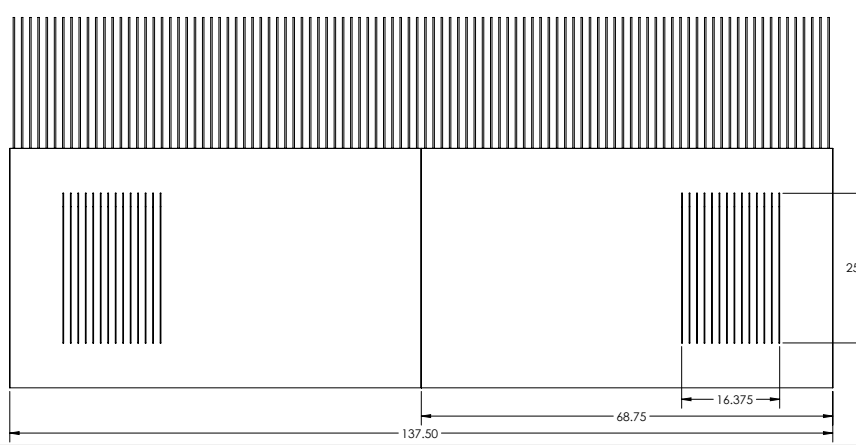


# FREQUENCIES (LIGHT QUANTA)

SOUND AND LIGHT INSTALLATION  
NICOLAS BERNIER

## INSTALLATION GUIDE

[READ BACKWARD FOR THE BREAK DOWN]



### IMPORTANT NOTICE BEFORE YOU START

- **Never ever** touch the acrylic panels with hands
- Acrylics panels should be **handled by the edges**
- Always use surgery gloves (**with no powder!**) for acrylic modules handling

**1.** This guide is made with version 1 of the installation. There is a second version which comes in 3 separate wood crates. Installation is the same except the crate part.

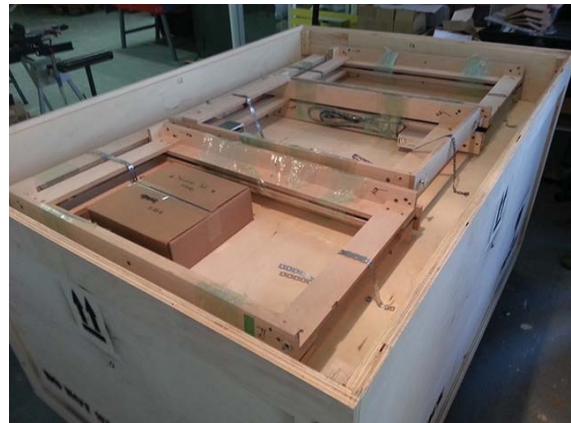


**2.** Remove the screws that retain the cover of the wood crate so you can open the lid of the box. **Please replace any stripped out screws!**



**3.** Remove the parts that are on the of the middle separating panel :

- Wood parts for the two module structures
- 2 stainless steel tubes (used to transport the LED modules)
- Computer box
- Motu sound card box
- Stuff box: structure screws + black finishing screws external panels of the installation + wood spacers to join the two structures of the modules + square drill bits + DMX wires + some spare screws



**4.** Start the assembly from the bottom part. Each structure contain : 3 Sets of legs and 4 trusts. **HINT** : There is two structures to build so you should split the parts to be sure you don't make mistake while making the assembly.

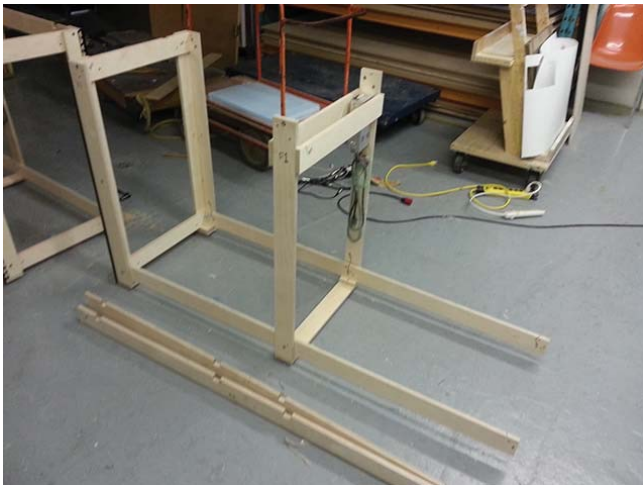


**5.** All the joints are identified with letters and numbers to easily match the parts together.

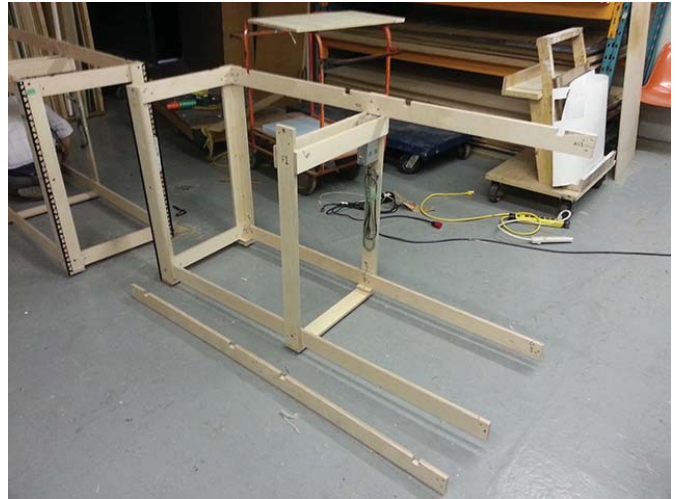
Each joints need two screws with washers to be perfectly secured



**6.** When the bottom trusts are installed you can get the middle set of legs in place.



**7.** Install the two last trusts (the ones with the channels)



**8.** Install the last set of legs.



**9.** Make sure that all the screws are in place (2 screws per joints).



**10.** Place the structures where it should be (normally in the middle of the room). Make sure every sets of legs are levelled and square.

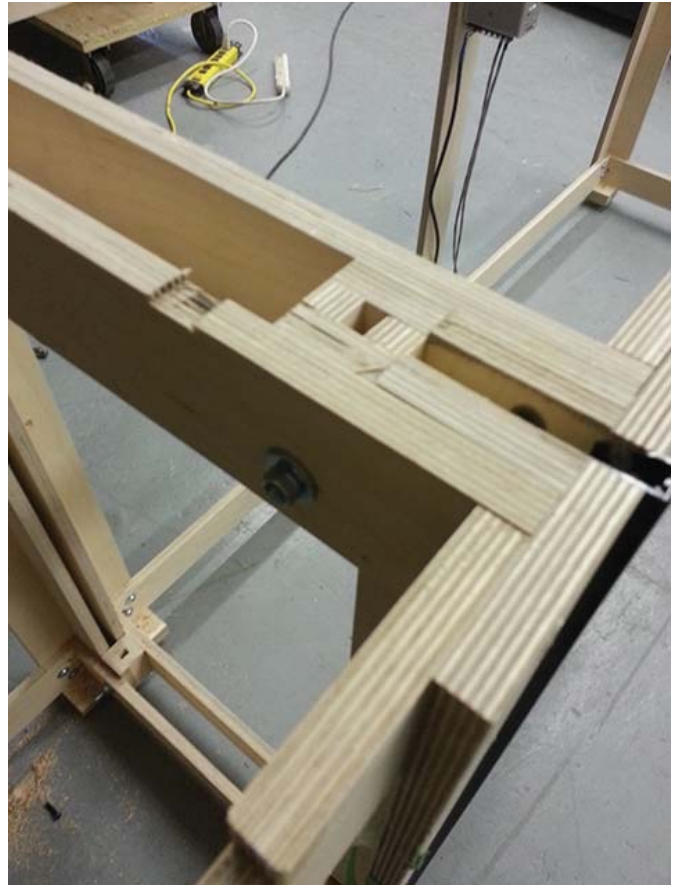
**11. LEVELLING IS CRUCIAL (!)** because it won't be possible to level it after all the LED modules are on top of the structure.



**12.** Adjust the levelling glide to ensure the structure lay perfectly on the ground

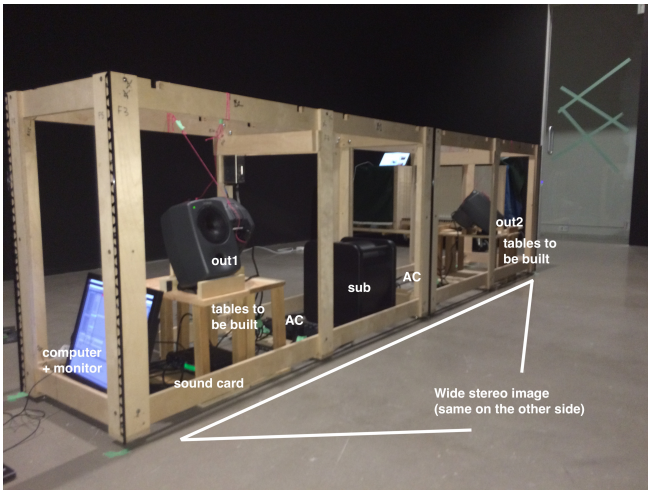


**14.** Install the 4 wood spacers. There are marks on them so you can find the right place to install them. **HINT** : longer screws need to be with the spacers of the bottom, shorter screws at the top (if not, the longer screws will prevent the acrylic module to be properly placed).



**15. Take the time to verify the levelling between** the two structure modules and make the final adjustment. You should place the structure where it is meant to be for the exhibition because **you won't be able to move the piece later on.**

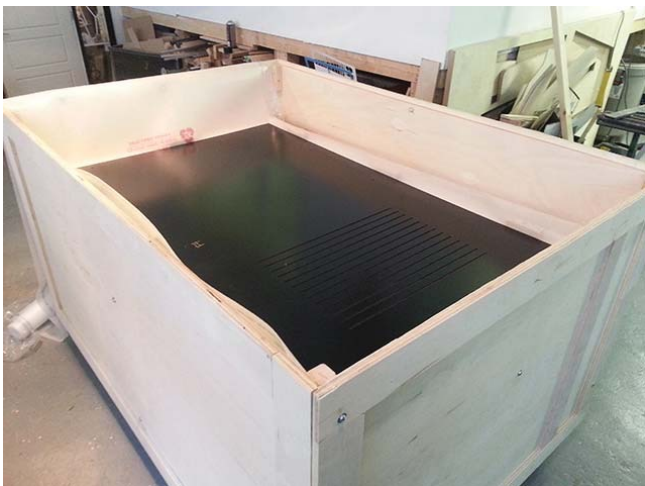
16. Plug computer, sound card and sound system. Test the sound and the software. Left/Right channels are on each long side of the installation.



18. Remove the middle panel of the crate and then the side panels of the crate.



17. In the middle section of the crate, are the finish panels. Remove the finish panels and put them in a safe place.



19. Remove the cross that separate the four LED modules.

**Repeat : never ever** touch the acrylic panels with hands



20. You now need to lift the LED modules from the crate and install them on the structure. **HINT** : You should turn the LED modules to give a little angle to help to get enough space for lifting. They are identified (A1, A2, B1, B2) so you can find the place they fit on the structure.



**21.** Use the two stainless steel tubes to get a good grip under the LED modules. You need to be at least two persons to lift a module. **HINT** : There are channels under the LED module, so you only have to slide the tube into them.



**22.** Grip hardily the stainless steel tubes and lift the module while keeping it parallel to the ground.



**23.** Bring each module to there identified place. Make sure that the LED modules sit perfectly on the structure.

**HINT** : place the middle modules first, this minimize the chances to touch it with your hands.



**24.** There are channels on the structure that fit with the ones under the LED module to ease the use of the stainless steel tubes.



**25. Plug the electronics.** Take a look under the LED Modules, every module have a plate with electronics. On the plate there are :

- 1 DMX IN connector
- 1 DMX OUT connector
- 1 Wire with a connector for the power supply

**26.** Plug each power connector to the appropriate power supply installed on the middle legs. Red connector with red connector, black connector with black connector.

**27.** Use the DMX/XRL wires to plug the modules in series.

Module A1 :

DMX IN plug to a computer,  
DMX OUT plug to DMX IN from module A2.

Module A2 :

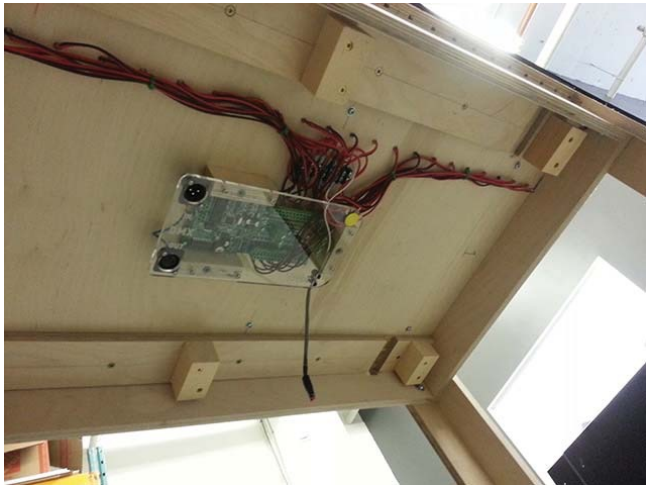
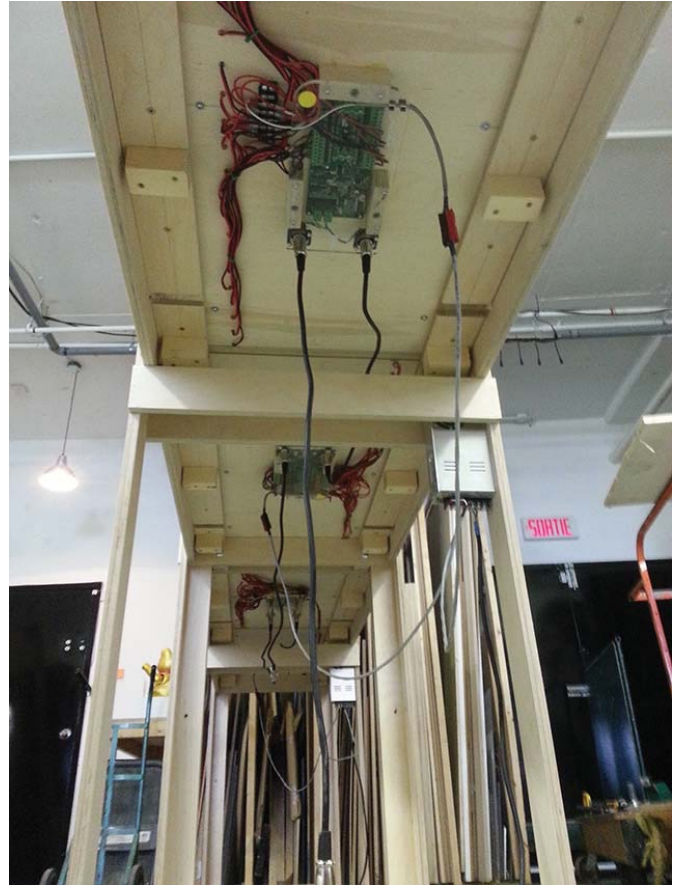
DMX IN (A2) plug to DMX OUT (A1)  
DMX OUT (A2) plug to DMX IN (B1)

Module B1 :

DMX IN (B1) plug to DMX OUT (A2),  
DMX OUT (B1) plug to DMX IN (B2)

Module B2 :

DMX IN (B2) plug to DMX OUT (B1)  
DMX OUT (B2) is unused



**28. >>> TEST DMX <<<**

**29.** Install side panels on one module.

**HINT :** To ease the installation of the side panels, **start by screwing the middle upper screw, then middle bottom screw, then sides middle screws and then end up with corner's screw.**



**31. >>> TEST SOUND!! <<<**

Test each single sequences. You can adjust the volume on each sequence individually in Ableton Live so volume is consistent. EQ if needed. Make sure volume is comfortable, not too loud to make the kids afraid but loud enough to have an impact.

**32.** Install the last side panel



**30.** Install one side panel on the second module.

**HINT :** Verify if everything is working before you seal the installation with the last side panel.



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**Notes**

- When packing up, please replace stripped out screws by new ones!
- Please contact Nicolas Bernier ([liste@nicolasbernier.com](mailto:liste@nicolasbernier.com)) if you think there is some important details missing in this document.