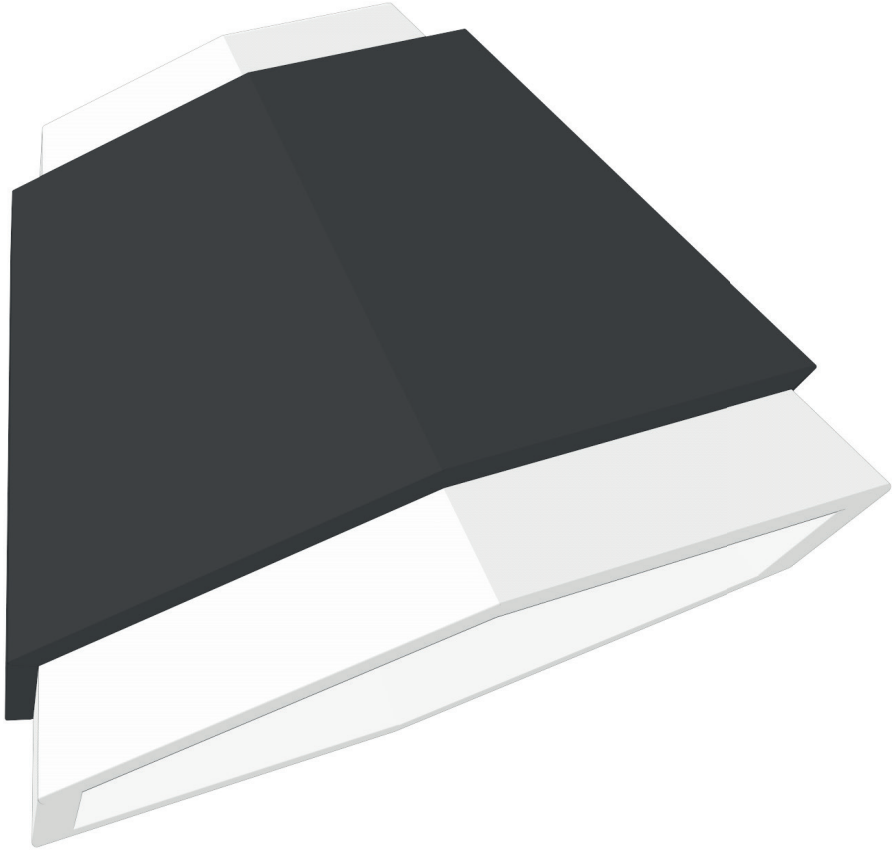
Torben Hove Larsen

"Lacuna" | MA4-ID5 | June 2014



PART 2: PRODUCT PRESENTATION


LACUNA

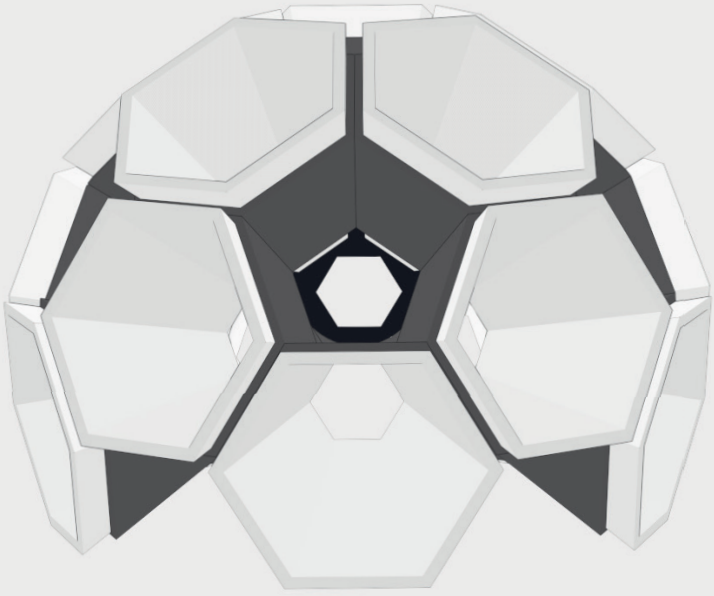
THE PRODUCT REPORT

This report is the second of two parts and presents the result of the process covered in the process report. The two parts are collected in one report and part 1, the process report, can be accessed by flipping it over.

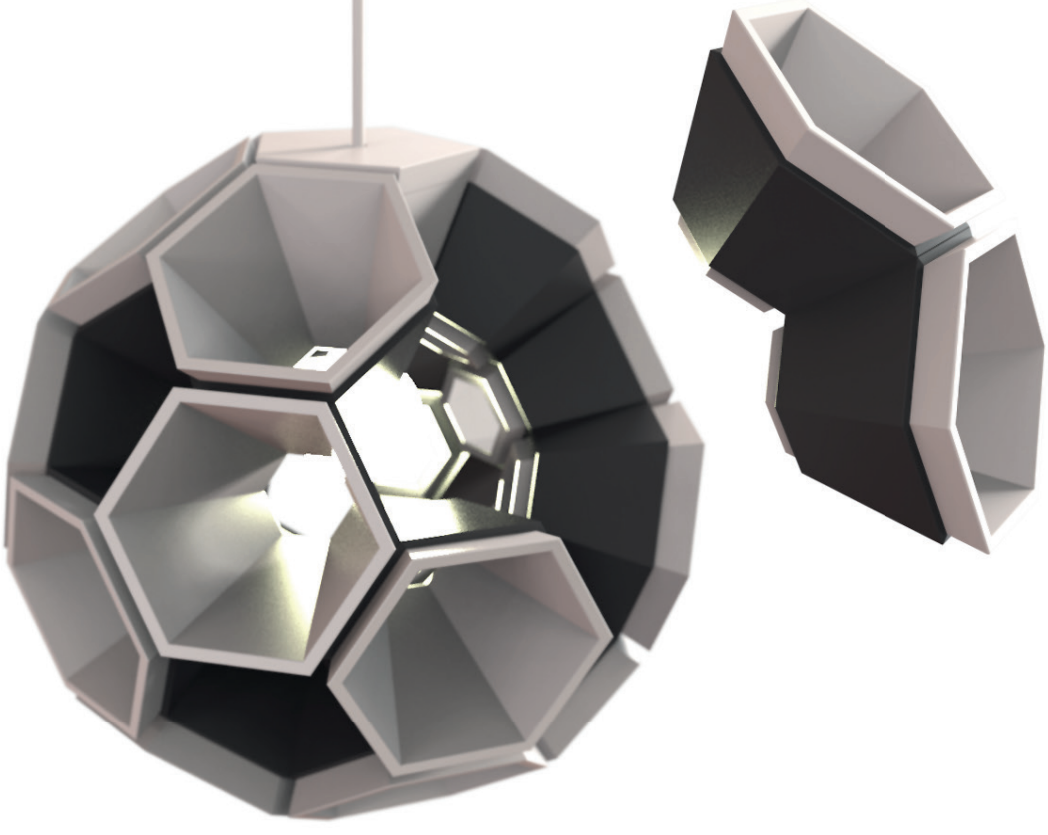
Intro

The presented product is the result of an exploration of the potential in crowdfunding, where selected, related communities of potential users has been used for ongoing research and feedback. This co-creation process has given a product with potential in user made customizations and retail add-ons, inspired by an open source structure.
It is an expandable platform that has the potential to be the centerpiece of any context; party, dinner or even movie night.

The presentation of the product is based on a subsequent use in the online launch of a crowdfunding campaign and is as such directed towards presenting the product for potential backers.



LACUNA



PRODUCT VALUES

Lacuna puts the user in the center both at assembling, expanding and in use. Even in the further development of the system, the user will be the driving force through an integrated co-creation, where any feedback, development ideas and even customized add-on creations can be shared online.

Customize As Needed
Assemble Modules In Any Number And Color

Endless Add-On Possibilities
Ongoing Development Through Co-Creation

Light Up Creations
Attach Your 3D Printed Scultures

Tangible Modules
A Size And Feel You Want To Touch

Create Contextual Effects
Add Custom Filters To Fit Any Mood

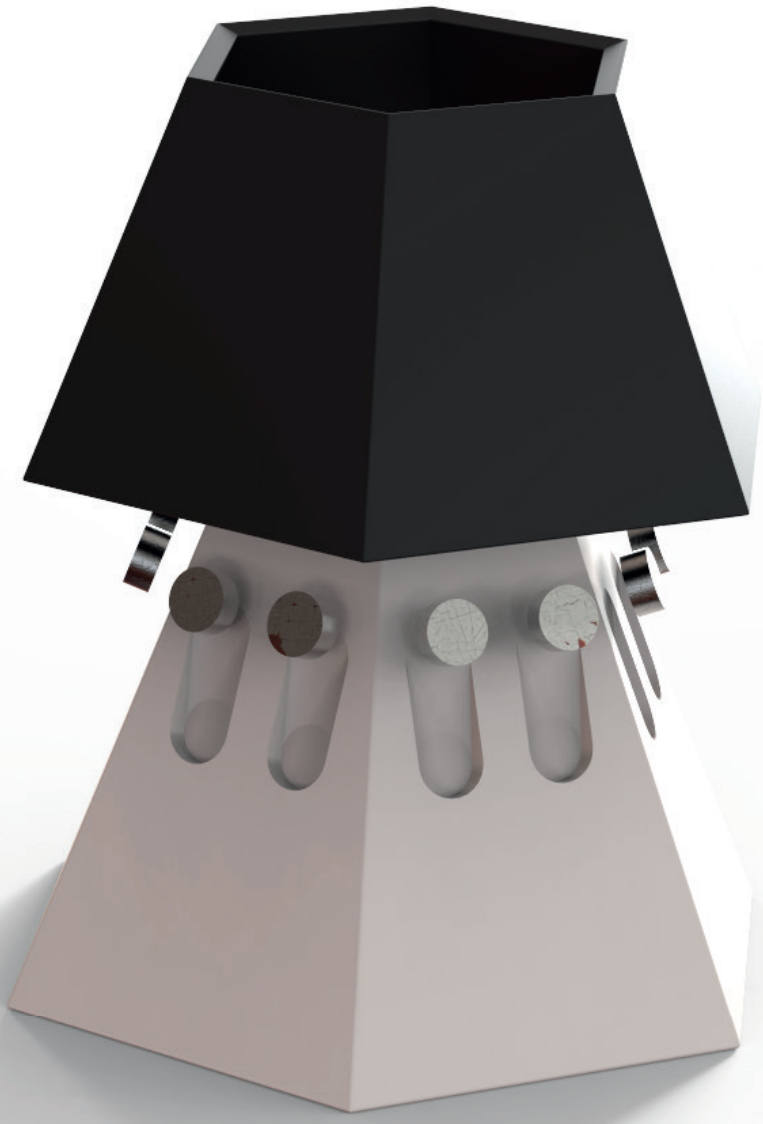
Magic Of Magnets
Easy Assembly Through Magnetic Fit

Module Composition

Exterior Part

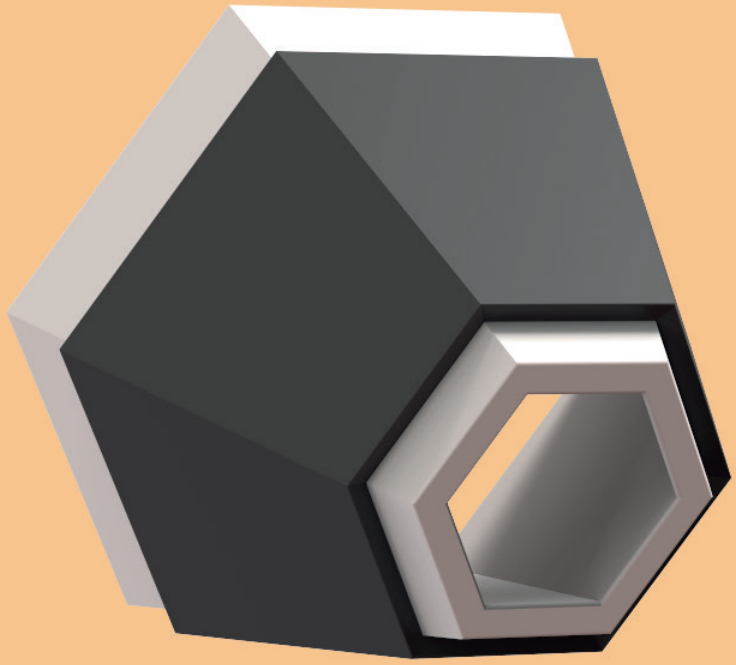
12 Magnets (2x6)

Interior Part



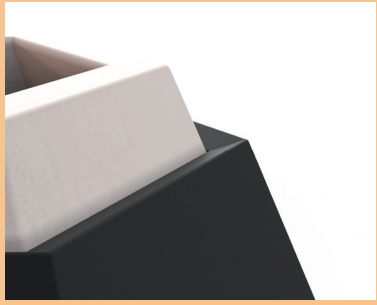
TANGIBLE MODULES

The individual modules have been developed with an ease and joy in use, in mind. Inspired by popular construction toys, they fit right in the palm of your hand and can be assembled with easy, through an innovative magnetic snap fit connection.



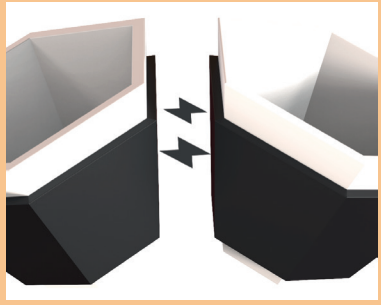
Optimized Tangibility

With inspiration from references in both human factors and popular toys, tangibility is optimized for a perfect connection between hand and Lacuna module.



Bead Blased Polycarbonate

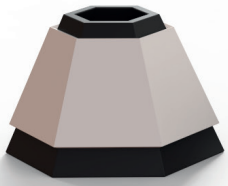
Polycarbonate is widely used in high grade sports equipment due to its high impact resistance. Combined with a light bead blasting, it gives a perfect, smooth surface.



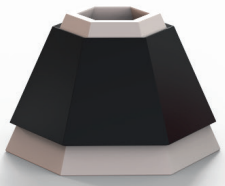
Magic?

Hidden magnets makes the individual modules connect almost like magic. With a force of 4N, they are optimized for connecting tightly while disassembled with ease.

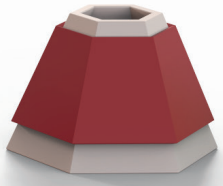
Available Colors



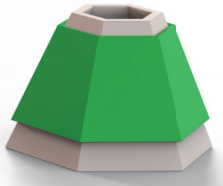
Limited Edition
Inverted Module
Ral 9010



Standard Module
Ral 9011



Red Edition
Ral 3000

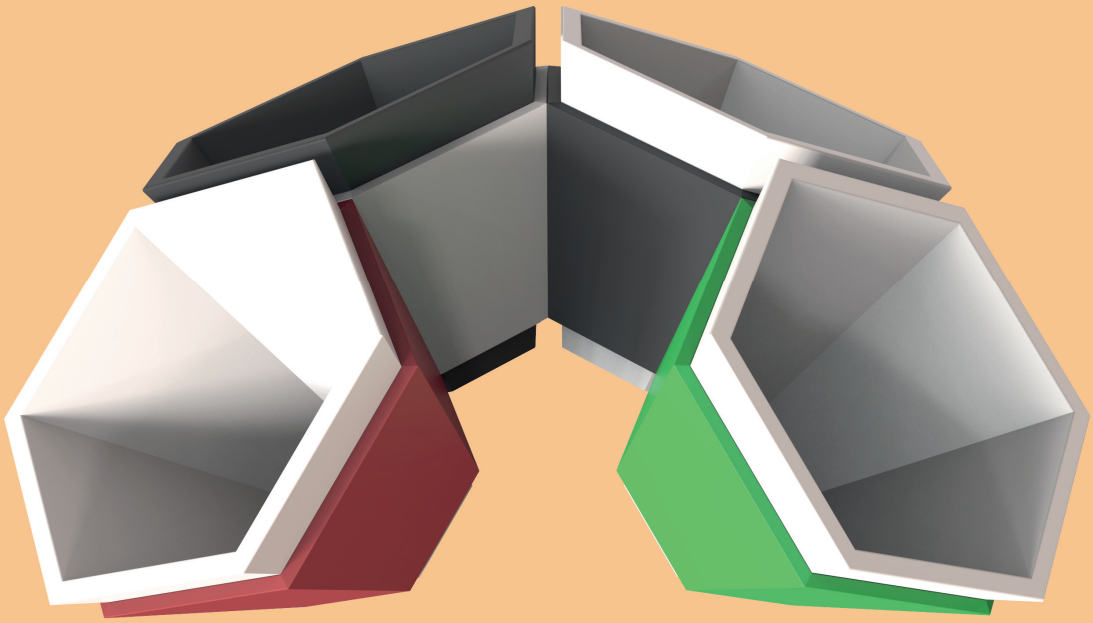


Green Module
Ral 6018

CUSTOMIZABLE ASSEMBLY

Adapt the assembled lamp to your individual style through a selection of modules in various colors.

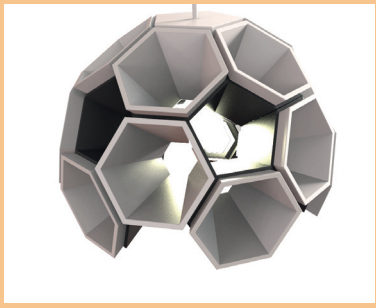
If a full sphere doesn't fit the context, simplify the assembly to eg. a set of 5 upward pointing modules.



Part or Full build?

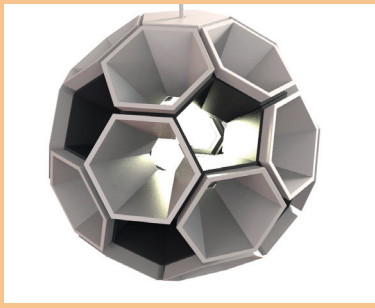
5 Modules

With 5 modules the bulb can be left visible from below, but with a ring of modules, in which add-ons or light filters can be placed.



15 Modules

With 15 modules a classic semi-spherical shape can be constructed. This makes it possible to add effects to the context through filters, but still have an unfiltered light below the lamp.



20 Modules

With inspiration from references in both human factors and popular toys, tangibility is optimized for a perfect connection between hand and Lacuna module.

CONSTRUCT THE CONTEXT

The open structure of Lacuna makes the process of making it a complete structure a process involving the users own creative input. In each module a hexagonal part of acrylic, cardboard or even metal can be placed. The nature of this determines Lacunas impact on the context. It can be an even, diffuse light through semi-transparent parts or project the pattern of a cut-out.

Setting The Mood

Lacuna can be used to set the mood for any context. A semi-transparent, red part could set a sensual atmosphere, while a cut out of a Batman logo could create an environment for hosting a movie night.

LIGHT UP CREATIONS

The growing market of 3D printing, opens up for a concept of adding 3 dimensional structure to Lacuna. It could even be used to just print parts to attach and showcase existing figures.

3D Prints

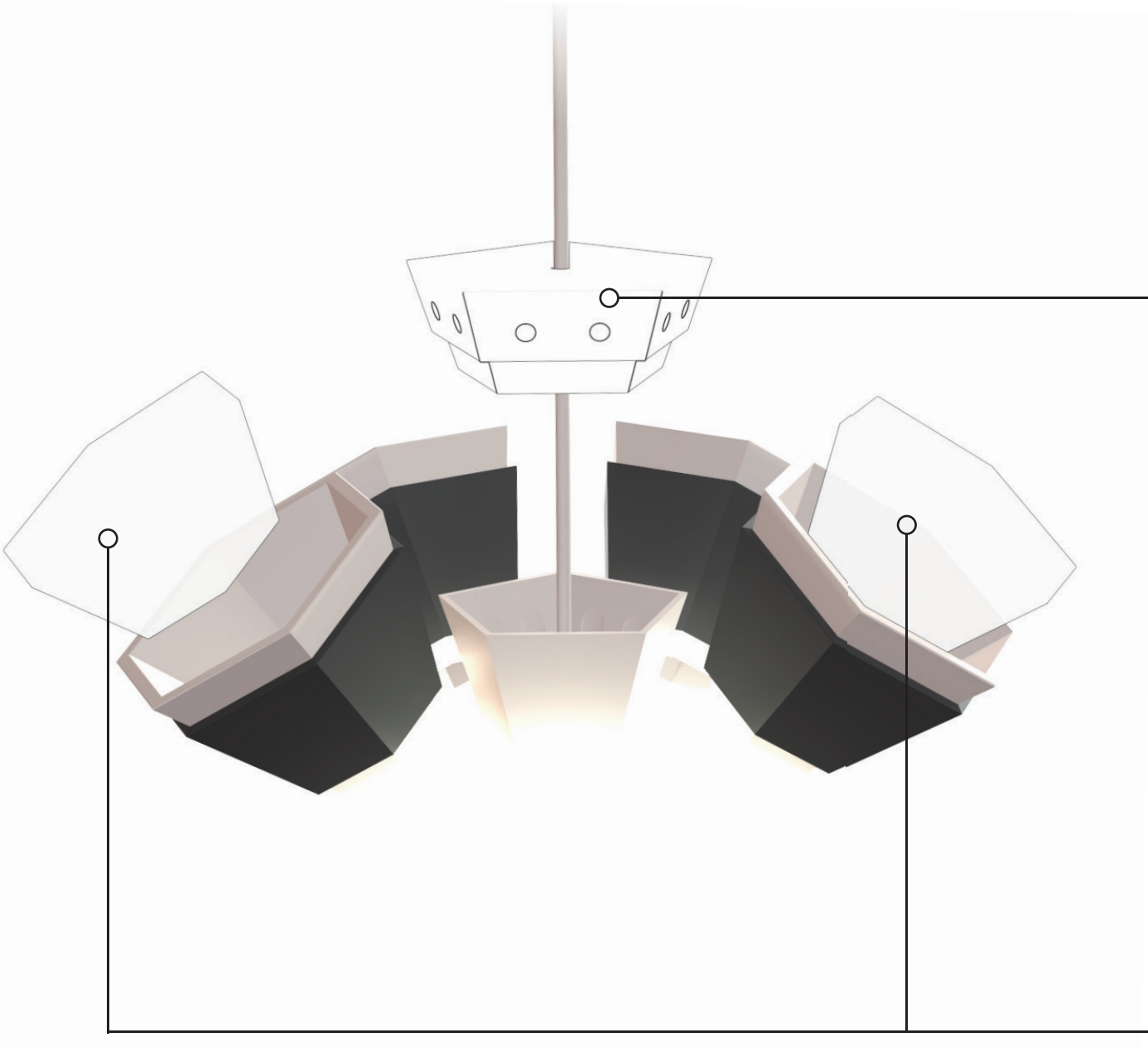
Attaching 3D printed constructions expands the customization of Lacuna to more than manipulating the environment. The entire composition could be enclosed in personal, home made prints.

Figures

By printing a clip that fits in the hexagonal modules, existing figures could be held in place. This could be used for showcasing collectibles or even for adding christmas decorations to Lacuna.

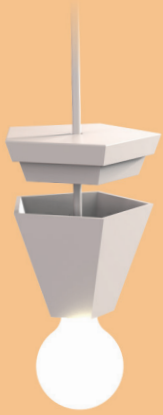
Connectivity

The integrated magnets in each modules could be used for holding 3D prints or 2D cut-outs in place through adding small metal balls or similar.



EXPANSION THROUGH ADD-ONS

The initial vision of Lacuna is the use of a modular lamp shade as not only a mood setting lighting, but an entertainment system in product that can be the center piece in any context. The potential in expanding through endless concepts of add-ons is facilitated by the possibility of adding a transformer to the socket module, from which electronic add-ons can be powered.



12V Transformer

The addition of a 12v transformer makes it possible, and easy, to further add any kind of electronic add-on.

Potential In Electronic Add-Ons

Speaker

A speaker add-on could make Lacuna not just the center piece of the visual context, but make it a complete entertainment system for a small party

Spot Light

Add-ons with small spot lights adds the potential of highlighting certain areas or even adding spot lights of different colors.

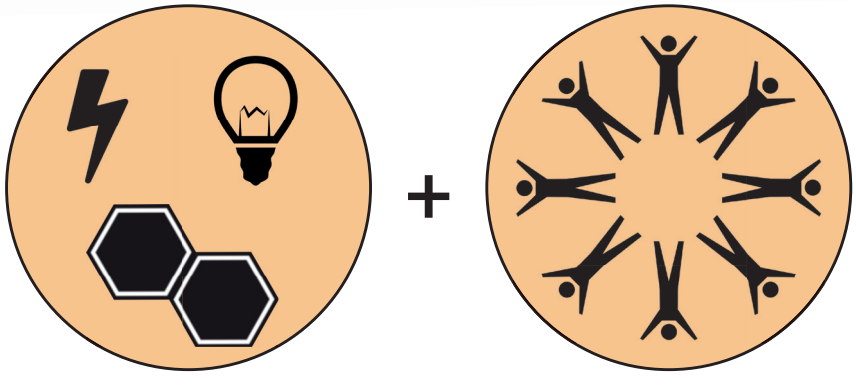
Fans

In the summer heat a small fan adds some airflow and makes it add a little wind to the atmosphere.

Bluetooth

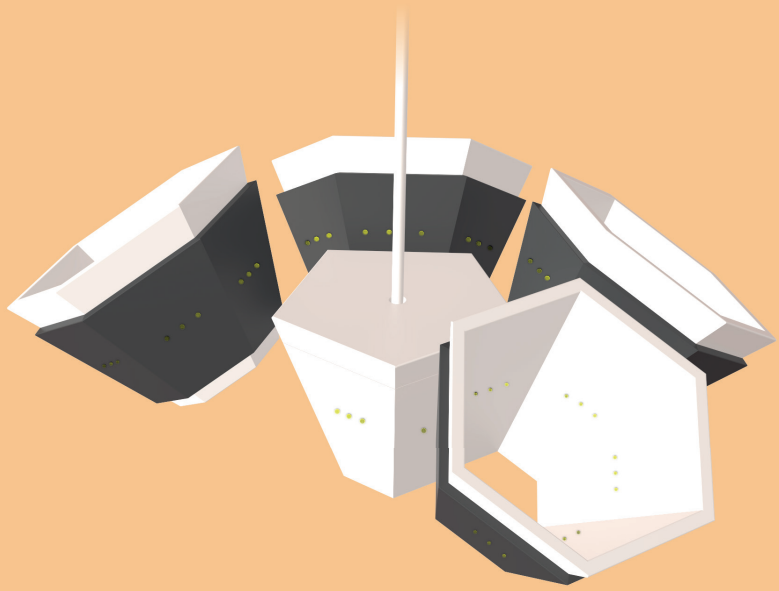
Along with attached speaker modules, a bluetooth receiver or similar technology, will add ease of streaming music.

With the combination of an even more integrated design of Lacuna and an active community, the possibilities are endless.



A PLATFORM FOR THE FUTURE

The future of Lacuna will se an even more integrated use of the modular system. In future iterations the transformer unit will be built in and the socket and the electrical system will be part of the modules' construction. A mock up of a optimized module and speaker add-on is show to the left.



No Need For Wire

The vision for the concept of electronic add-ons is the future integration of circuits and connectors in the individual components. This gives a plug-and-play interaction without the hassle of attaching wires to the center module.

Replace Individual Components

While the current generation of modules won't be able to make use of the integrated connectors, the platform will stay true to the format and current modules will as such be able to be used along with future iterations.

Co-Creation

The concept of co-creation has been part of Lacuna throughout the initial development. This will remain an important part of the product and users will be able to share 3D models, ideas for further development and lay outs for user made add-ons.

PACKAGE CONTENT

The modularity of Lacuna makes the potential in having different package sizes ideal. The potential of bundle rewards through IndieGoGo might break the line up up, so the smallest package will be a single module.

Module Kit

The module kit consists solely of Lacuna modules, with no socket module included. This makes it perfect for anyone who already owns the Base Kit and want to expand through either more modules or modules in different colors.

Base Kit

The Base Kit includes 5 Lacuna modules and further a socket with attached wire. It is an intro package that can present the product's qualities to new users.
The portfolio will be expanded to include Medium Kit and Premium Kit of respectively 15 and 20 Lacuna modules.

ESTIMATED PRICE

Prices are based on production of a prototype batch. Further material optimization and might lower prices prior to launch of crowdfunding campaign. In addition to these items, prices will include packaging, assembly and handling.

Module Kit: 115 euro

Price of a Module Kit includes:

Tooling & Setup Charge of:
Interior Part
Exterior Part

Injection Molding of:
Interior Part
Exterior Part

Neodymium (NdFeB) Magnets:
5x12 magnets (13.500 gauss)

Base Kit: 150 euro

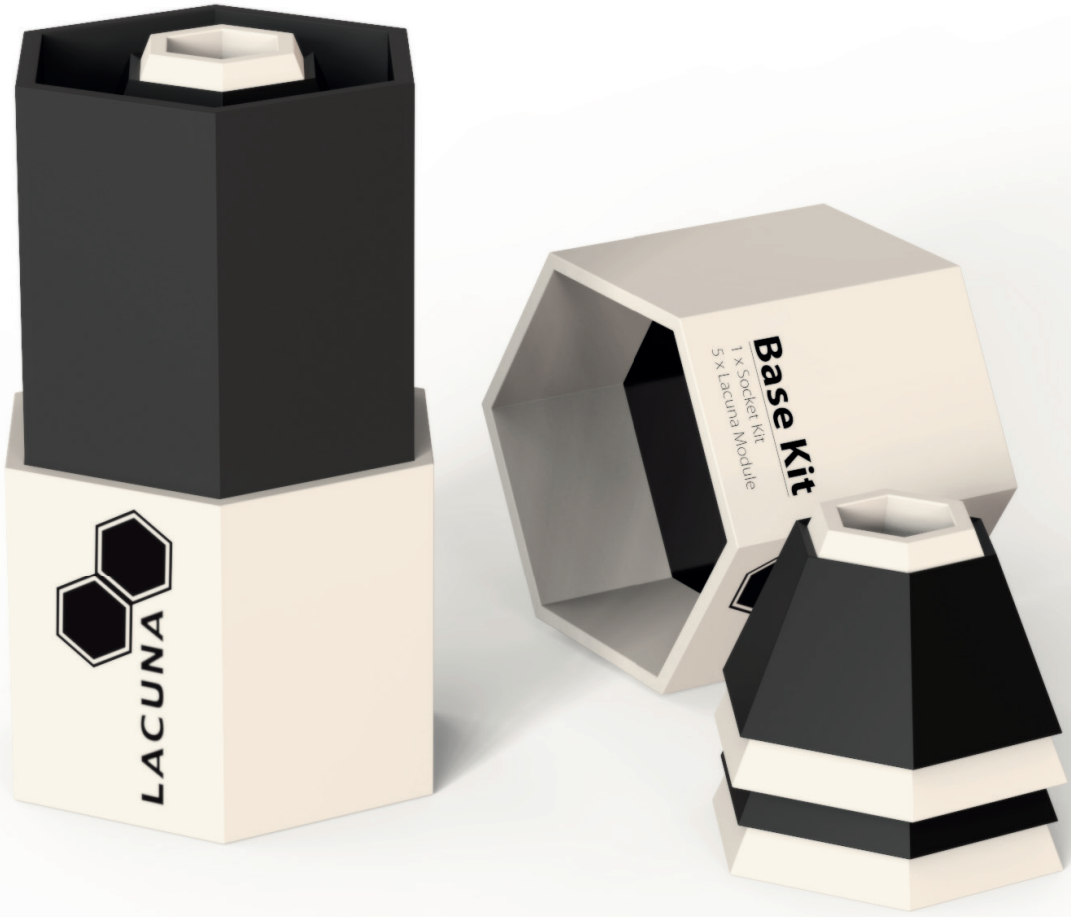
Price of a Base Kit includes:

Tooling & Setup Charge of:
Interior Part
Exterior Part
Socket Top Part
Socket Main Part

Injection Molding of:
Interior Part
Exterior Part
Socket Top Part
Socket Main Part

Neodymium (NdFeB) Magnets:
5x12+10 magnets (13.500 gauss)

Wired E14 Socket



A SPHERICAL LAMP

...AND MUCH MORE