DFL\_PRESS\_DIYR

# DIYR - Do It Yourself Revolution

by Design Friction Lab

Let your mind take you to your bedside table lamp and think: Where did you buy it? With whom were you? Do you know where it was made? By whom? How much did you pay for it? How many times did it break? Maybe it never did, but you binned it nonetheless. Can you imagine it having a whole different value to you? Can you imagine even naming it? As we do with things that matter, that last, that are dear. There is no right or wrong answer to any of the above but consider this.

DIYR (pronounced dear) Celebrates the spirit of independence, creativity, and resourcefulness. The acronym DIYR stands for 'Do It Yourself Revolution', promoting reflection and new forms of production, combining simplicity and longevity, ethics and aesthetics. DIYR is an innovative wide spanning and ongoing research projectwhich sets to take design-led research out of academia to society and the market.

DIYR designs growing ecosystems of innovative, playful, guiltless, and highly purposeful social electronics for anyone to build, hack, personalise, share, fix, and forever keep. **DIYR actively empowers countering of planned obsolescence and reducing e-waste.** Enabling one to get active, gain knowledge and skills to repurpose components and make things one need, like, and would keep; while in the process, developing a mindful approach to resources, products, alternative production, and active environmental responsibility.



**DIYR** Fan collection

## DOING IS KNOWING

DIYR is founded on acknowledging that personal involvement in the creation of an object fosters a unique connection and endows the product with greater emotional significance, integrating feelings with practicality and design. DIYR is based on acknowledging that self-gained understanding of an object's build promotes a stronger relation and emotional value to it, combining emotions with function and purpose. The knowledge and skills of our doers are expanded in multiple directions, from electronics and production technologies to design, making and repairing. By enabling the production of consciously built things whose emotional value surpasses their economic worth, DIYR encourages the realisation of self-made objects that are easy to assemble, practical to use and stimulate constant reinvention.

<u>DIYR.dev</u> website (designed by <u>studio MUT</u>, <u>@studiomut</u>) makes available the necessary <u>instructions</u> for anyone to turn into a doer and produser (producer/user) of useful and beautiful objects, through the step-by-step easy to follow instructions for the complete ecosystem.

The extensive instructions empowers learning by doing and supporting passive 'users' to become proactive 'proDusers'. It allows to seamlessly navigate the sourcing of components and their transformation from abstract 'parts' or components into personalised objects that could become dear to you like no other object does.

As DIY production offers infinite possibilities but at the same time, we all appreciate having a selection of well-defined choices. The DIYR team curated a collection of standout DIYR versions and variations that are ready to be used as they are, enhancing the aesthetic and utility of any home or workplace, and serving as a source of inspiration for further variations and creative explorations.

DIYR strives to collaborate with with Fab Labs, offering a unique collection of possibilities for individual fablab projects, 'recipes' designed to deepen engagement with their current users while also attracting new audiences. Serving as a nexus for innovation, DIYR merges the realms of Design, Making, Do-It-Yourself culture, and sustainability, integrating them with distributed production models and urban micro-factories.

Related scientific papers:

DIYR.DEV Collections Prod	oducts <u>Instructions</u> About Instructions		
	LILE ST	$\mathbb{X}$	
ADV-BAT	ADV-PNT	CRK-S	CRK-L
NONE	NONE	THINGS	THINGS
ALL BATTERY POWERED PRODUCTS	WORKS WITH EVERYTHING	WHR	HA
LGT-BTN-S	LGT-BTN-M	LGT-STK-S	LGT-STK-M
LIGHTS	LIGHTS	LIGHTS	LIGHTS
STR-CLG-S. STR-CLG-H. STR-CLG-L. STR- HNG-S. STR-HNG-L. STR-POL-S. STR-POL-L. STR-POL-XL. STR-WAL-S. STR-WAL-L	STR-CLG-S, STR-CLG-H, STR-CLG-L, STR- HNG-S, STR-HNG-L, STR-POL-S, STR-POL-L, STR-POL-XL, STR-WAL-S, STR-WAL-L	STR-CLG-S. STR-CLG-M. STR-CLG-L. STR- HNG-S. STR-HNG-L. STR-POL-S. STR-POL-L. STR-POL-XL. STR-WAL-S. STR-WAL-L	STR-CLG-S. STR-CLG-H. STR-CLG-L. STR- HNG-S. STR-HNG-L. STR-POL-S. STR-POL-L. STR-POL-XL. STR-WAL-S. STR-WAL-L

 DIYR - DIY-Redefined, exploring the innovative potential of designing DIY electronics Cohen N, Alt P, Ugur Yavuz S (2021). Proceedings of the Fab 16 Research Papers Stream

DIYR Instructions: https://diyr.dev/instructions/list



### BACKGROUND

In times of multiple crisis, embracing alternative and sustainable solutions for materials, products, and manufacturing systems becomes increasingly crucial and urgent. Constant development in technology together with the ever-growing consumer demand for the new, encourage an exponential growth in the production of electronic goods which consequently leads to a wide and multi-levelled scope of problems and catastrophes. While incremental growth follows unsustainable production patterns, the democratization of technology gives rise to contrasting paradigms and ways of production that could shift the power back to the consumer.

Starting from the principles of transparency and openness, the DIYR project aims at a more sustainable product world, environmentally conscious production, and consequently raises the value and care (DIYR: dear) for things. DIYR seeks to reach beyond the scopes of nowadays consumption and production and contributes to a constant raise of awareness about electronic products that are not anymore "black boxes" but open and transparent systems.

DIYR explores the potential of creating new product typologies through combining electronics with agile proDusers, while cutting off the complete industrial chain in between. For the layperson, DIYR wants to become an initiator, a point of entry to develop ambitions and motivation to do things by oneself and move from being a passive user to an active proDusers reflecting her / his own relation to technology. For makers and DIY'ers, DIYR wants to become a point of entry into the realm of design, into a more aware, circular, environmental, and complete world of better products and production. DIYR aspires to influence the industry and market by showcasing alternative production methods that emphasize environmental responsibility, useability and care. It encourages a shift in perspective, where consumers, as proDusers, are deeply involved in the product lifecycle, promoting heightened awareness through active participation in the creation and use of products.

DIYR echo Enzo Mari's words and invites us "to reflect critically on the objects that fill our daily existence". DIYR instigates a valuable knowledge-transfer and delivers important educative values for a more conscious, responsible, and proactive attitude towards our material world and the environment.

DIYR is Prof. Nitzan Cohen's vision of fostering the development of resilient futures through empowerment and doit-yourself practices. Pursuing this vision is done in a collaborative manner at the Design Friction Lab of the Free University of Bozen-Bolzano at the north of Italy.



DIYR Family - Album photo

## DIYR - COLLECTION & MAKING

The growing DIYR collection currently features various lighting fixtures, fans, blue-tooth speakers, hangers and racks with quirky aesthetics, high functionality and endless ways to make them yours and speak of yourself. Particular emphasis is given to using the simplest materials and processes and the repurposing of valuable resources, as such, special instructions enable the repurposing of used rechargeable batteries ('Battery Second Life').

The complete DIYR collection is made for anyone to be able to produce, it is divided into four levels from 'Very Little Skills' to 'Quiet some Skills'. All instructions indicate the estimated direct components costs and indicated the estimated average making time. All instructions are subjected to the creative commons licensing.

The self-production is based on simple home tools, as well as a filament based 3d printer and basic electrician tools. Acknowledging not everyone has all those at hand, any fablab around would be surely delighted to give a hand with those and win a new member. The materials required are resourced from any typical DIY store as well as per post for the eclectic components.

The DIYR collection is a constantly growing ecosystem which for the moment comprises of:

A comprehensive lighting ecosystem – An ingenious system of endless possibilities and utmost flexibility. Featuring exchangeable lamps and light heads which fit a wide scope of table, floor, wall and ceiling mounts. Making clever use of magnets and magnetic heads, almost all lights and fixtures are interchangeable and highly flexible at any moment. Adapting itself to how we live and could use our lights, rather than the usual opposite. At DIYR we always look for the easiest and most intuitive way to construct and to use. all lights are compatible with others, opening up infinite possibilities where all is versatile and interchangeable. Simply put - all fits all. With battery (only salvaged!) or with cable for very high light intensity, all DIYR lights come with 'touch-less sensors' which switches the light by simply swiping just next to it. Any size, any colour, any version, all available for anyone to do, themselves.

#### → Currently in the collection are Desk Lights, Floor Lights, Wall Lights and Ceiling Lights.









**Fans** – DIYR fans challenges what you think of fans, that is, if you ever did. When you think of a fan, you hear a noise. When you localise it, there is most likely a sleepless night or a sweaty afternoon at the office. When you use it, it is most likely summer. When you picture it, it is either black or white. DIYR fans are a far cry from all this. They are absolutely noiseless and reduced to one speed, acknowledging we only need one, pleasant speed blowing just enough air to freshen you, but not blow you away. \*Since the fan blades are constructed from lightweight cardboard, they are harmless and do not require a protective guard.

 $\rightarrow$  Currently in the collection are Fan Large, Fan Medium and Fan Wall.



#### www.diyr.dev / @diyr.dev

**Bluetooth Speakers** – DIYR speakers challenge how you may think speakers look like, how heavy they are or how complex it might be to make them. The DIYR Speakers are innovative Bluetooth loudspeakers based on large surface single membrane and the very simple principle according which if the speaker membrane is big enough the resonating box around is not needed. They are made of simple 4mm corrugated cardboard (the one used for almost any common packaging boxes) which is covered by coloured paper print / print or thin felt. The rest are 3d printed base and blades holder, aluminum tube from the diy store, a simple electric controlled and a motor.

 $\rightarrow$  Currently in the collection are Speaker Large and Speaker Medium (speaker small is still in development and will come out early spring '24).



#### www.diyr.dev / @diyr.dev

**'Things'** – DIYR 'Things' hold a unique spot within the DIYR ecosystem as the non-electrical category; they are objects born out of a simple necessity we identified. Applying the same DIYR logic of optimizing and simplifying these items serve as clever furnishing enhancements and utility aids, crafted to complete and complement one's living or working spaces with practicality and one's own personality. Made of a simple yet intricate 3d printed piece with 5 simple broom sticks, it is difficult to claim one can make a coat hanger simpler. The wall hanger is a full printed wall hook in three sizes (but then, one can customize that as well), It employs an ingenious yet straightforward mounting system that utilizes a 3D-printed screw for easy wall attachment. → Currently in the collection are Coat Racks and Wall Hangers.



#### Video:



1. The DIYR family > <u>Link <</u>



3. DIYR Lights – Just Play! <u>> Link <</u>



5. Innovative lights to do, to... <u>> Link <</u>



7. On with a swipe! > Link <



9. On with a swipe! > Link <



11. Innovative BT speaker: 4mm thick > Link <



2. Innovative desk-lights, as easy as... ≥ Link ≤



4. Above your bed or desk... > Link <



6. Floor Lights, as beautiful and... <u>> Link <</u>



8. DIY but touch.less <u>> Link <</u>



10. Innovative BT speaker: 4mm thin  $\geq$  Link  $\leq$ 



12. A DIY cardboard speaker x high fidelity > Link <



### CREDIT & CONTACT

DIYR Online: https://diyr.dev/ Instagram: @diyr.dev

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DIYR is a project by the Design Friction Lab <u>https://designfrictionlab.com</u> Instagram: <u>@designfrictionlab</u>

