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# TEDx in a BOX

## Final Prototype

# In this meeting we want to:

1. Recap the project so far (insights, early ideas)
2. Share the new TEDx in a Box design
3. Discuss the next steps for you to take it forward

# Insights and Early Ideas

We've been interviewing,  
brainstorming, synthesizing, ideating  
and this is where we are today



We've had **4 interviews**, **9 email** threads,  
and **18 different people** from IDEO join  
our brainstorm

We have identified **6 key insights**  
from talking to the TEDx Organizers

# 1. TEDx organizers need support **explaining the value of TEDx** to the audience, local leaders and speakers

*“People tell me ‘I have a hair salon, how’s this going to help me?’”*

– Kalo, South Africa

*“People don’t see that TEDx can actually make a change in their community”*

– Masarat, London

*“I need videos to show that TEDx is not just rich people stuff”*

– Abhishek, India

## 2. TEDx organizers want to **cater to bigger audiences** with better quality events

*“I want to be able to setup the event in plaza for anyone who wants to come!”*

– Veronica, Equador

*“If you want to do more than four talks you are doomed because the battery will not last.”*

– Veronica, Equador

*“You really can’t do an event with the current box for more than 20-30 people.”*

– Masarat, London

### 3. TEDx organizers desire the ability to **curate their own content**

*“Balancing non-local and local inspiration can be difficult”*

– Kelo, South Africa

*“I had to pause the talk every minute and use two translators to go from English to Hindi, then Hindi to Bangla”*

– Masarat, London

*“Maybe I could self-record translations before the talks”*

– Veronica, Ecuador

## 4. Setting up and running **technology must be simplified**

*“The box was impossible to put back together”*

– Kelo, South Africa

*“We did a dry run at home to test out the whole system before going out”*

– Veronica, Equador

5. TEDx organizers need  
**help planning for the event**  
beyond just setting up the technology

*“People say they are willing to volunteer but they don’t have the right skills”*

– Kelo, South Africa

*“I need a system to check up on and groom volunteers”*

– Masarat, London

## 6. TEDx organizers need **an easy way transport the box** locally and around the world

*“The box was couriered to me from London and I had to pay really high import taxes”*

– Abhishek, India

*“It’s a scary box - it looks like a bomb!”*

– Masarat, London

*“I get worried about carrying this expensive box around here”*

– Kelo, South Africa

# 2 Opportunity Areas

# The Basics

Give TEDx organizers the tools to simply and consistently deliver TEDx

1. Bigger events

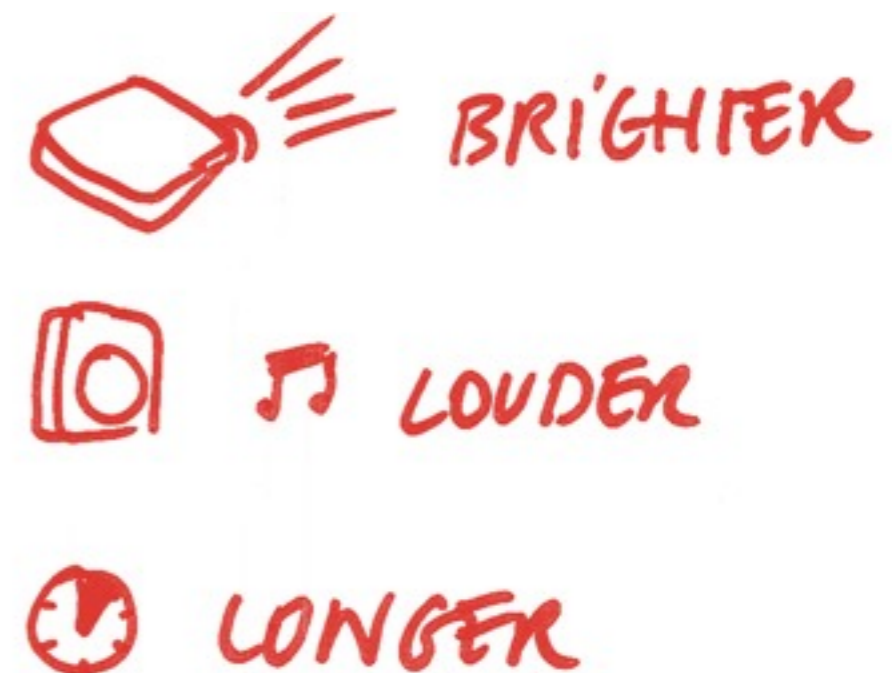
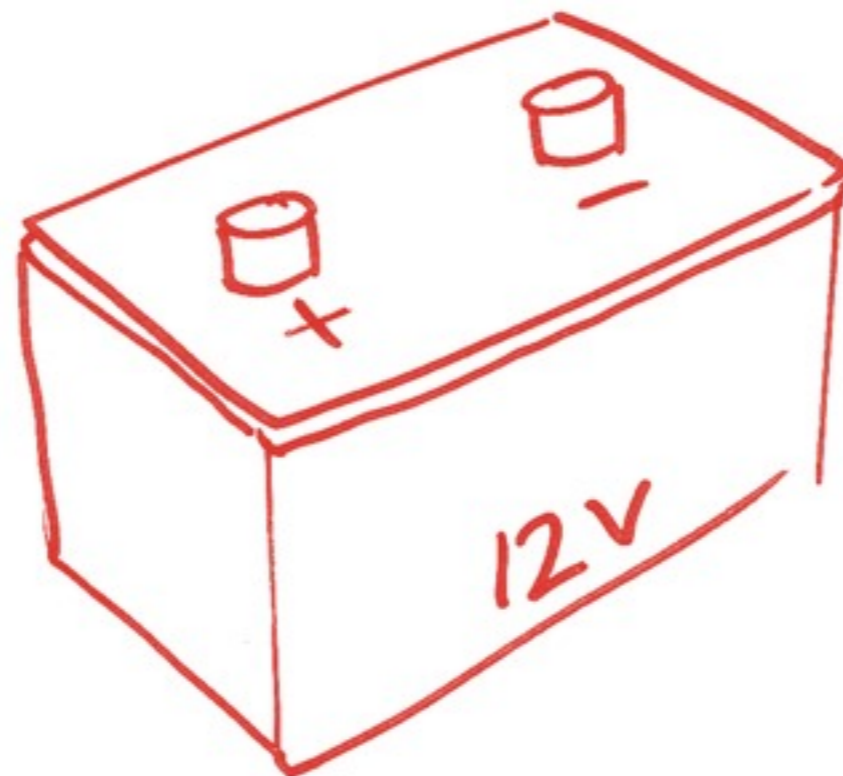
2. Reliable power source

3. Simple set up

4. Easy transport

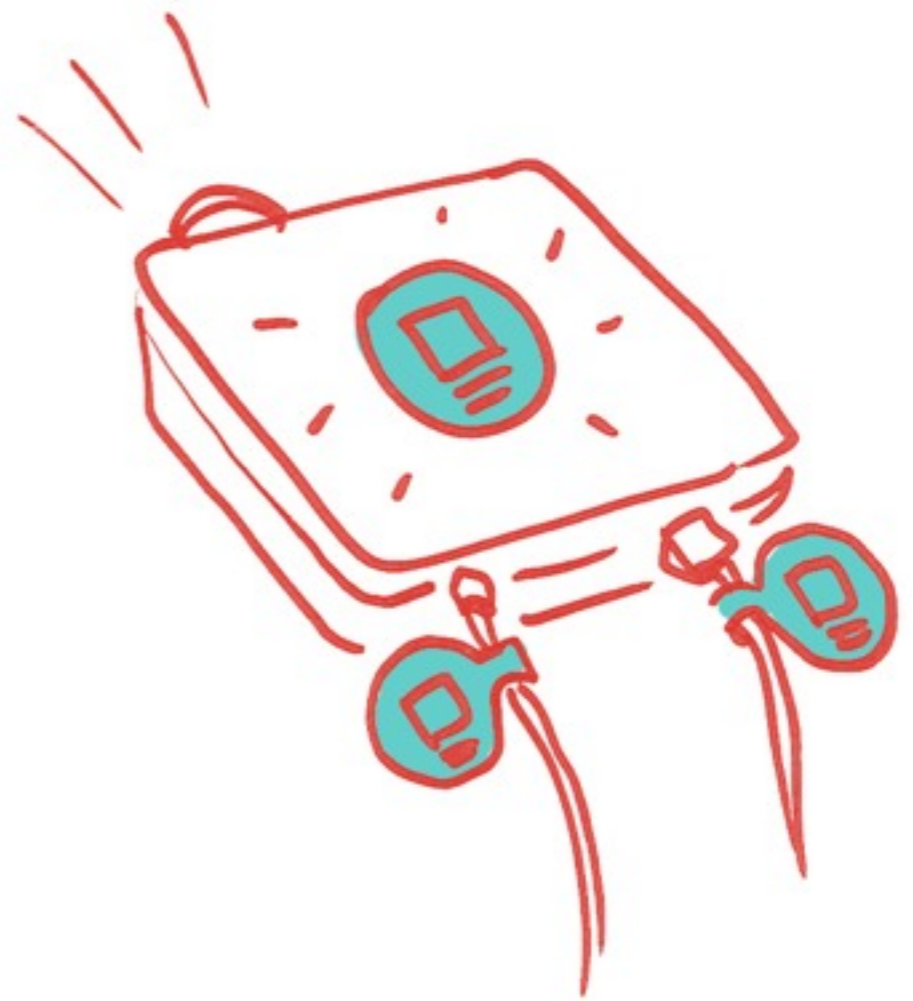
# Universal car battery power

- Enables the use of a powerful projector and speakers
- Universally available and serviceable
- Multiple charging options



# Color coded assembly system

- Makes assembly intuitive
- Crosses language barriers



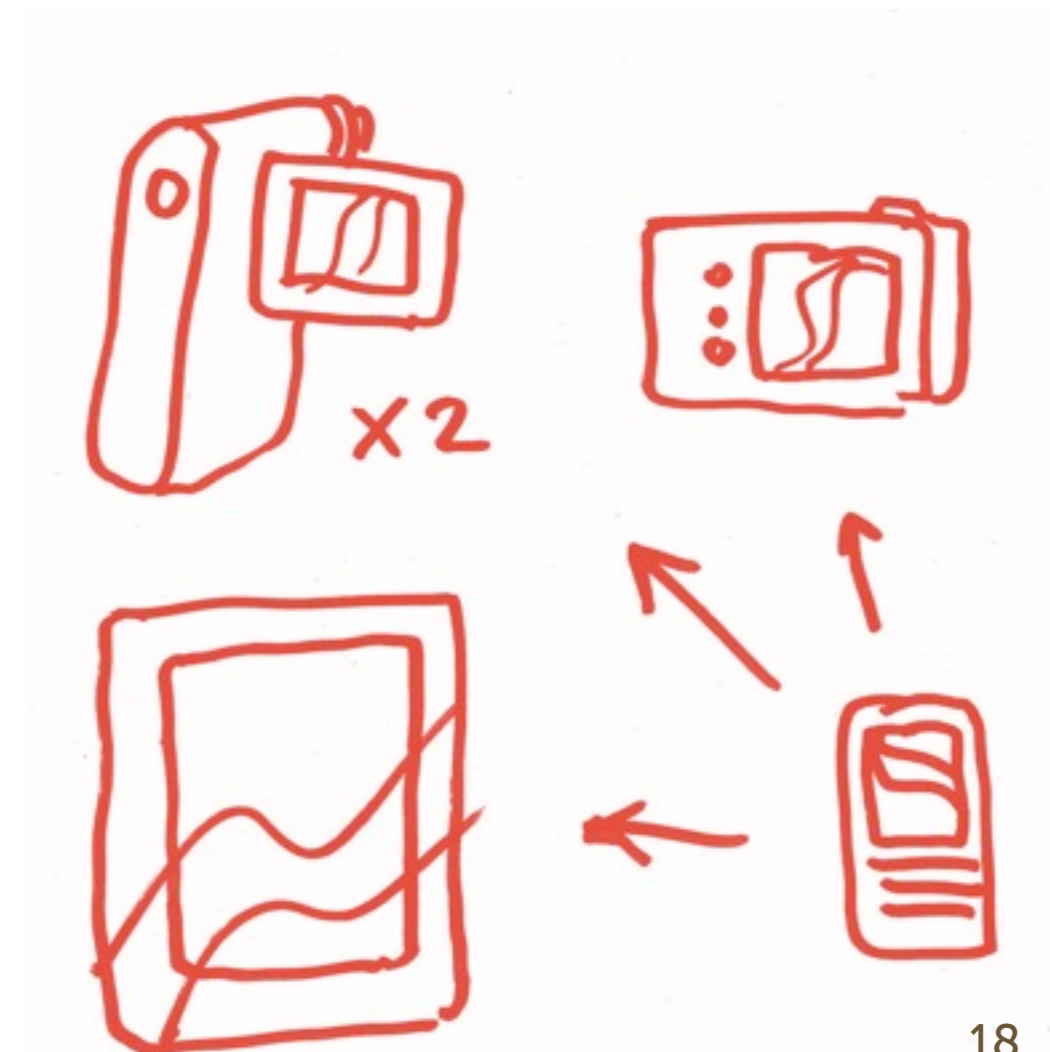
# Quick Start Guide

- Provides step-by-step visual instructions
- References color coding system
- Explains multiple usage options (charging, running)



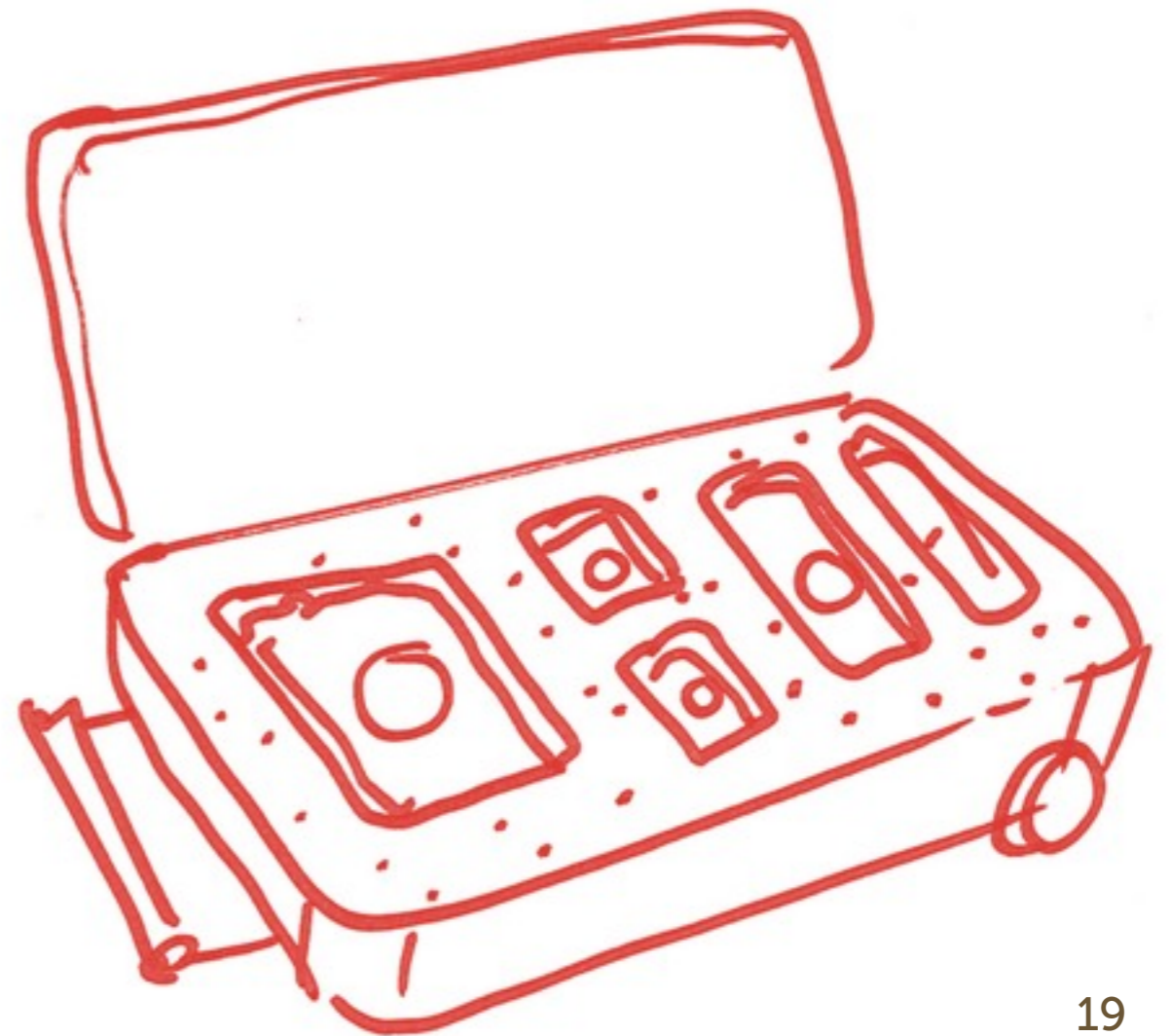
# Individual functions

- Provides simplicity of use
- Enables wider volunteer user
- Creates backups in the system



# Out of the box experience

- Simplifies identifying components
- Makes it easy to repack
- Enables ease of customs inspection
- Enables easy identification of missing components



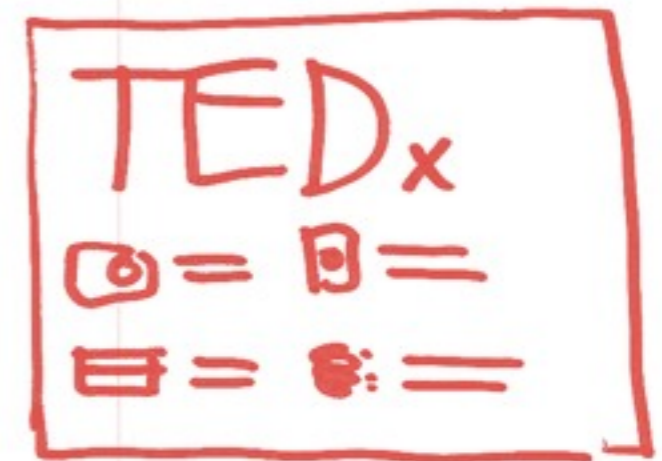
# Hard shell carry-on

- Protects the equipment
- Makes the box more inconspicuous and friendly



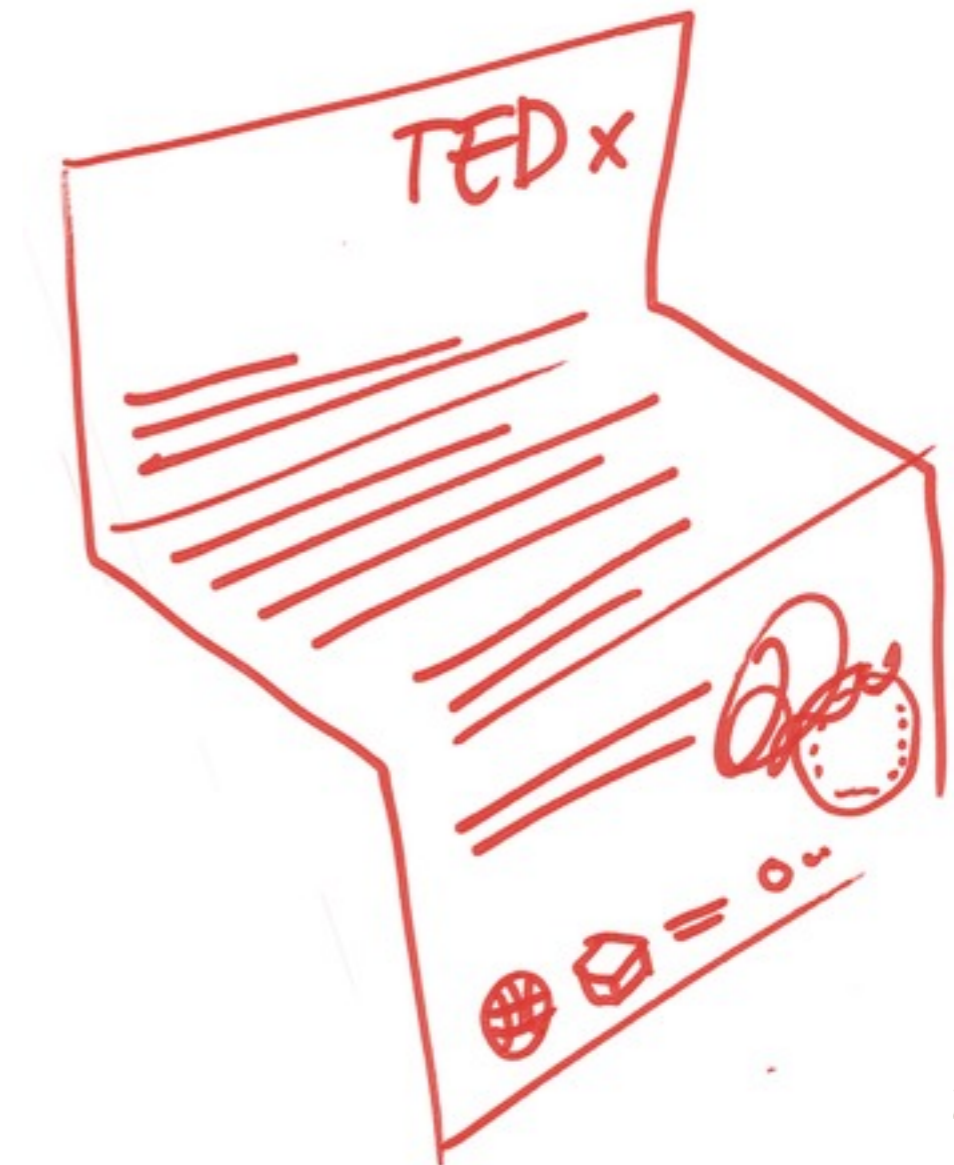
# Contents sticker

- Enables ease of customs inspection
- Enables easy identification of missing components



# Official TEDx letter

- Enables ease of customs inspection
- Provides legitimacy to TEDx organizer



# The Experience

Enable TEDx organizers to make the event locally relevant and engage their community

1. Communicate the value of TEDx
2. Curate their own content
3. Manage the show

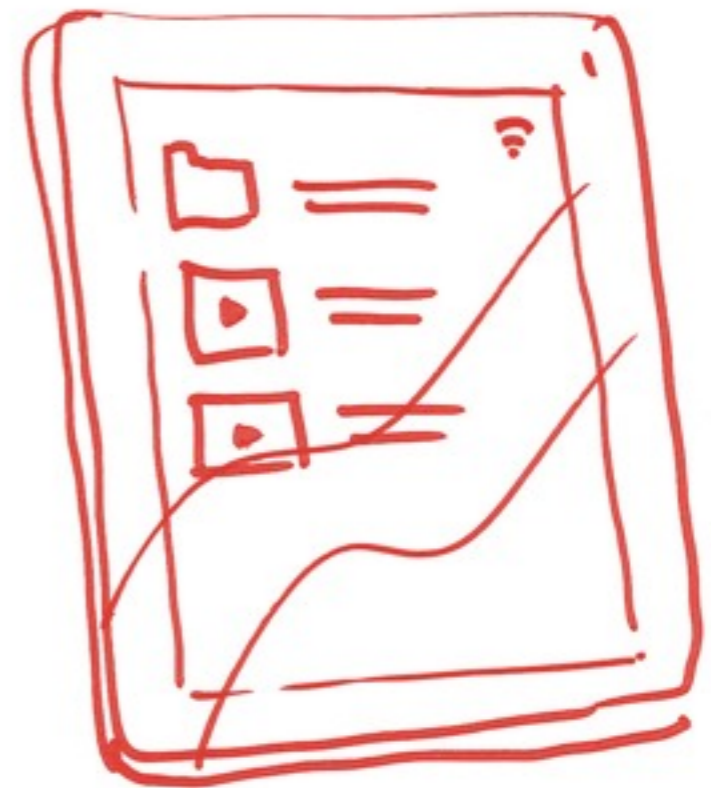
# Simple video introduction

- Helps explain the value of TEDx
- Helps connect the audience to global TEDx efforts
- Shows relevance of TEDx experience to local community



# Content organizer

- Allows organizer to select relevant talks
- Allows organizer to show their own media



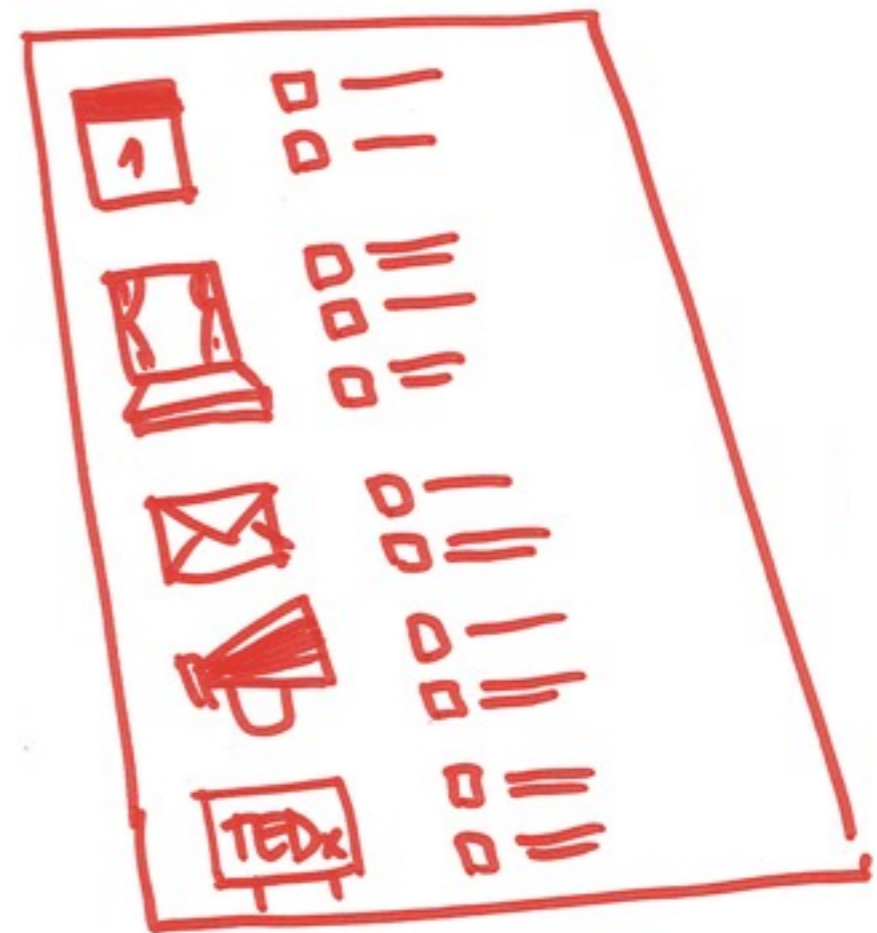
# DIY dubbing tool

- Allows access to illiterate audiences
- Allows organizer to dub their own talks beforehand



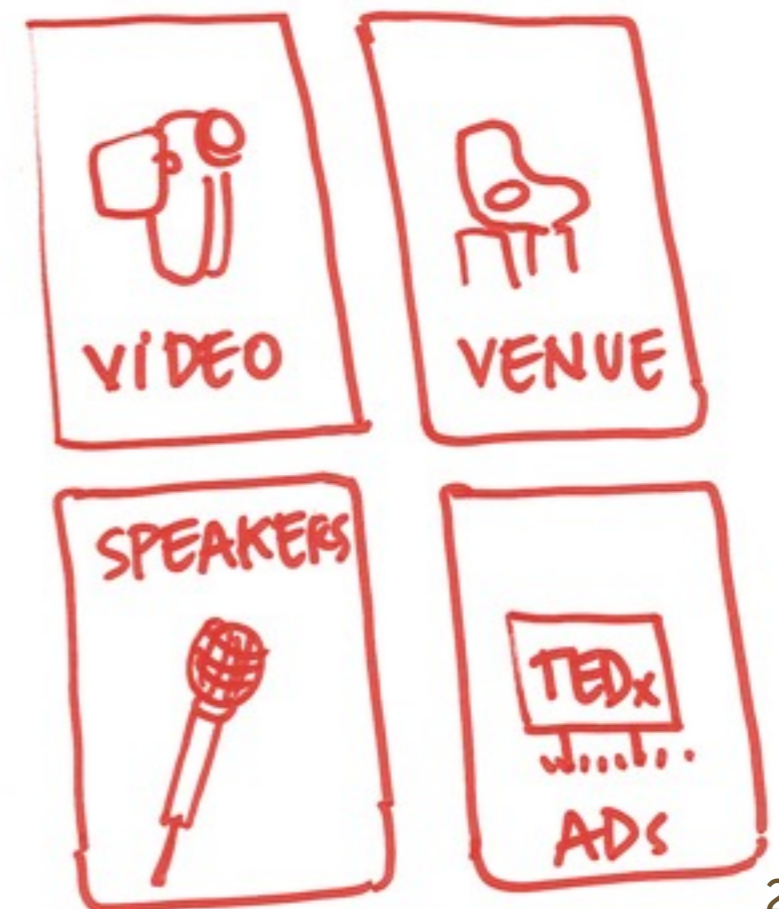
# Organizer check list

- Provides simple guidelines to organize an event
- Helps organizer tackle very different tasks efficiently
- Provides a basic timeline for the event



# Volunteer role cards

- Helps organizers delegate tasks
- Helps volunteers understand their role
- Improves the overall quality of the event



# The Basics

1. Universal car battery power
2. Color coded assembly system
3. Quick Start Guide
4. Individual functions
5. Out of the box experience
6. Hard shell carry-on
7. Contents sticker
8. Official TEDx letter

# The Experience

1. Simple video introduction
2. Content organizer
3. DIY dubbing tool
4. Organizer check list
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# The Experience

1. Simple video introduction
2. Content organizer
3. DIY dubbing tool
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5. Volunteer role cards

# The new TEDx in a Box

Since last the last meeting  
we've been focusing on **the basics**

We've been selecting the right technology,  
creating a simple system to assemble it,  
and making sure it fits in a box.



We've tested **7 different projectors,**  
**2 battery packs, 2 PA systems**  
and researched a lot  
of different components.

The new TEDx box has  
a **brighter projector** that lasts longer,  
**louder speakers** with a microphone,  
and can be **charged** both at **home**  
and from a **car**.

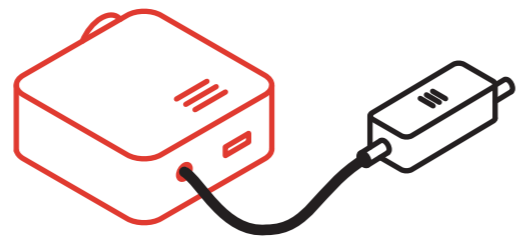
And it all fits in this  
**friendly** carry-on suitcase



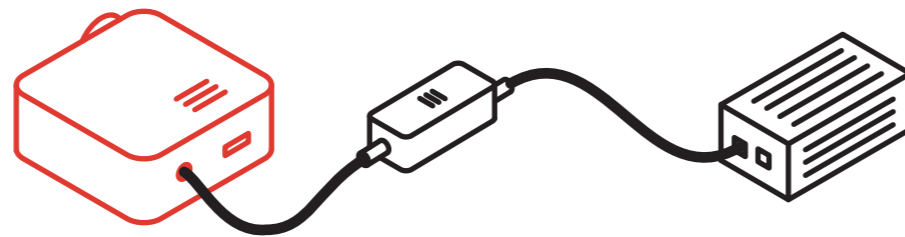
This is how it all works

<http://vimeo.com/30382939>  
(password: kibera)

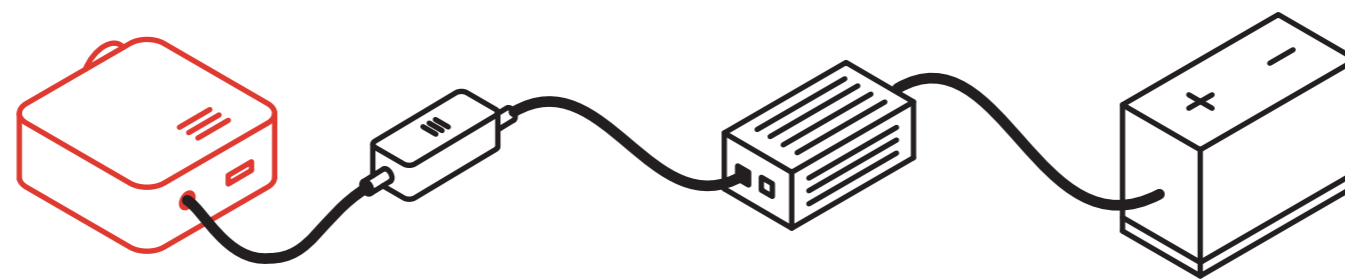
# The system



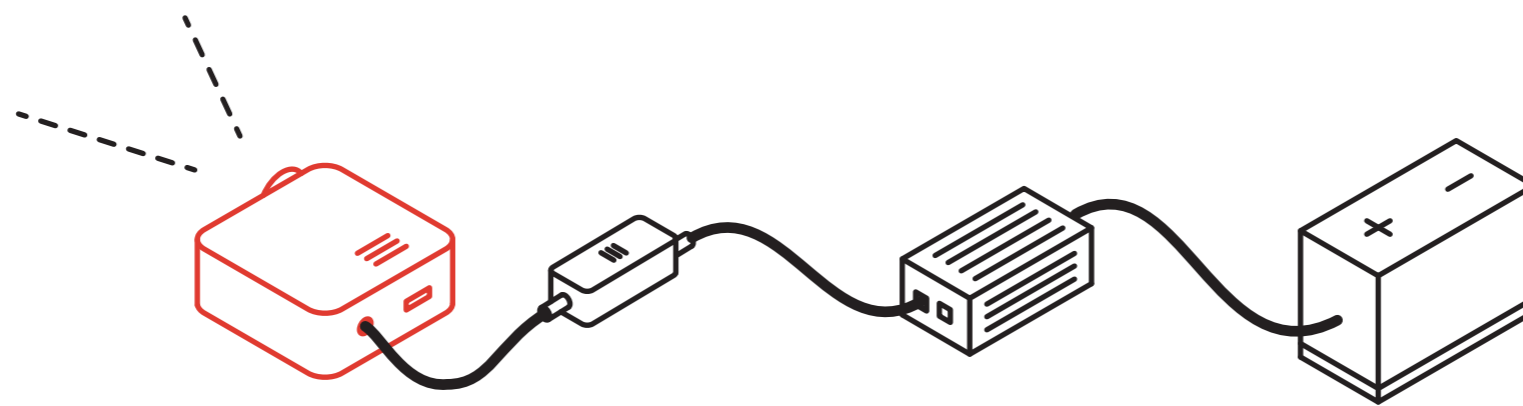
The **projector** is the smallest, brightest we could find,  
with very low power consumption



The **projector** attaches to the **inverter**



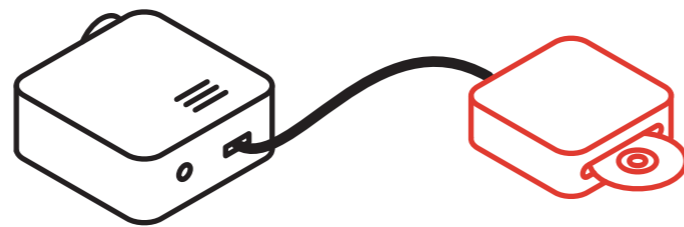
that plugs into the **battery**



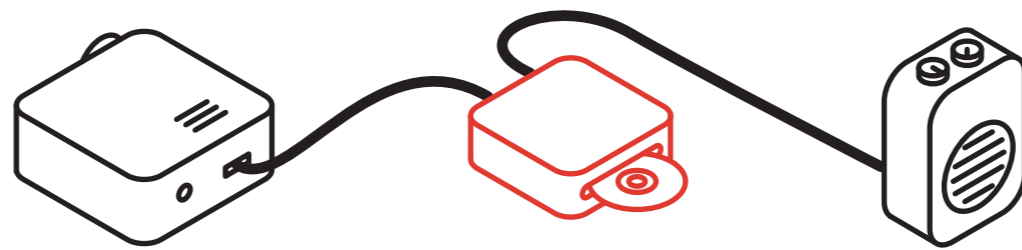
The **organizer** can run a bigger event for at least 2 hours



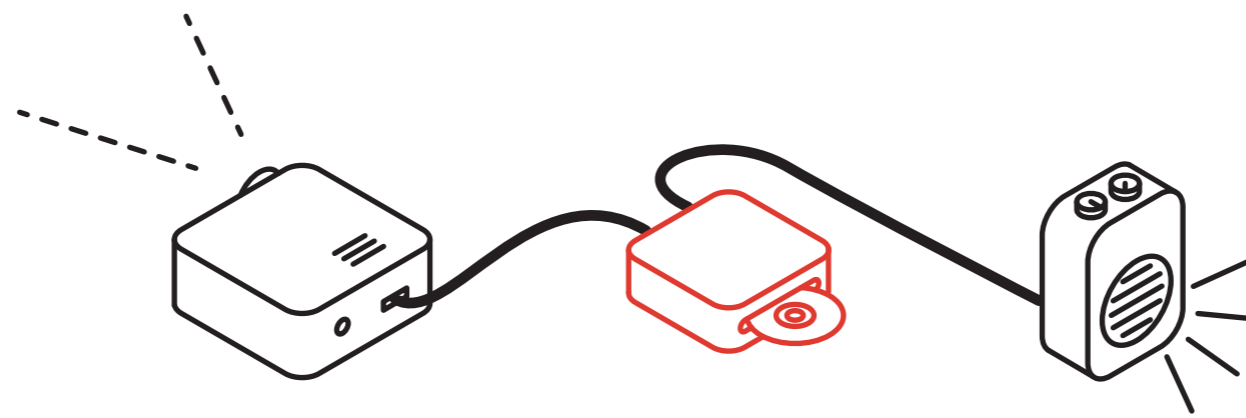
The **DVD player**'s screen enables the organizer to show local leaders videos about the value of TEDx



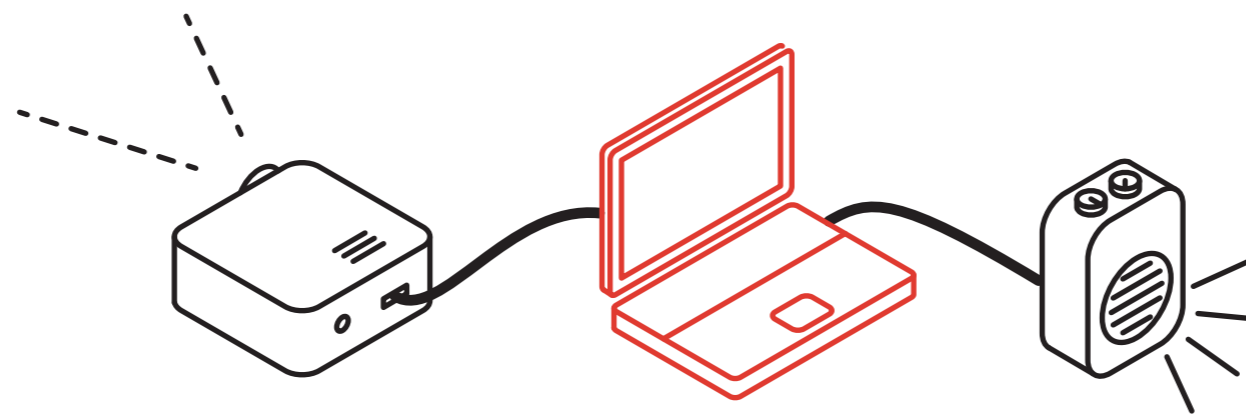
The **DVD player** attaches to the **projector**



and the **PA system**



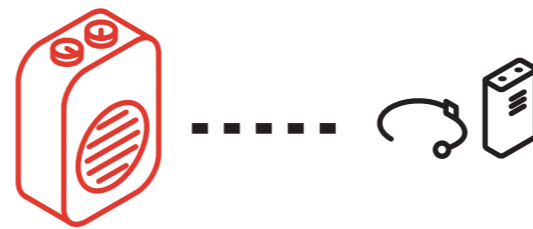
The **organizer** can play TED Talks from **DVDs** and an **SD Card**



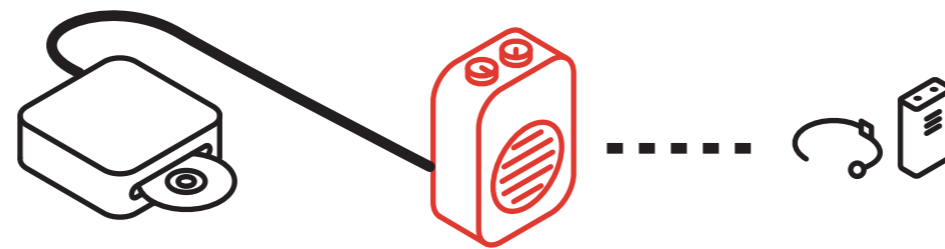
The **organizer** can also plug their **laptop** into the system to share their own presentation and content



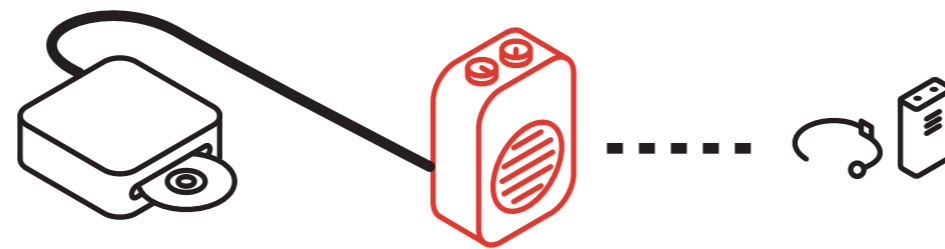
The **PA system** we chose is a balance of clarity, power, and size



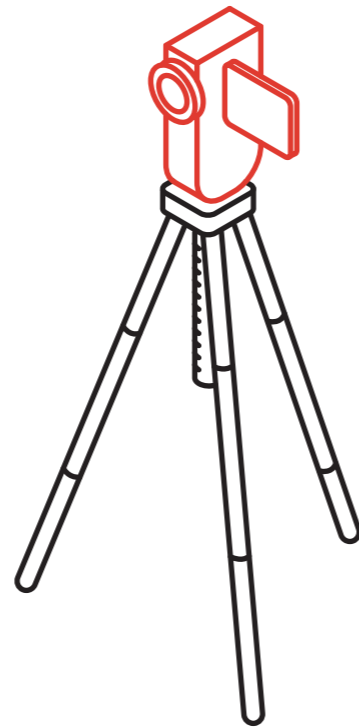
The **PA system** comes with a **wireless mic**



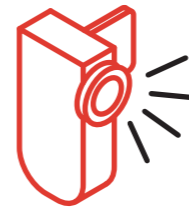
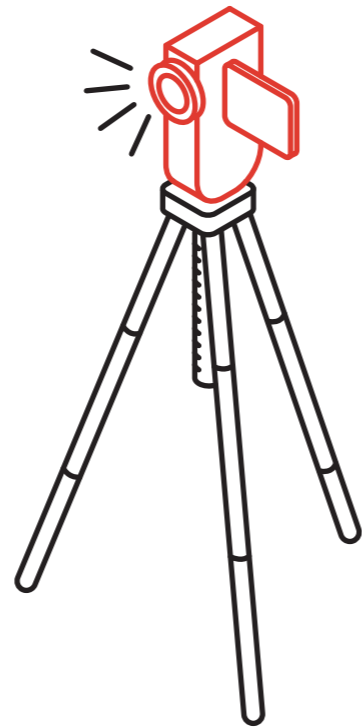
The **PA system** can be used with the **microphone**  
and the **DVD player** simultaneously



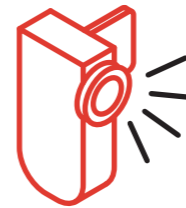
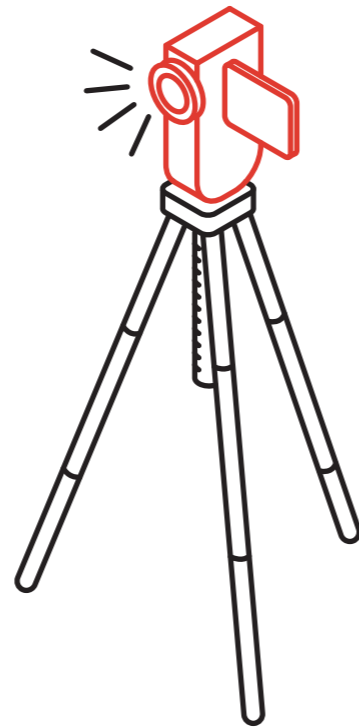
The **organizer** can dub TED Talks on the fly  
and **speakers** can show content while presenting



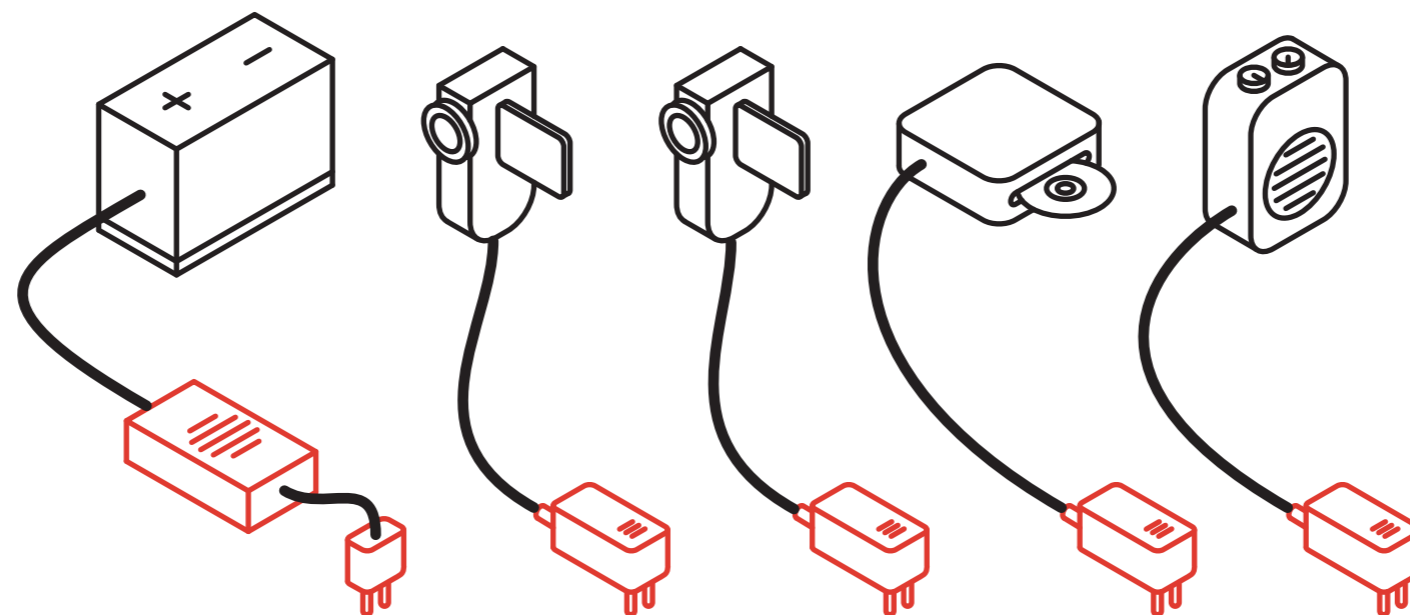
Two **camcorders** and one **tripod**



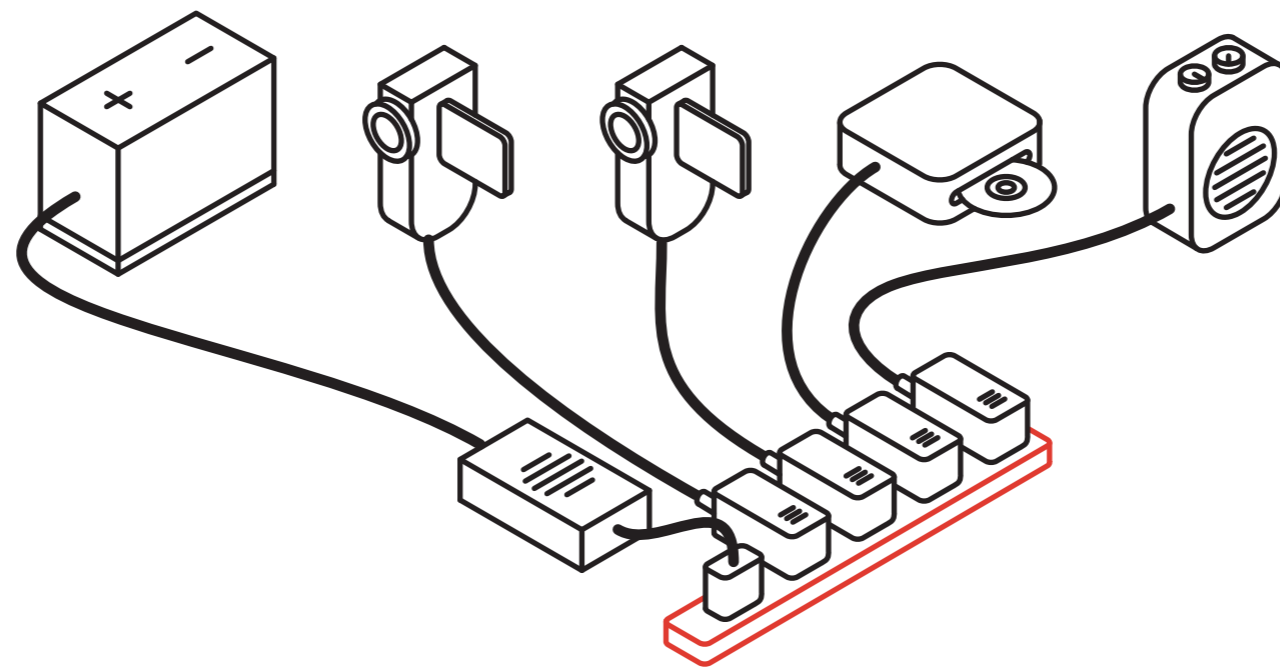
can record the event



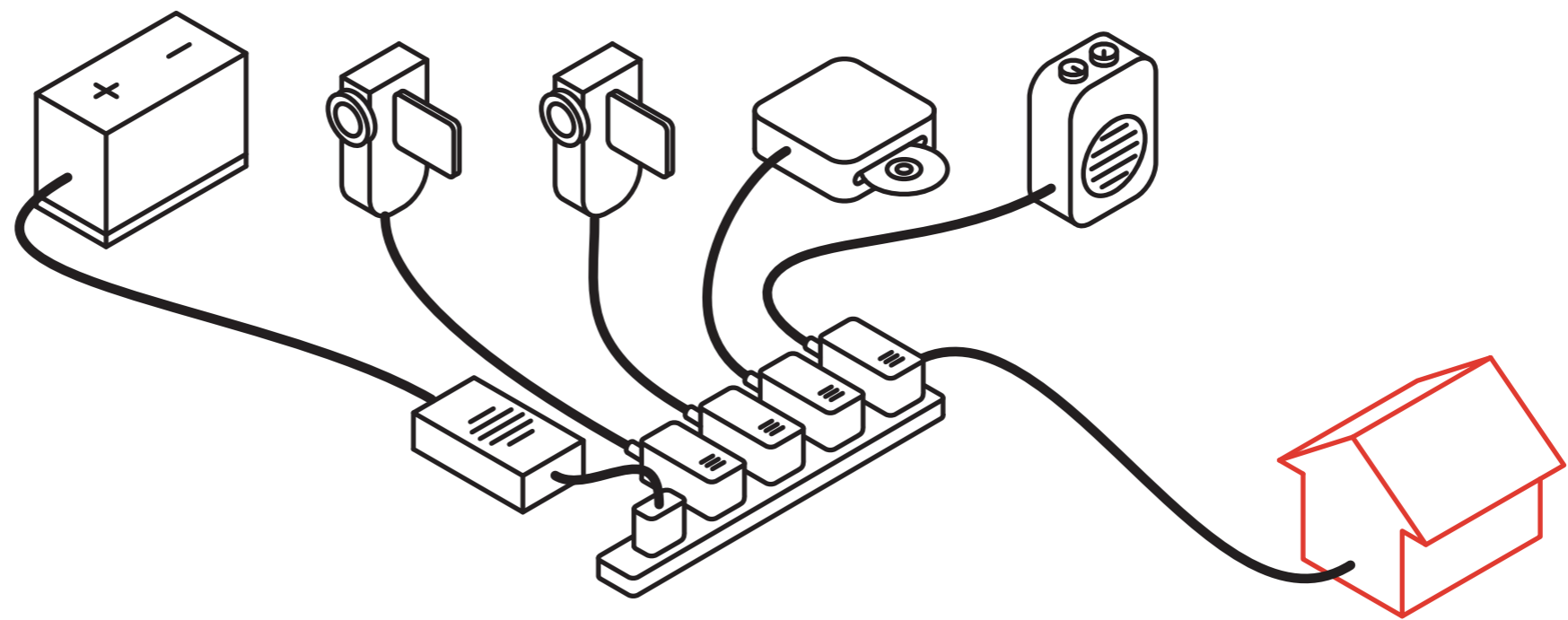
The **organizer** can keep one camcorder on the **speaker** and use the second to film the **audience**, closeups, and venue



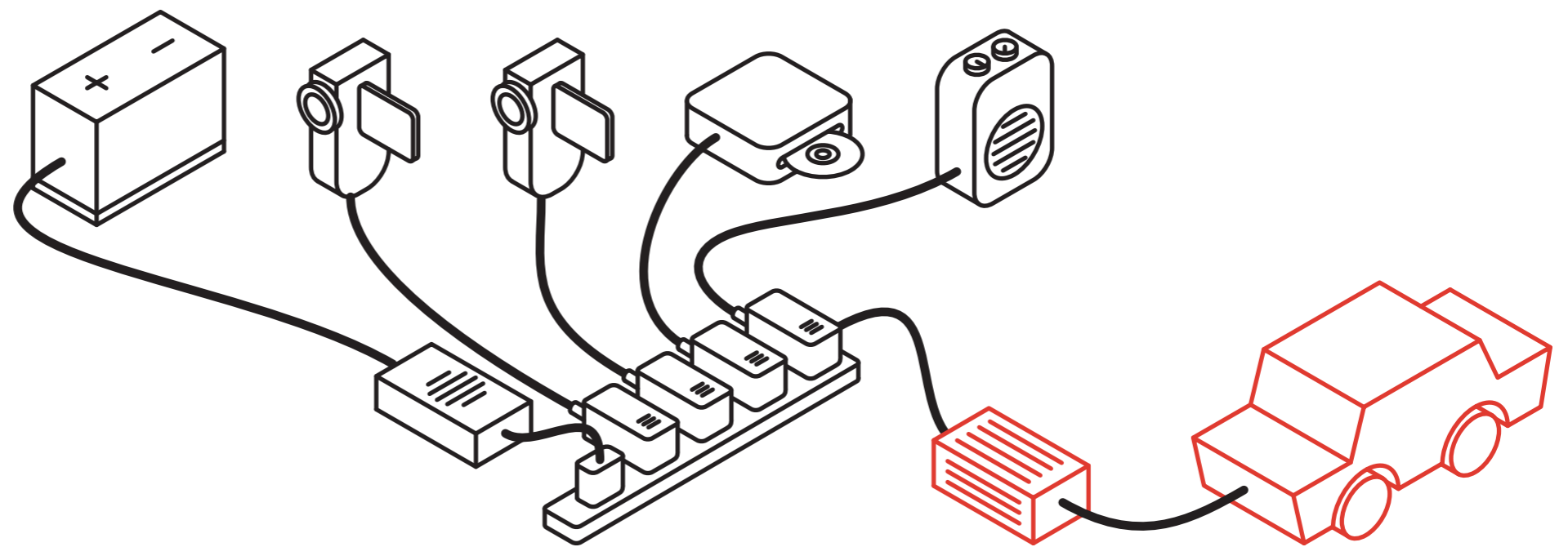
The devices and the main battery come with **chargers**



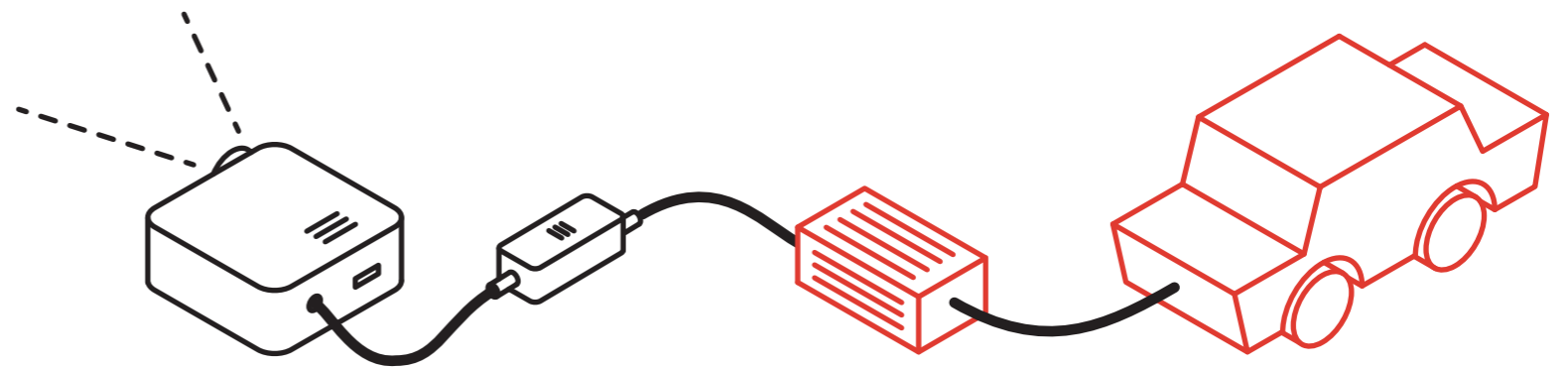
A **power-strip** helps manage all the chargers



The **organizer** can charge all the devices and battery from any **home outlet**



Or using the **inverter** everything can be **charged** from a **car**

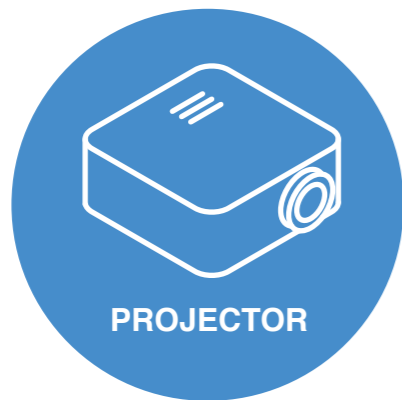


The **organizer** can also **power** the projector directly from a **car**

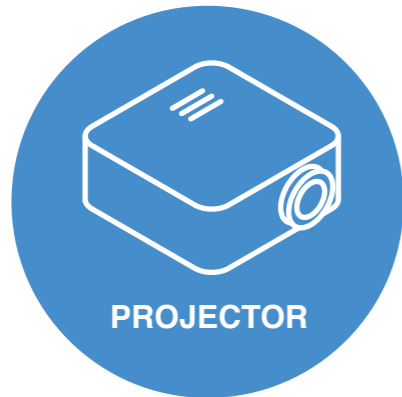
Wow, that's **a lot of parts!**

Absolutely,  
and this is how we've solved that

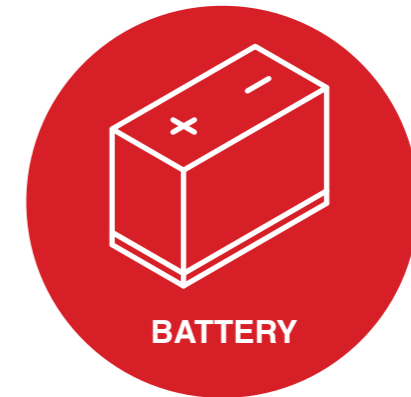
# The color coding system



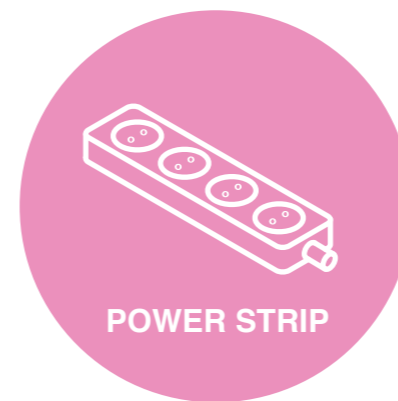
Every **component** in the system has its own **color**



PROJECTOR

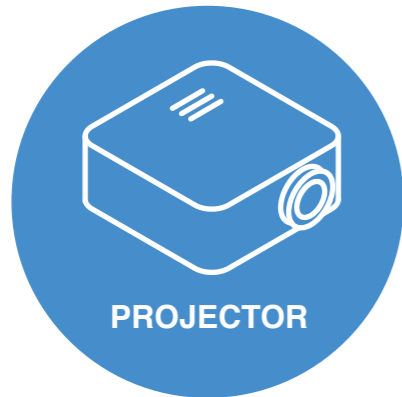


BATTERY



POWER STRIP

Every **component** in the system has its own **color**



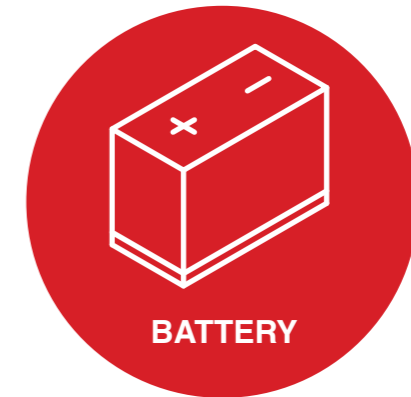
PROJECTOR



AUDIO



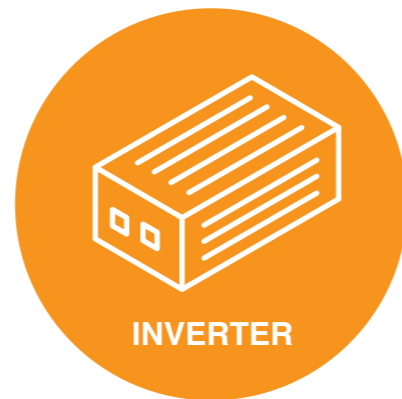
DVD



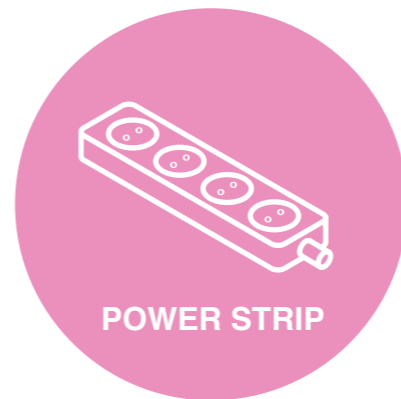
BATTERY



MIC



INVERTER



POWER STRIP

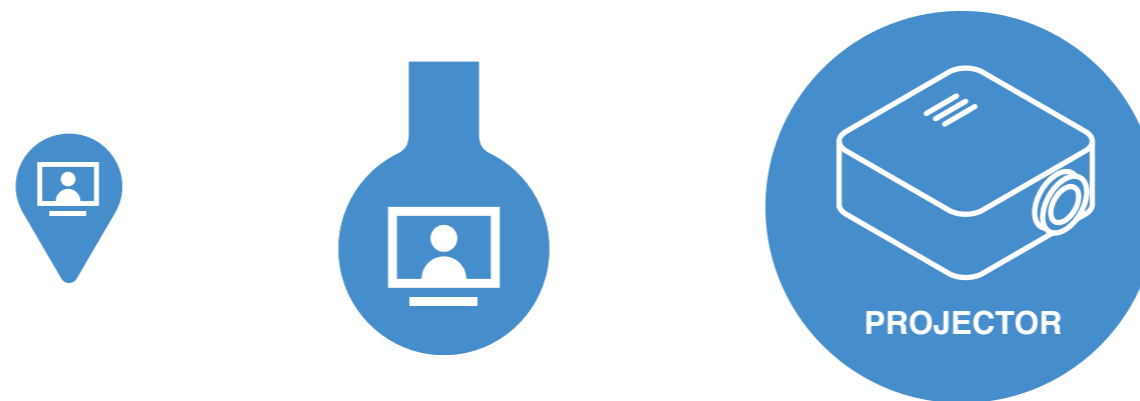


CAMCORDER

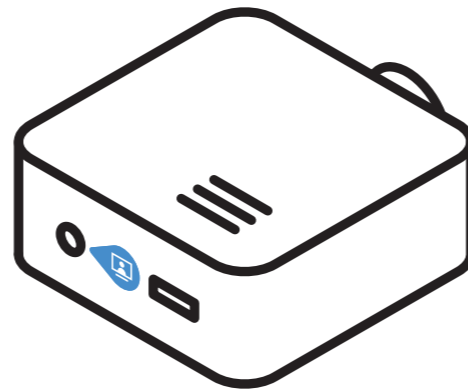
Every **component** in the system has its own **color**



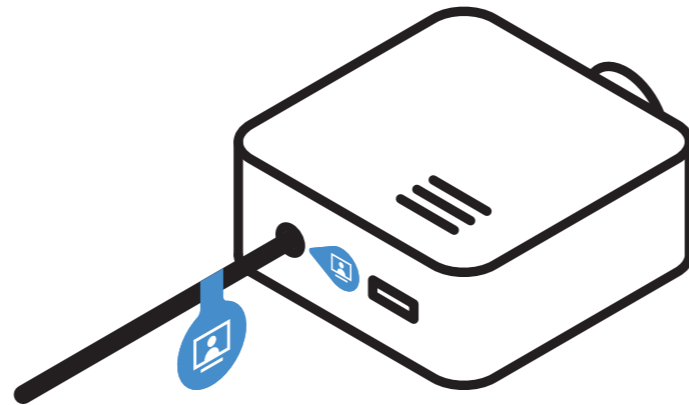
Every **cable** and **port** has its own **icon**



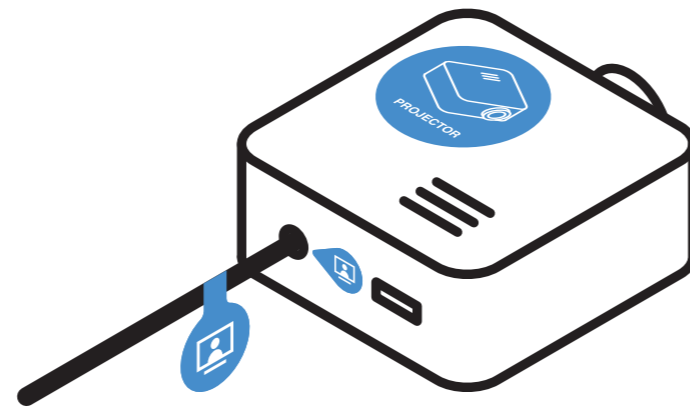
By combining the colors and icons into a set of **stickers**  
the assembly becomes super easy!



One indicates the **port** on the device



One lives on the right end of the  **cable**

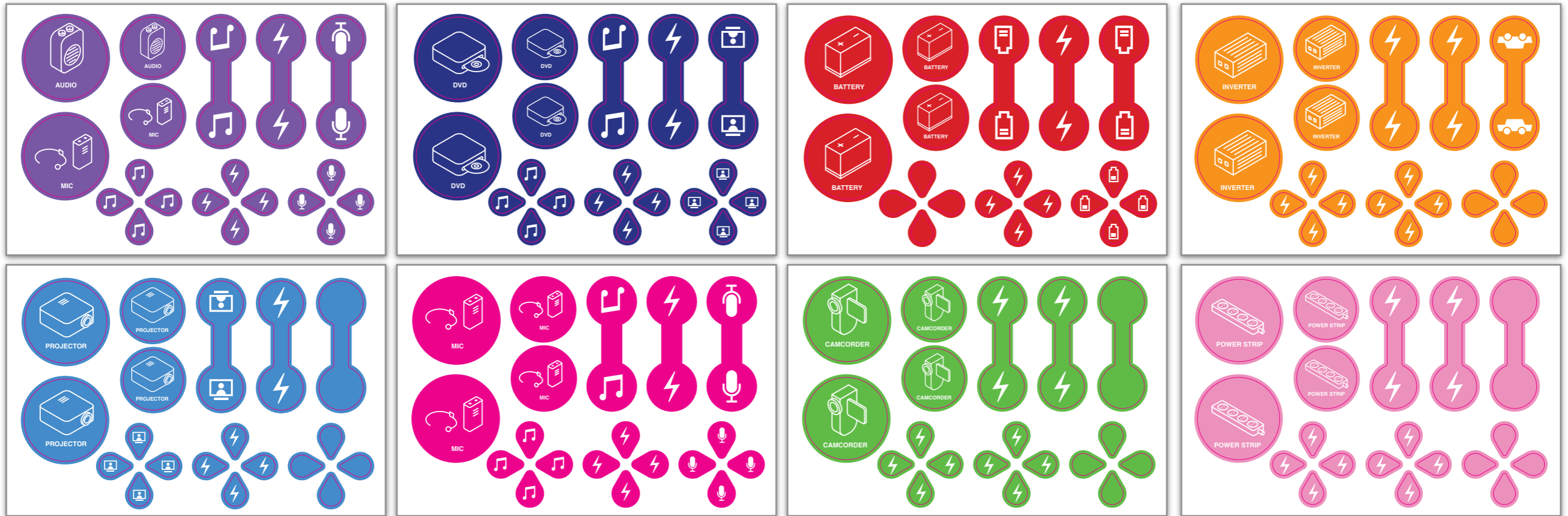


And the big round one is on the **device** itself



Cables become very intuitive!

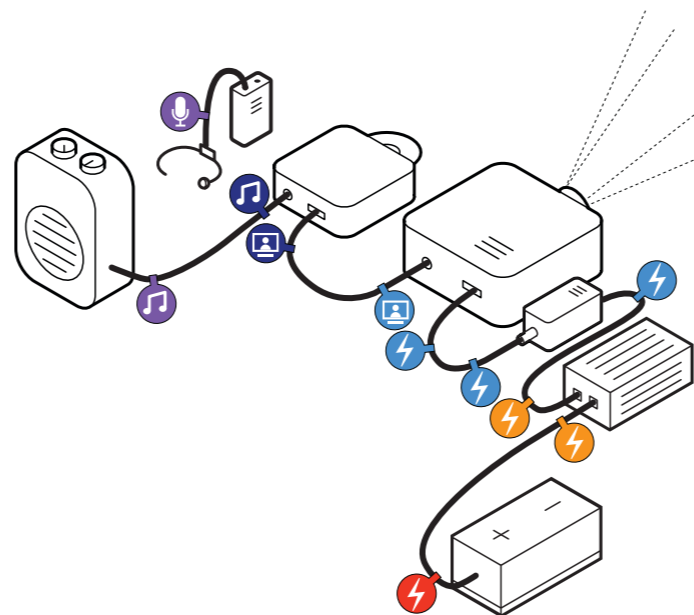
It's even **easier** when you try it out!



Included in the assets folder is a set of **stickers** that you can send to your printer of choice to have the **labels printed**.

# Quickstart guide

# Quickstart Guide

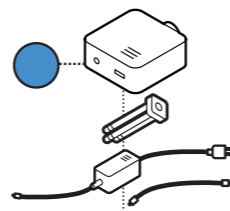


**TED<sup>x</sup>** In a Box

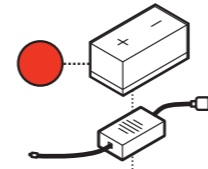
x = independently organized TED event

The kit comes with a **visual quickstart guide** that helps the organizers assemble the kit and run a successful TEDx event

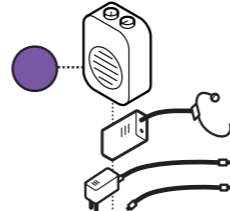
# Parts Checklist



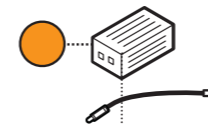
Projector  
Tripod  
Charger  
HDMI - HDMI Cord



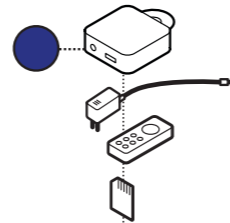
Battery  
Charger



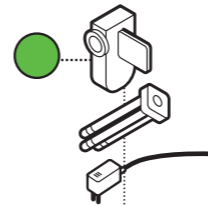
PA System  
Microphone  
Charger  
Audio - Audio Cord



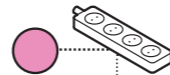
Inverter  
Car Charger



DVD Player  
Charger  
Remote  
SD Card



x2 Camcorder  
Tripod  
Charger



Power Strip



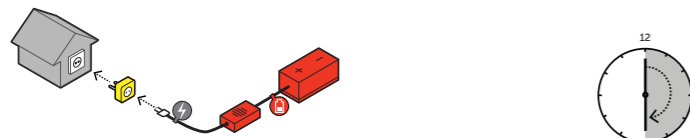
Plug Adapter

The organizer has a **list** of all the **components** that come in the suitcase

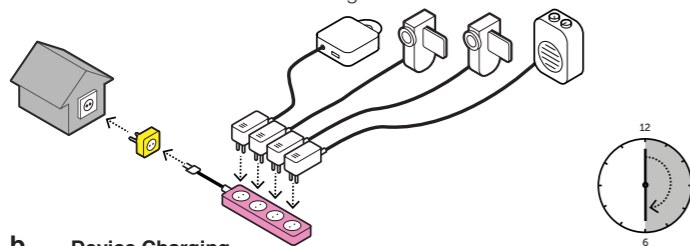
# The guide explains how to charge the system both at home and from a car

## Charging the system

### 1 Home

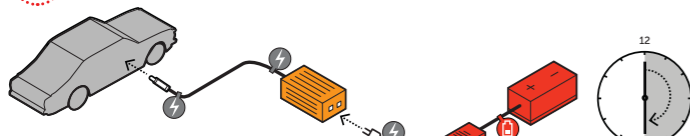


- a. Battery Charging**  
Plug battery and charger into adapter and then into wall plug; wait at least six hours for a full charge

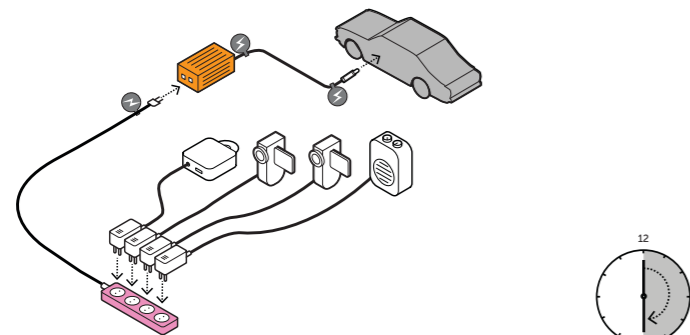


- b. Device Charging**  
Plug devices and chargers into power strip; plug power strip into adapter, and then into wall plug; wait at least six hours for a full charge

### 2 Car



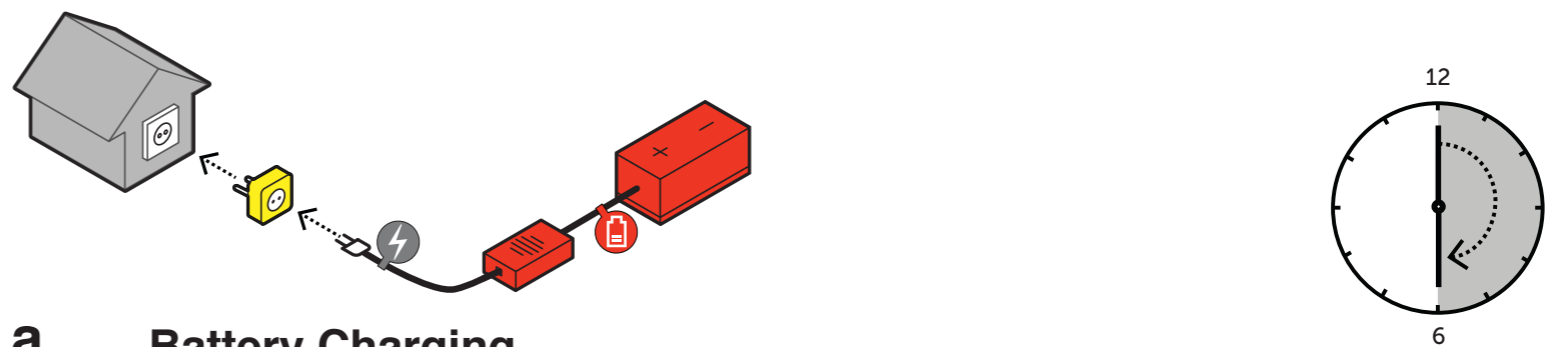
- a. Battery Charging**  
Plug battery and charger into inverter and then into running car lighter plug; wait at least six hours for a full charge



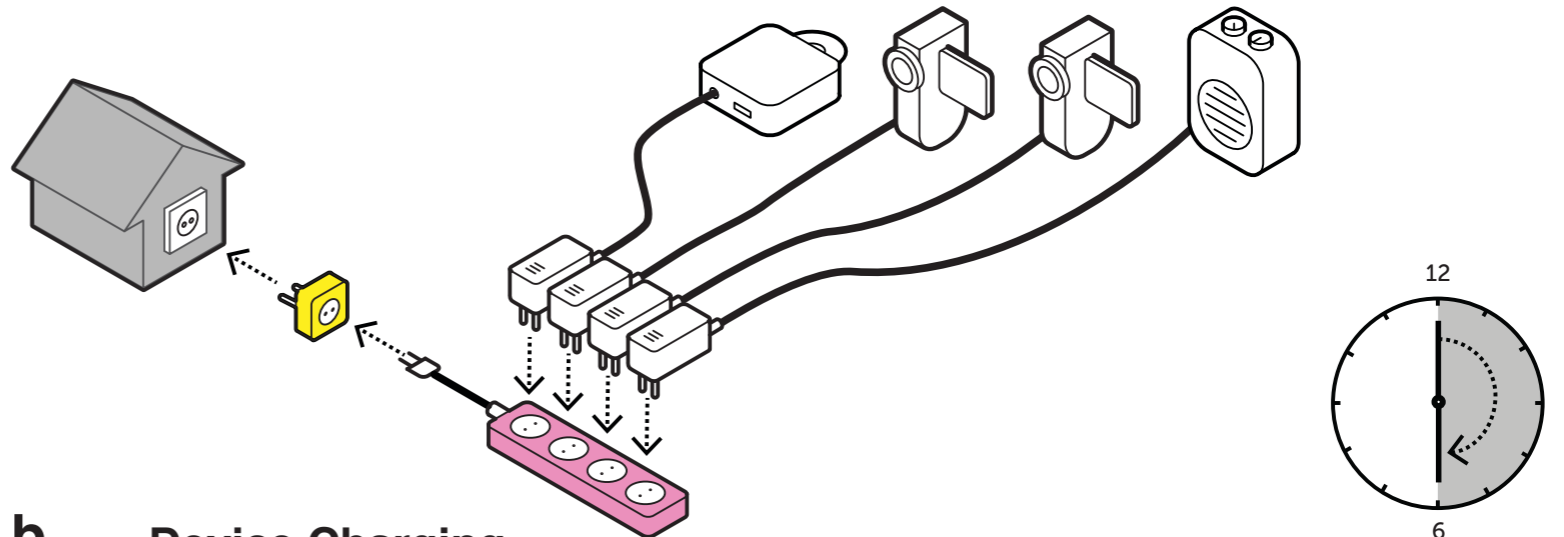
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## Charging the system

### 1 Home



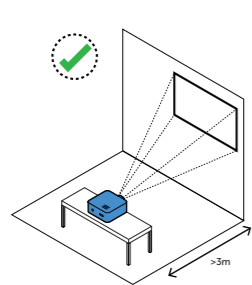
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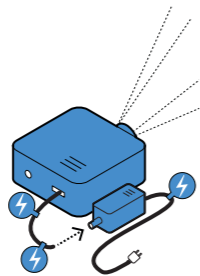
- b. Device Charging**  
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# How to set up the system to watch TED Talks

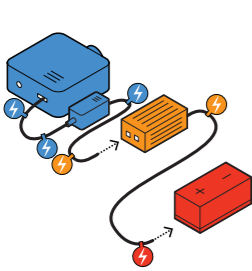
## Watching a TED Talk



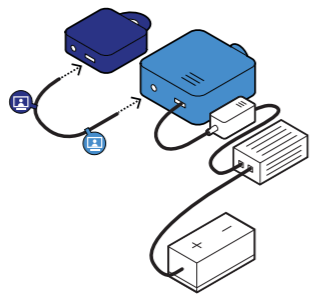
Set projector at least 3m from screen to get a large image



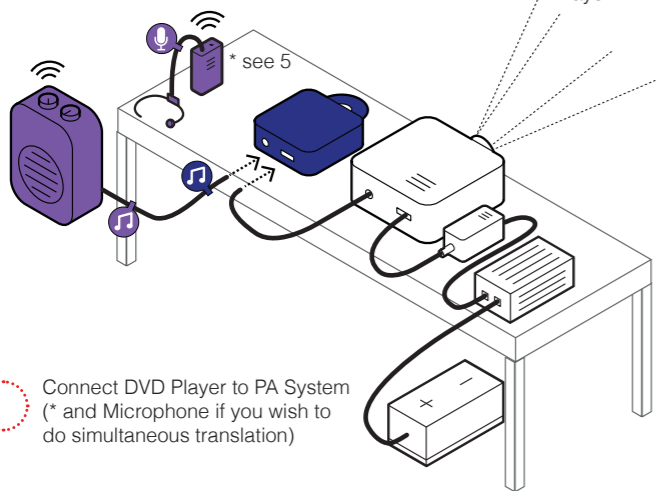
2 Connect projector to adapter



Connect projector to inverter and battery

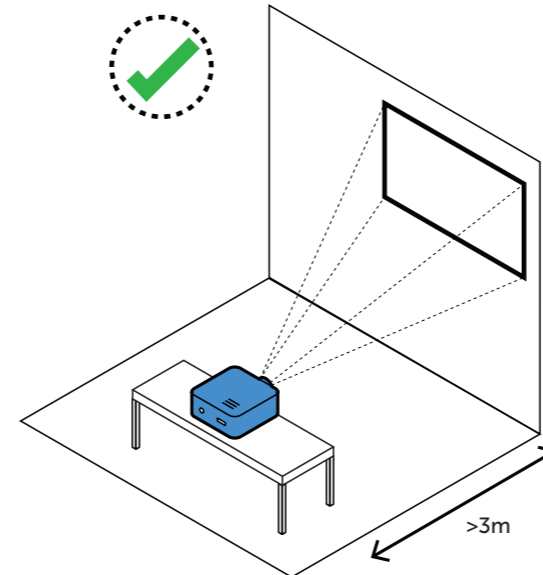


4 Connect projector to DVD Player

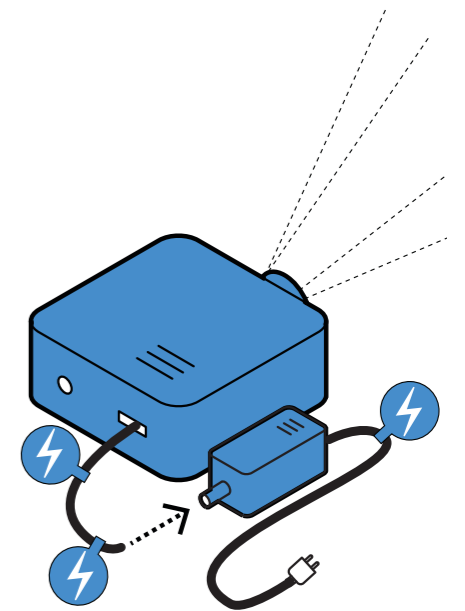


Connect DVD Player to PA System (\* and Microphone if you wish to do simultaneous translation)

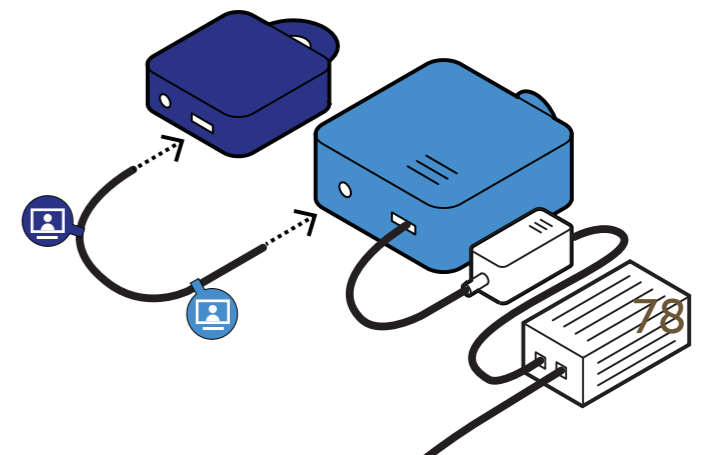
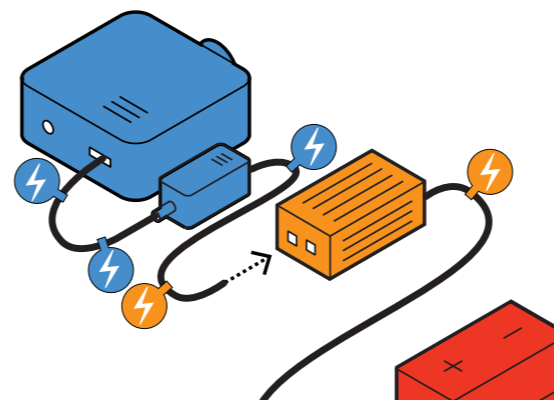
## Watching a TED Talk



Set projector at least 3m from screen to get a large image



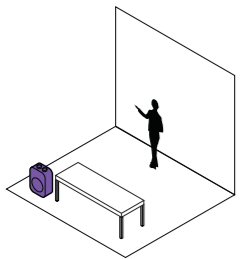
2 Connect projector to adapter



# And how to host **live speakers**

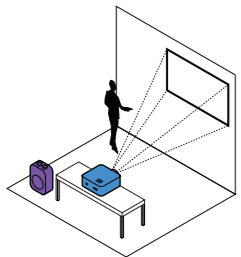
## Live Presentation

### a. Without Slides

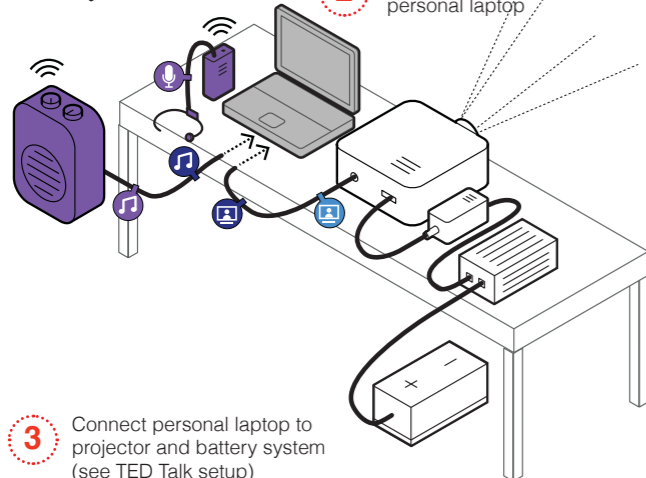


**1** Set up PA System and wireless Microphone

### b. With Slides



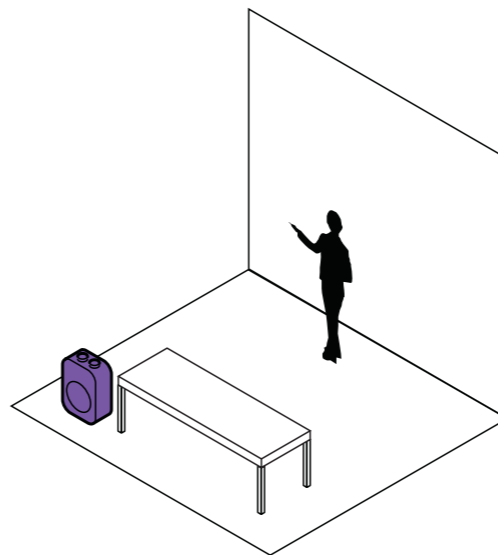
**2** Connect PA System to personal laptop



**3** Connect personal laptop to projector and battery system (see TED Talk setup)

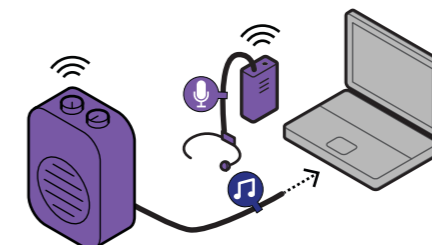
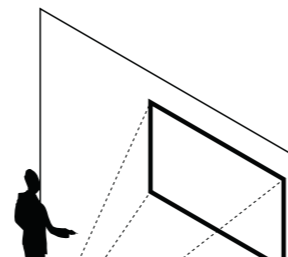
## Live Presentation

### a. Without Slides

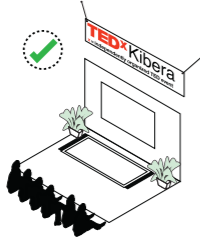


**1** Set up PA System and wireless Microphone

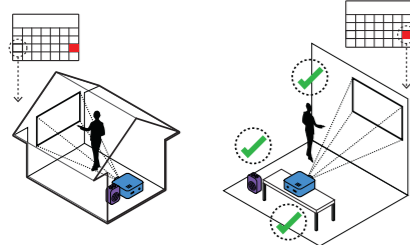
### b. With Slides



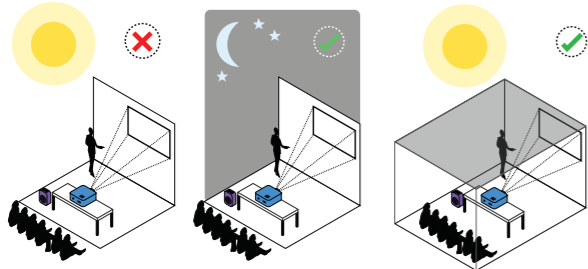
## Helpful Tips



- 1 Dress up your space!**  
Think about adding a large sign with the name of your event, plants, or a rug in the area where speakers will stand.



- 2 Practice at home before the event!**  
Set up the entire system you plan to use and do several trial runs at home, to make sure it will work on the day of the event.

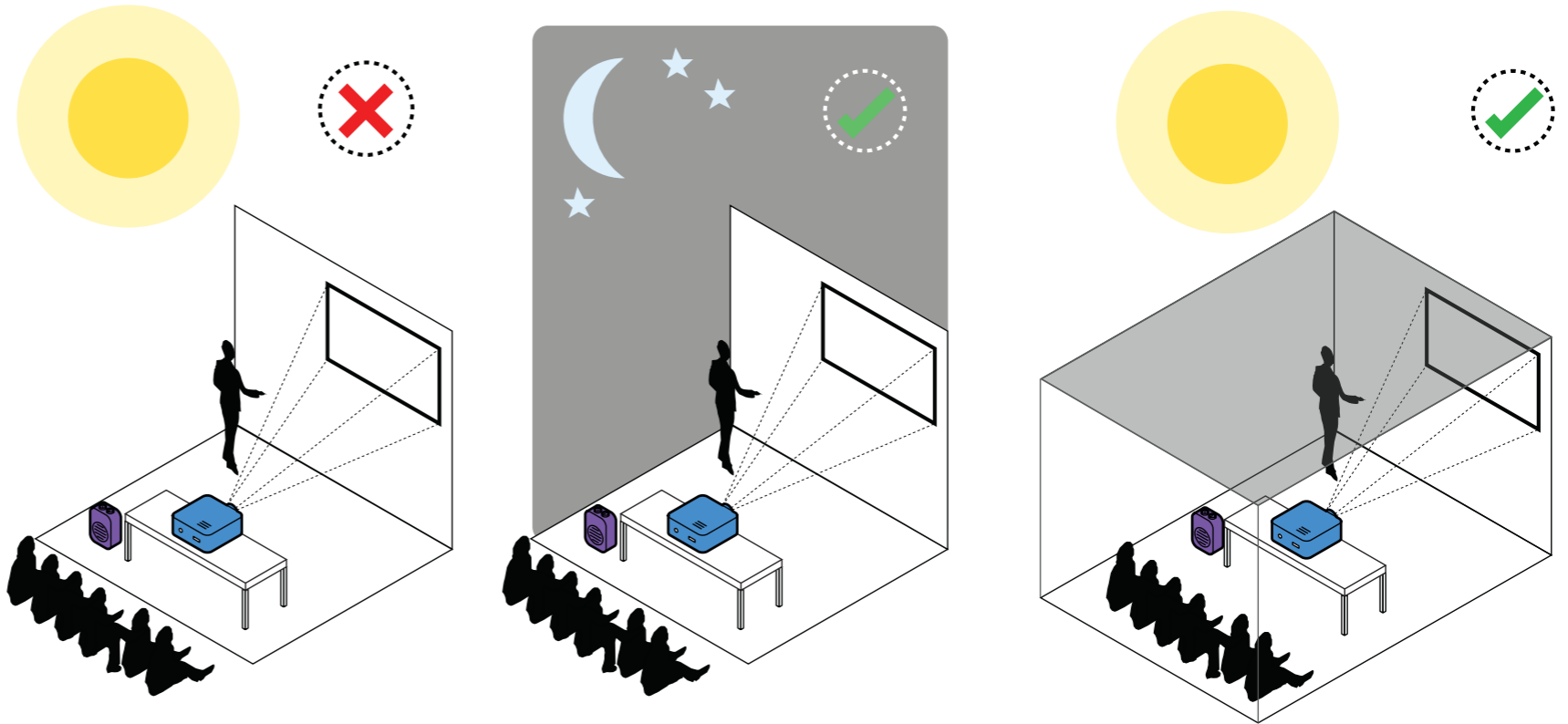


- 3 Find a good time and location!**  
Hold your event either indoors or during the evening to ensure that your projections will be bright and visible to your audience.

2

## Practice at home before the event!

Set up the entire system you plan to use and do several trial runs at home, to make sure it will work on the day of the event.



3

## Find a good time and location!

Hold your event either indoors or during the evening to ensure that your projections will be bright and visible to your audience.

Finally the guide contains some **helpful tips** on setting up the event

### Charging the system

**1 Home**

**a. Battery Charging**  
Plug battery and charger into adapter and then into wall plug; wait at least six hours for a full charge

**b. Device Charging**  
Plug devices and chargers into power strip; plug power strip into adapter, and then into wall plug; wait at least six hours for a full charge

**2 Car**

**a. Battery Charging**  
Plug battery and charger into inverter and then into running car lighter plug; wait at least six hours for a full charge

**b. Device Charging**  
Plug devices and chargers into power strip; plug power strip into inverter, and then into running car lighter plug; wait at least six hours for a full charge

### Watching a TED Talk

**1** Set projector at least 3m from screen to get a large image

**2** Connect projector to adapter

**3** Connect projector to inverter and battery

**4** Connect projector to DVD Player

**5** Connect DVD Player to PA System (\* and Microphone if you wish to do simultaneous translation)

### Live Presentation

**a. Without Slides**

**1** Set up PA System and wireless Microphone

**b. With Slides**

**2** Connect PA System to personal laptop

**3** Connect personal laptop to projector and battery system (see TED Talk setup)

### Parts Checklist

- Projector
- Tripod
- Charger
- HDMI - HDMI Cord
- PA System
- Microphone
- Charger
- Audio - Audio Cord
- DVD Player
- Charger
- Remote
- SD Card
- Power Strip
- Battery Charger
- Inverter
- Car Charger
- x2 Camcorder
- x2 Tripod
- x2 Charger
- Plug Adapter

### Helpful Tips

**1 Dress up your space!**  
Think about adding a large sign with the name of your event, plants, or a rug in the area where speakers will stand.

**2 Practice at home before the event!**  
Set up the entire system you plan to use and do several trial runs at home, to make sure it will work on the day of the event.

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Hold your event either indoors or during the evening to ensure that your projections will be bright and visible to your audience.

### Quickstart Guide

**TED<sup>x</sup> In a Box**  
x = independently organized TED event

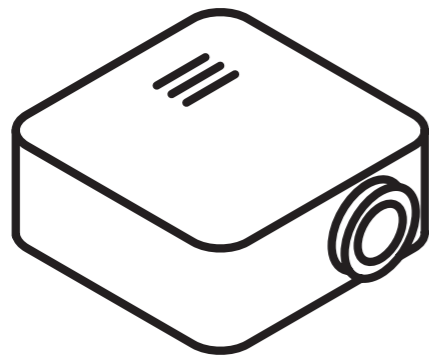
Included in the assets folder and in the prototype box is a copy of the **quickstart guide**

# Universal Spec Sheet

We've outlined each device's **requirements** as well as the ones we've **selected** for the prototype box

# TED<sup>x</sup> in a Box Spec Sheet

1/4



## Projector

### Requirements

DLP Technology  
> 100 Lumens  
< 80W Power Consumption

### Selected Item

HP Projector AX325AA  
<http://goo.gl/NT3hy>  
\$390

### Notes

Compact size  
Light Weight



## Mini Tripod



## Power Adapter

110-220V



With the selected components the **total cost** of the TEDx in a Box kit is **\$1555**



## PA System



### Requirements

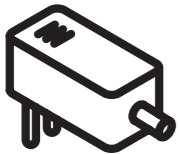
> 25 Watts  
Microphone  
Aux Inv

### Selected Item

Hisonic HS110R  
<http://goo.gl/NwOJH>  
\$130

### Notes

Small size + weight  
Rechargeble batteries

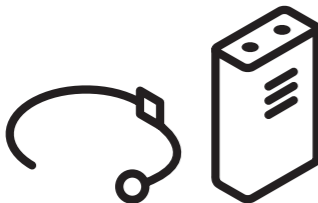


### Charger

110-220V



### Audio Cable



### Wireless Microphone



You might also want to use this as the foundation  
for your **open-source box** initiative

**TED<sup>x</sup> in a Box Spec Sheet** 1/4

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**Projector** ●

Requirements	Selected Item	Notes
DLP Technology > 100 Lumens < 80W Power Consumption	HP Projector AX325AA <a href="http://goo.gl/NT3by">http://goo.gl/NT3by</a> \$390	Compact size Light Weight

---

**Mini Tripod**

---

**Power Adapter**  
110-220V

---

**AV Cable**

---

**PA System** ●

Requirements	Selected Item	Notes
> 25 Watts Microphone Aux In	Hisonic HS110R <a href="http://goo.gl/NwCJH">http://goo.gl/NwCJH</a> \$130	Small size + weight Rechargeble batteries

---

**Charger**  
110-220V

---

**Audio Cable**

---

**Wireless Microphone** ●

**TED<sup>x</sup> in a Box Spec Sheet** 2/4

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**DVD Player** ●

Requirements	Selected Item	Notes
SD Card Slot	Toshiba SDP74S DVD Player <a href="http://goo.gl/7oRk">http://goo.gl/7oRk</a> \$100	Rechargeble Batteries Region 1 - TED DVDs should match this

---

**Power Adapter**  
110-220V

---

**Remote Control**

---

**Battery** ●

Requirements	Selected Item	Notes
Lithium-Ion Technology 12VDC 6 Amps current draw 15 Amp / hour Tamiya RC Connector	Polymer Li-Ion Battery <a href="http://goo.gl/hMh1x">http://goo.gl/hMh1x</a> \$340	Needs to be UN approved for shipping Amp calculated to run 2hr presentation

---

**Battery Charger** \$40  
110-220V

**TED<sup>x</sup> in a Box Spec Sheet** 3/4

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**Inverter** ●

Requirements	Selected Item	Notes
12VDC to 110VAC 400 Watts	Rhino 400W Inverter <a href="http://goo.gl/4QQwM">http://goo.gl/4QQwM</a> \$40	

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**Car adaptor**

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**Camcorder (2)** ●

Requirements	Selected Item	Notes

---

**Charger**  
110-220V

---

**Power strip** ●

Requirements	Selected Item	Notes
US plugs 5 slots		Check that all chargers fit when plugged in

**TED<sup>x</sup> in a Box Spec Sheet** 4/4

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**Suitcase**

Requirements	Selected Item	Notes
Hardshell case Carry-on size Wheels	Delsey Helium 21" <a href="http://goo.gl/zXvYL">http://goo.gl/zXvYL</a> \$100	Friendly color

---

**Foam Padding**

Requirements	Selected Item	Notes
Easy Rip Foam	Pelican 1561 Foam <a href="http://goo.gl/zXvYL">http://goo.gl/zXvYL</a> \$60	Foam needs to be custom fitted into the suitcase

---

**Tripod**

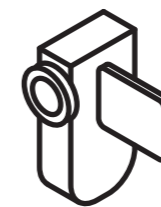
Requirements	Selected Item	Notes
Travel size > 50" Extended	Vivitar Tripod <a href="http://goo.gl/XHwYl">http://goo.gl/XHwYl</a> \$20	Folded < 15"

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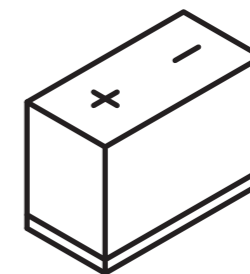
**Plug Adapter (2)** ●

Requirements	Selected Item	Notes
US Plug to Multiple Plugs		

Included in the project assets  
is the **universal spec sheet** to help you  
assemble the boxes



We haven't specified a **camcorder** yet  
as we need **your** video team **input**  
(we've estimated \$300 for two)



Let's briefly talk about the **battery pack**

## 3 battery packs to look into



Brunton Impel  
<http://goo.gl/I7dAF>



Sherpa 120  
<http://goo.gl/GXjh1>



Novuscell CPAP  
<http://goo.gl/vouaA>

Moving forward

We still see **value** in the ideas  
we shared with you **last week**

# The Basics

1. Universal car battery power
2. Color coded assembly system
3. Quick Start Guide
4. Individual functions
5. Out of the box experience
6. Hard shell carry-on
7. Contents sticker
8. Official TEDx letter

# The Experience

1. Simple video introduction
2. Content organizer
3. DIY dubbing tool
4. Organizer check list
5. Volunteer role cards

# The Basics

- ✓ 1. Universal car battery power
- ✓ 2. Color coded assembly system
- ✓ 3. Quick Start Guide
- ✓ 4. Individual functions
- ✓ 5. Out of the box experience
- ✓ 6. Hard shell carry-on
- ✓ 7. Contents sticker
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# The Experience

- 1. Simple video introduction
- 2. Content organizer
- 3. DIY dubbing tool
- 4. Organizer check list
- 5. Volunteer role cards

We hope you'll be able  
to **refine** and **take them forward**

# Open questions

1. How long will the system run?
2. Is car charging a useful feature?
3. What is the right battery pack for the projector?
4. What is the best way to ship the box?
5. Can you find regional partners to assemble the box?

If we were you this is what we'd **do next**

1. **Identify** a point-person to build the boxes
2. Have them **test** the prototype system
3. **Pilot** 3 units with organizers
4. Gather **feedback** from users
5. **Iterate** the system
6. **Build** 20 boxes and ship them out
7. **Spread ideas!**



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Thank you!

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**Emily Friedberg**

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