

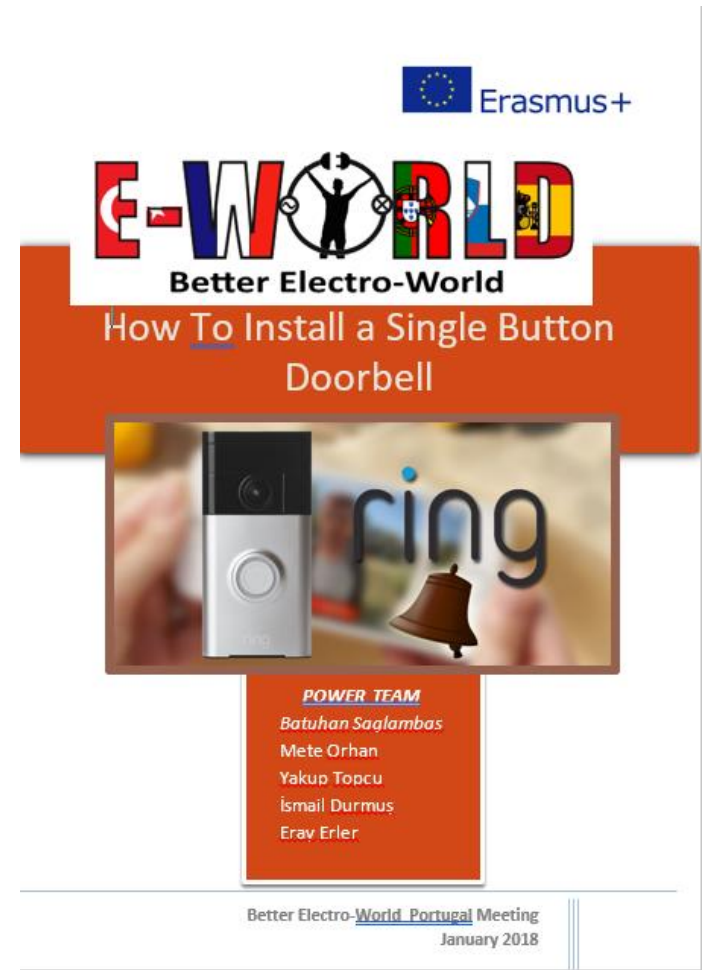
# HOW TO MAKE T-BOOKS

## T-Book Writing Guide



## Cover:

- Project and Erasmus+ logo,
- Mini electric subject title,
- Photo about the subject,
- Team members name,
- On the bottom a text about place and dates.



## Page 1:

- Better Electro World Project Summary in English (Copy paste from Application Form).

### THE PROJECT SUMMARY

E World (Better Electro World) is a project which is set up on the idea that VET (Vocational Education and Training) can be learned best if a student acquires vocational qualifications by the good samples of practices on peer learning and project based implementations. The main reason for this project is to lessen the educational barriers of VET which hinder a student to be successful and proactive. The idea of this project on peer learning with the good examples of project based learning comes after finding that we have a lot of common needs, problems and reasons for participating in a European partnership.

In the implementation of this project, "Learn & Do" step is improved and reinforced by taking the next step "Learn & Teach". We aim to train trainees/workers for reaching good quality with an international knowledge, vocational skills and individual competence base, relevant to working life. That will increase their employability not only in their national business but also in the EU labor market. In addition, this will set up the frame for their lifelong learning.

## Page 2:

- Contents.

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## Page 3:

- Mini electric project introduction.

### Electric Doorbells

Ding dong!  
Sometimes we love that sound, sometimes we hate it. But if there's one thing I love it's the science behind it. When someone's finger pushes on my doorbell, what I can hear is the sound of impressively simple 19th-century physics—the science of electromagnetism, to be exact. Just what happens when the doorbell goes "ding"? Let's take a closer look



## Page 4:

### Explanation about the subject:

- How to install ...
- How to work ...
- How to use ...
- How to program ...

#### **How to Install a Single Button Electric Doorbells**

This project will focus on the installation of a simple, single button doorbell equipped with a fuse, transformer, chime, button and applicable wiring.

Before we install the project we should learn the materials of the single button electric doorbell circuit.

Then, we draw the circuits and pipe scheme.

Then, we install the materials.

After installing the circuit, try to listen ding dong while pushing the button.

## Page 5 - 6:

- Introduction of the materials in the subject (Wire, resistor, Led, diode, motor, fuse..., what you need in the subject ... )

### Wiring Materials

**C- Button:** A button switch is an electrical switch that is activated by pressing. The button makes or breaks electrical contacts that may be normally open or normally closed



**D- DoorBell:** A device on or adjacent to an outer door for announcing one's presence. It can be mechanical, directly sounding a bell, or a button that electrically sounds a chime or buzzer inside the building. A button that activates an electric doorbell.



**E- BellWire:** is a small-size wire insulated with paraffin-coated cotton and used especially for electric bell circuits. buzzer systems, door chimes, etc., on low voltage battery or transformer circuits



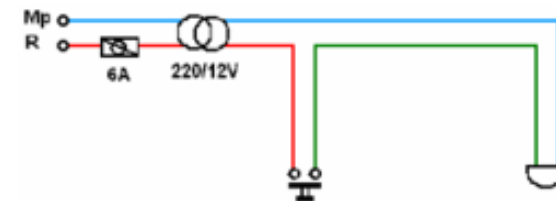
## Page 7:

- Circuit scheme, wire connection scheme, montage schme..., what you use ...

### Step 1- Draw the Electric Scheme

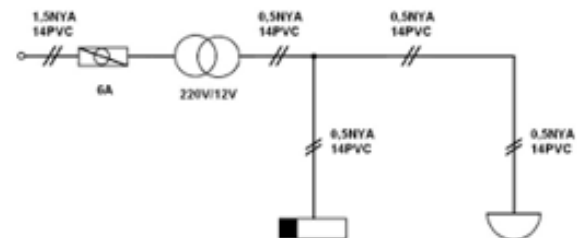
We should draw the electric scheme of single button doorbell circuit.

Circuit Diagram:



Pipe Installation:

You can follow pipe installation, type of wires and how many wire in the pipe.



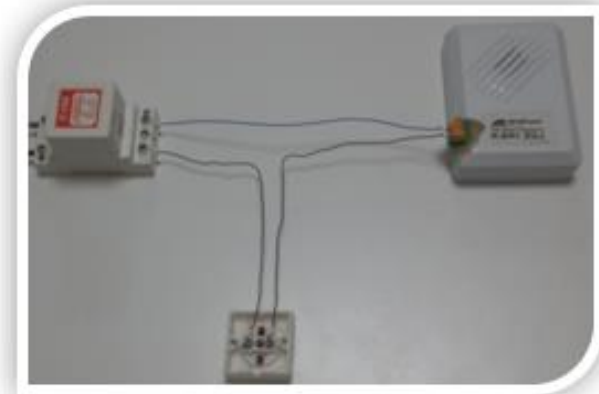


## Page 8 - 11:

- Montage steps...  
Mounting steps... All steps.
- Step1... a short explanation and its photo
- Step2... a short explanation and its photo
- Step3... a short explanation and its photo



c. Install the bell wire from button to the doorbell.



d. Install the bellwire from doorbell to transformer.

## Page 12:

- Warning messages  
(Copy paste from  
sample book Door  
Bell -up to you)

### Things To Be Aware Of

- I. Be careful not to leave any open space when insulating the cables with tape after connecting the cables.
- II. Be careful not to tighten the screws too much when installing the bell because the bell may break.
- III. Be careful not to damage the conductors when opening the terminals because the low current cables are thin
- IV. input and output should not be reversed while transformer is connected.
- V. The screw terminals of the transformer's terminals must be properly tightened. If it is tightened too much, the cables may be torn off. If tightened, the cables may become clamped, and the cables may become arcing due to their loosening.
- VI. When connecting the cables to the materials, connect them in the screw tightening direction.
- VII. For places with 230 v use 1.5 NYA (thick). Use thin cables transformer output(Low Voltage).

## Page 13:

- Mini Quiz about the subject (5 questions are enough)

### Questions:

1) In the doorbell circuits Transformers are used for :

- A) Increasing the AC Voltage
- B) ~~Decreasing~~ the AC Voltage
- C) Regulating the Voltage
- D) Rectification Ac Voltage

2) Which one is not correct about Fuses:

- A) fuse is a protective device that is designed to protect an electrical power system from the harmful effects of over-currents
- B) Fuses reduce short circuit (fault) currents that flow to a low value by "current limitation".
- C) Fuses used for easily turning off electric power on the system.
- D) Fuses are used for transfer the energy without any wire.

3) Which one is symbol of fuse?



- A)
- B)
- C)
- D)

## Page 14 - 18:

- Introduction of the team members with their small size photo and They will answer these question: “What did you learn during the project meeting?” or similar question...

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Hi, I am İsmail,

Samandıra Vocational and  
Technical Anatolian High School,  
Electrical Electronics

Department, 11th grade student. I live in Istanbul,  
Turkey.

My interests are sports, traveling, books, reading  
magazines and learning different things.

This is my first Erasmus+ experience. I am very excited  
and happy because of it. I am also excited to see a  
different culture.

The reason for joining this project is;

To teach something, to learn better while teaching, to  
see different cultures, to overcome self-confidence  
and to direct other people to such projects, such  
opportunities.

Page 19 - 22:

- Team working photos (maximum 4 pages - 8 photos).



Last page:

- The last page-back cover will be empty ...
- We will add a big project family photo after meeting.