

Hardware

1 Arduino Uno + USB cable
1 PC (I)
1 HDMI cable
4K Screen (II)
10 x metal buttons (III)
1 x jumbo arcade button (IV)
1 x Epson T88V thermal printer
+ USB cable, power supply and paper for the printer
(optional) Phidgets motion sensor (V)

I) Used at Ballerup: Vision Office Mini computer; i5 core + Intel HD630 Kabylake graphics card + wireless USB

II) Used at Ballerup: Philips "50 4K screen; 50PFL3807T

III) Push Button Momentary Metal 1,6 mm from ArduinoTech.dk

IV) <https://www.arcadeshoppen.dk/arcadedele/arcadeknapper/jumboknapper.html>

V) <https://www.phidgets.com/?tier=3&catid=10&pcid=8&productid=81>

Software

Code for arduino found at
https://github.com/KarinaKorsgaard/Ballerup_Arduino

Download the folder and open the TravelBoard sketch.
Upload to Arduino using the newest IDE.

The main Application can be found at
https://github.com/KarinaKorsgaard/Ballerup_travel
Clone the folder to the desktop of the PC.



10 x momentum metal push buttons



1 x momentum jumbo knap

Installation

Open the Compt Prompt on the pc and type

```
cd <path to desktop> ENTER
```

```
git clone https://github.com/KarinaKorsgaard/Ballerup_travel.git ENTER
```

Print que clearing

The folder should now be on the desktop. Open the folder and go to the data->bin folder and find the file **clearPrinter.bat** Right click the file and create a shortcut. Name the shortcut

clearShortCut.lnk

Rightclick the shortcut and open the properties. Click security->advanced and click the "administrator rights checkbox"

This step makes sure that we clear the printque when the application is started.

Autostartup

Open notepad and write the lines:

```
cd <path to travel_folder on desktop>
```

```
git pull
```

```
<path to desktop> go.bat
```

Save the document as autoStart.bat (the .bat ending is important)

Press the windowss icon (start) and type "Run" - This should open the "run window. Here type "shell:startup" - This should open a folder.

Place the autoStart.bat file here.

Now open a new notepad. Write the lines:

```
cd <path to travel_folder on desktop>
```

```
start bin/Ballerup_travel.exe
```

```
go.bat
```

Save this file on the deskop as go.bat

Printer setup

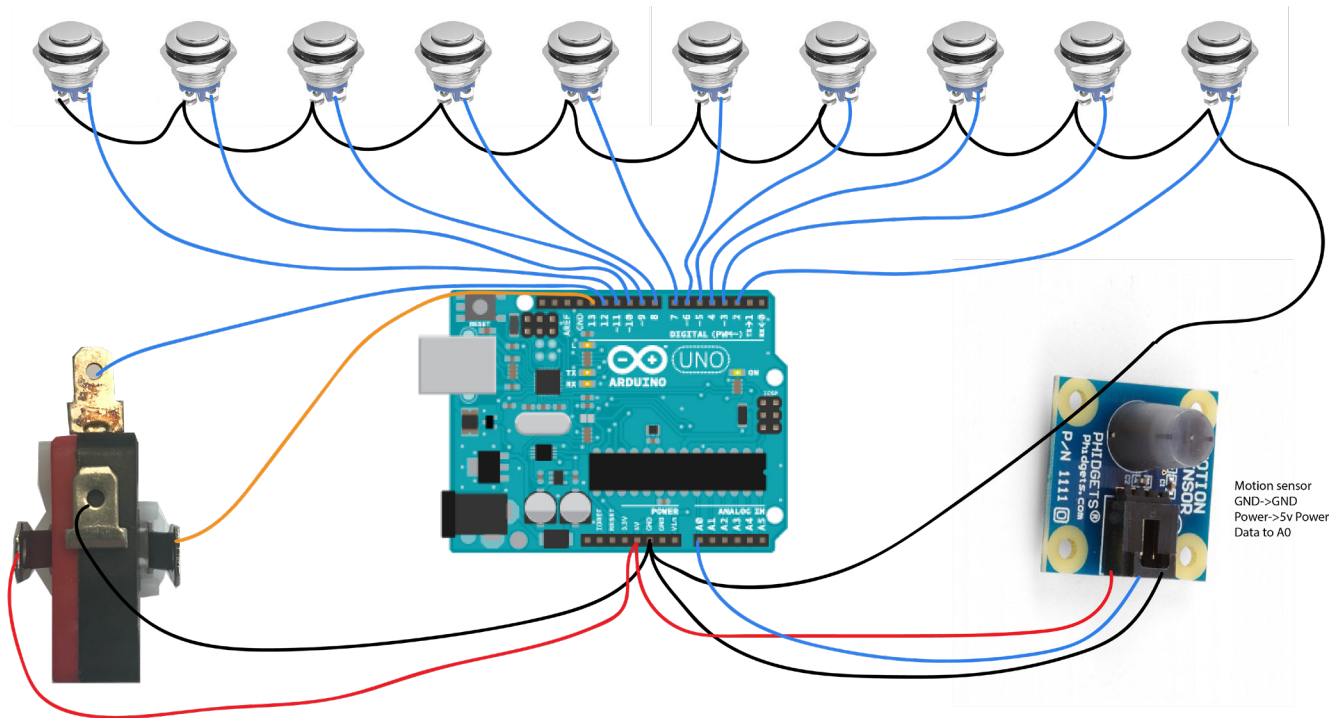
Download the Epson T88V driver from

https://download.epson-biz.com/modules/pos/index.php?page=single_soft&cid=5635&p-cat=3&pid=36 and install it.

Open the print preferences (printers and scanners) and make the thermal printer your default printer. Open the settings and change the settings to so it looks nice. Make a few test prints and save the presets.

WIRING THE BUTTONS

TRAVEL INSTALLATION
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Set all buttons ground in a daisychain and add the end to the GND pin on the arduino. The other pin on the button should have a wire for each. Button 1 should go to Digital 1 on the arduino, 2 -> Digital 2 and so forth.

The archade buttons should be assembled. Solder the light, button GND and power. Light goes to Digital 12 and Button goes to Digital 13.

UPDATING THE DATA

Clone the git repository to anywhere on your **own** computer. Open the data folder in the archive. Open the travel.JSON file and edit, or replace the .JSON file.

Remember to validate the JSON! For example use the online JSON validator:

<https://jsonlint.com/>

Add emoji images in the "emojis" folder or link the new destination to an existing emoji by writing the name of the file in the JSON.

open the terminal and type

cd <path to travel folder>

git pull **ENTER**

git add . **ENTER**

git commit -m **ENTER**

git push **ENTER**

This updates to the git repository.

Now restart the computer running the installation, and the data should be updated.

The installation should start up automatically. When it starts up, it pulls the latest resources from github.

Pressing "d" will enter debug mode. Here the gui is shown. You can adjust the sliders to control the speed of the animation. When done, press the small "floppy disk/save" icon on the gui. Press "d" again to exit debug mode.