# Assembly instructions for cube, energy transition'

## In General:

- All profiles and devices are color-coded (white, black, green and blue).
- All profiles and devices of the same color must be positioned on the same side.



### 1.) Assembly frame construction

1. Lay out horizontal floor profiles according to the sketch and underlay them with wooden strips.

2. Vertical profiles 1. green-black / 2. black-white / 3. white-blue / 4. blue-green

Position according to sketch and fix with floor profiles.

3. Assign and fix horizontal ceiling profiles according to color.

4. Even all floor profiles using a spirit level, adjust them using adjustable feet.



1.1 Check that profiles are correctly placed by checking colors

2.) Assembly projector consoles
1. Lay out USB cable on the floor (short branches/cables go to the corners, long branches/cables end in consoles). 2. The position of the brackets is color-coded on the floor profile and centered with limits on the right and left. Fix the brackets using turnbuckles; align horizontally by using the adjustable foot and level indicator. 3. Assign and connect projectors and PCs according to color code.



2.1 connection points from PC facing towards the center of the cube



2.2 limits on the right and level indicator

# 3.) Wiring:

1. 230V power supply with saftety plug branches out to all parts of the WAGO-plugs for:

- 4x beamer/PC (HDMI 1)
- 1x lamp
- 1x reserve
- HDMI corner adapter are partly faulted/missing



3.1 Each beamer needs a power cable and a video cable connected



3.2 Each computer needs to be connected to Power, USB and Video



3.3 Connect the power cables to the white box



3.4 Connect USB Cables to the cables in the frame



3.6 Connect the long green network cable to the UPS. Also, connect the cable of the multiple plug to the UPS (use adapter cable provided). Connect the UPS to the socket.



3.5 Connect a short green network cable (CAT 6A) to each of the computers. Connect the four cables to the TP Switch on the wooden plate. Also, connect the long green network cable (CAT 6A) to the TP Switch on the wooden plate and pull it outside the frame. Connect the white box and the TP Switch on the wooden plate to a white multiple plug. Pull the cable of the multiple plug outside the frame. 3.7 Connect the UPS connector to ensure the UPS will work smoothly

# Elemente auf der Vorderseite

- Anzeigeschnittstelle display
- 2 USV-Batterieanschlüsse UPS battery connetcor
- Batteriemodul battery modul
- Blende frontcover



# 4.) Assembly ceiling

1. Insert both blockout towels, black side should face outside (top).

2. The lamps have an adapter for the groove, so that they should just be hooked into the groove like on picture 4.1

3. Connect 230V supply to the first lamp throught the tiny hole in the corner of the blackout towels.

The other lamps are connected via extension cables like in grafic 4.2 .

4. The final cable is connected to the white box inside the frame



ALE FEMALE 4.2 Wiring for lamps

4.1 Angle when hooking lamp into groove

### **5.)** Assembly brackets for touchpoints 1. Assemble brackets for touch points only after the wires at the centre are connected.

### 2. Pay attention to color coding.

3. Important! There are markers on the right and left to precisely assembly each bracket to the right position( see picture 5.1) Fix the brackets using turnbuckles.

4. Note: One touchpoint is currently missing



5.1 marker for position of brackets

# 6.) Inserting the Prints

1. Insert the prints, pay attention to the right postions! Let one print still open so that you can still go inside for the next steps

print: politics (lightblue)

print: economy (yellow)







6.1 Only touch the prints with clean hands!!



6.2 Start in the edges A then B, C, D





6.3 Press the print in the frame

# 8.) Starting the projections

1. Check that everything is powered and connected (all cables must be connected)

#### 2. Turn on the UPS:

- a. Press the Power button of the PSU
- b. Press the "OK"-key of the PSU
- c. Using the arrow keys and the "OK"-key of the UPS, select "Control"
- d. Select "UPS"
- e. Select "Turn on with Delay".
- f. The UPS turns on within 2 minutes, including the electricity of the whole station.
- 3. Computer and beamer should start automatically once power is on. Otherwise they can be started by pressing the power button.
- 4. The beamer can be turned on with the remotes. Each beamer has it's own remote.

# 9.) Configuration of the projection

1. Once the computers have booted a projection should be seen on each side.

- 2. Now do a calibration for each side:
  - Connect the keyboard to the USB Port (placed in the lower left edge of the frame.
  - In the software press the Space key on the keyboard to enter calibration mode
  - If the projected animation does not fit to the print of the side you need to switch the scene in the software. Press left control Key + 1 or 2 or 3 or 4 to select the proper animation
  - you will see four crosshairs which need to be placed to the poper position so that projection and print match
  - with the left/right/up/down buttons you can change the position of the selected crosshair
  - by pressing return you can switch the crosshairs
  - position every crosshair to match the proper position.
  - check if the touchpoints work. Touch every touchpoint and check if the animation of the projection changes.
  - if some animations don't change check below ("Solving Touch Problems")
  - once you are done press Space key again to leave the calibration mode
  - unplug the keyboard and continue to the next side of the cube till you are done with each side



crosshair in calibration mode

# 10.) Solving Touch Problem

1. If none touch work verify if the USB connectctions inside the cube are all correctly connected.

- Please be aware that the computer is always the opposite side of the projection
- 2. If it still doesn't work the touch sensity must be changed. Please call support for instructions: +49 172 2474 148 (Mr. Heinen)

# **11.)** Solving other Problems

Please call support for instructions: +49 172 2474 148 (Mr. Heinen)

# 12.) Turning off the Cube

1. Using the keys of the PSU, follow these steps:

- Press "OK".
- Using the arrow keys and the OK-key, select "Control"
- Select "UPS"
- Select "Turn off with Delay"
- The UPS shuts down within 2 minutes and turns off the electricity of the whole cube.