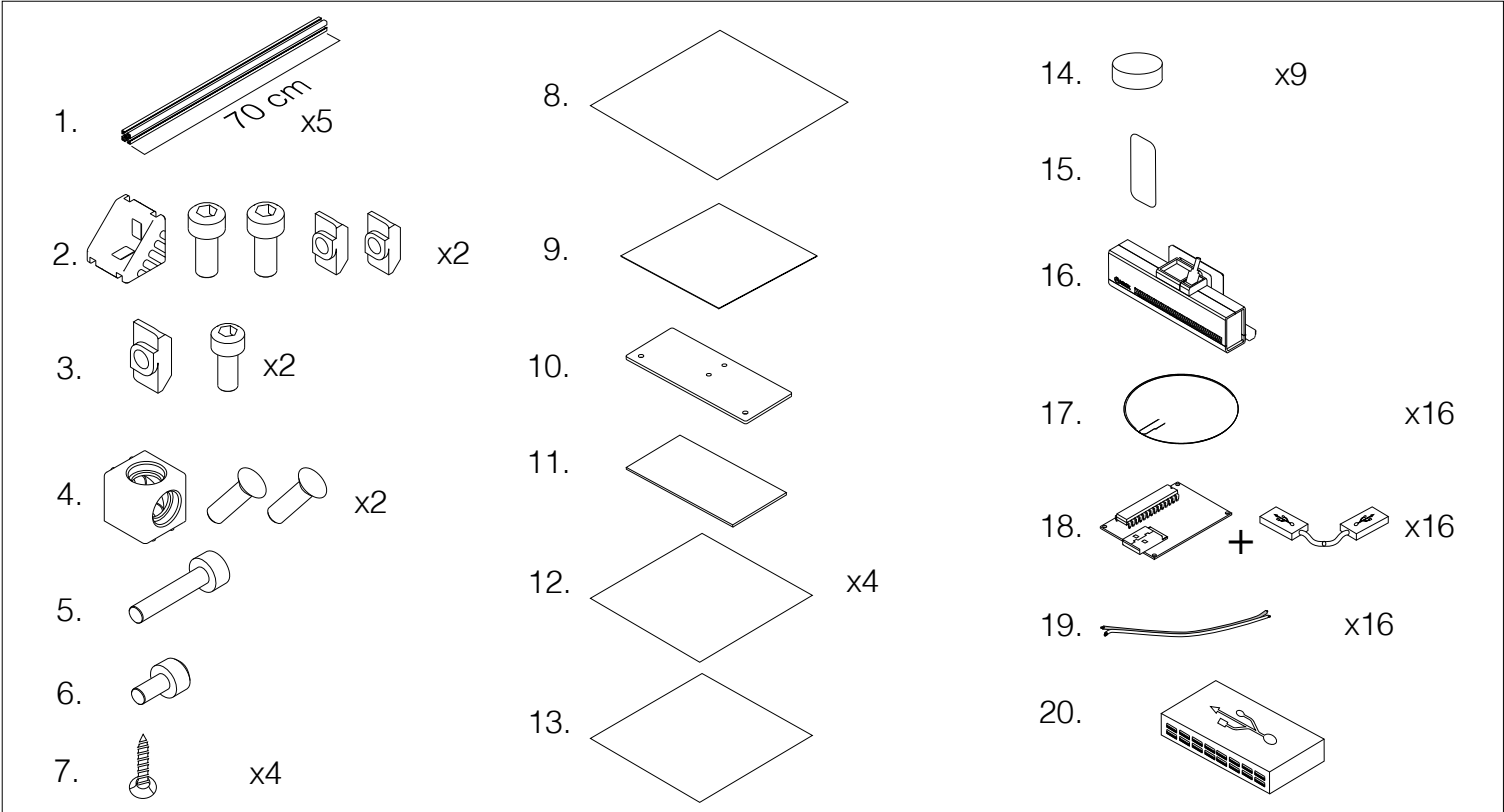
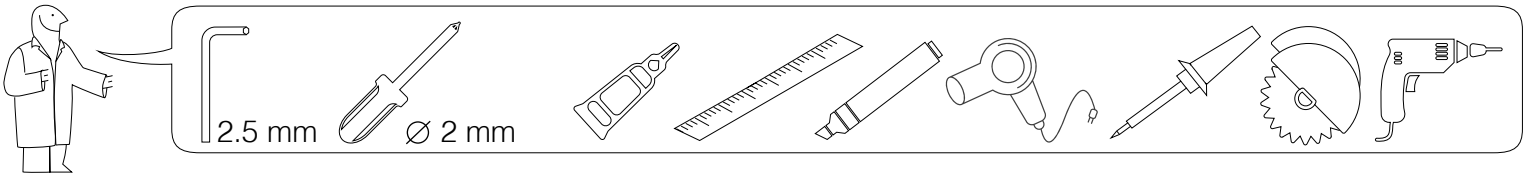
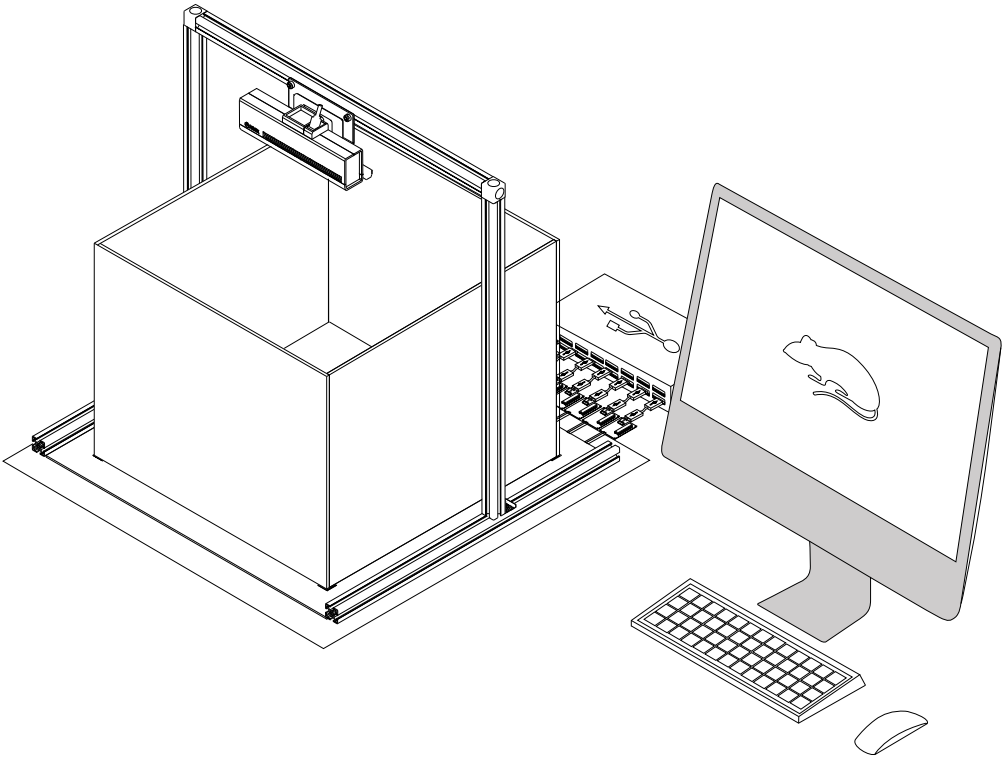
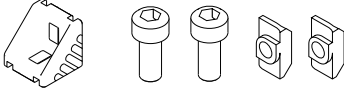
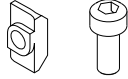
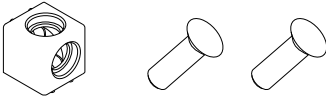
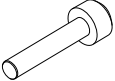
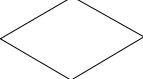
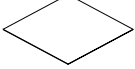
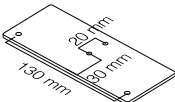
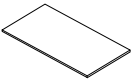
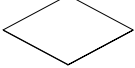
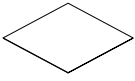
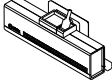
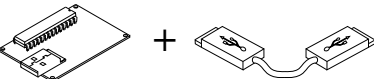
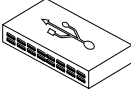


LIVE MOUSE TRACKER

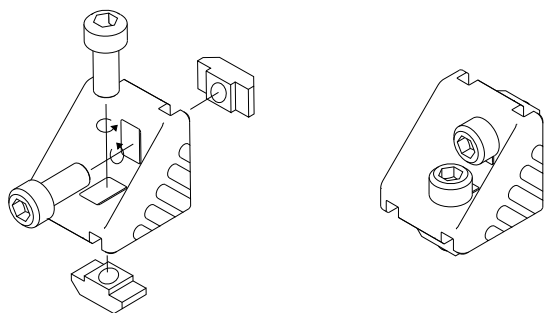
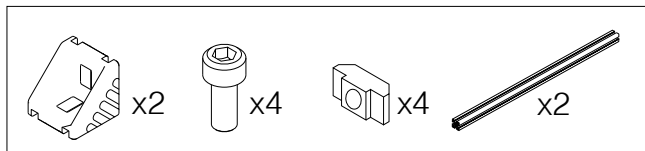
Assembly instructions (v2)



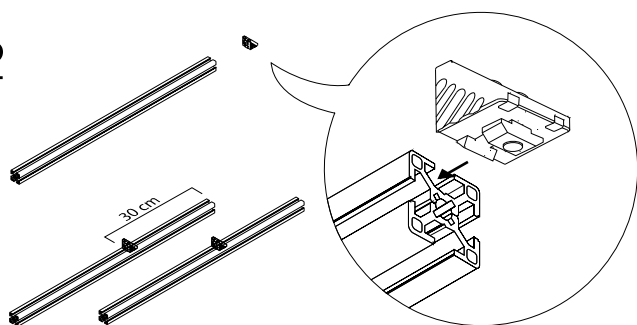
Shopping list

n°		type	reference	quantity
1.		Bosch Rexroth profile 300x300x700 mm	30x30	5
2.		Bosch Rexroth 30x30 gusset with 8 mm fasteners kit	3842523528	2
3.		Bosch Rexroth 8 mm M6 T-nut + M6 screw	3842501753 3842507071	2
4.		Bosch Rexroth 30mm corner cube kit 2S with 2 M8 screws	3842524485	2
5.		Adjustment screw M6, length 30 mm		1
6.		Mount screw 1/4"x20 (US standard)		1
7.		screw Ø4 mm		4
8.		paper sheet for the bottom 760x760 mm		1
9.		matte cardboard to glue antenna 600x600x3 mm		1
10.		PMMA plate 60x130x3 mm M6 and 1/4"x20 holes		1
11.		red transparent PMMA plate 70x180x3 mm		1
12.		PMMA transparent plate (walls) 350x496x4 mm		4
13.		PMMA transparent plate (bottom of the cage) 492x492x4 mm		1
14.		plastic part Ø20x10 mm		9
15.		masking tape 35x20 mm		1
16.		Kinect v2 (XBox One Version)		1
17.		antenna	RFID coil - 100Av http://www.priority1design.com.au/	16
18.		RFID Reader + USB connector	FDX-B/HDX RFID Reader http://www.priority1design.com.au/	16
19.		2 core Figure 8 cable 700 mm		16
20.		USB hub (at least 16 powered USB ports)		1

1

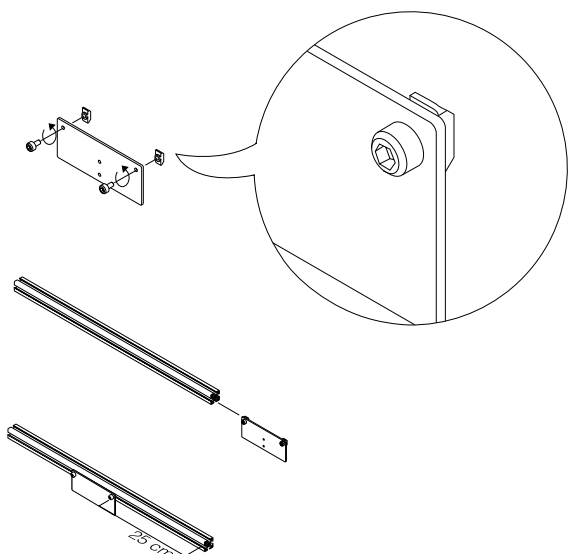
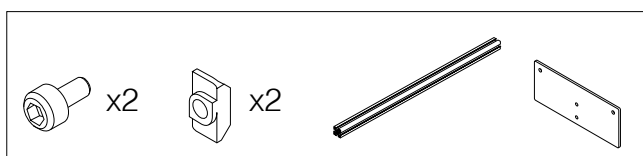


2



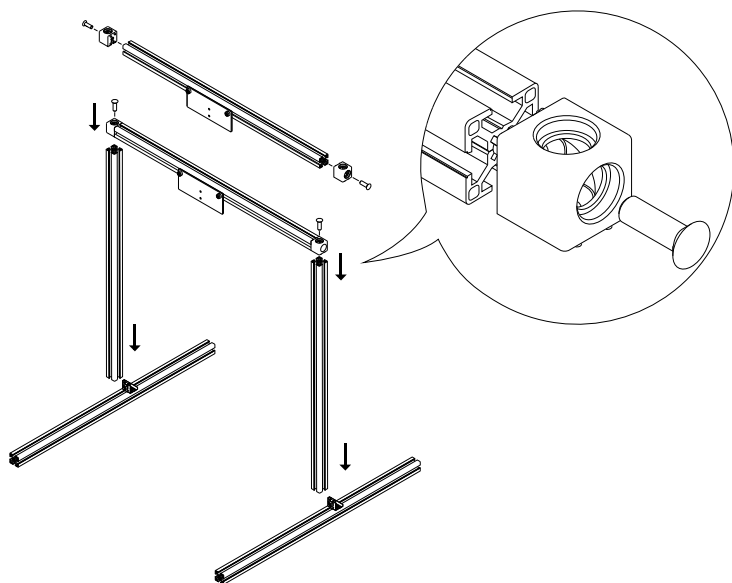
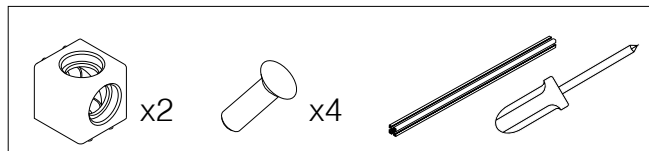
- Insert the screws into the gusset holes and the T-nuts. Tighten the screws letting them loose.
- Insert a T-nut attached to the gusset into the profile rail. Place the gusset face 30 cm from the profile back and tighten the corresponding screw until you cannot move the gusset.
- Repeat these steps with the second profile.

3



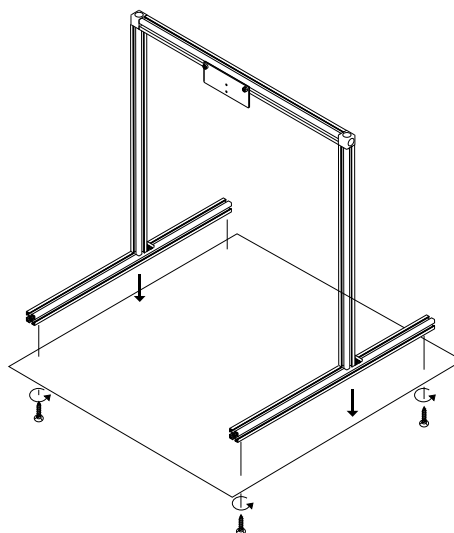
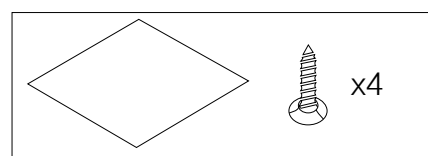
- Insert the screws into the Kinect support slab holes and the T-nuts. Tighten the screws to the T-nuts letting them loose.
- Insert the T-nuts into the profile rail. Distance between slab and profile right side should be 25 cm.
- Tighten the screws until you cannot move the slab.

4



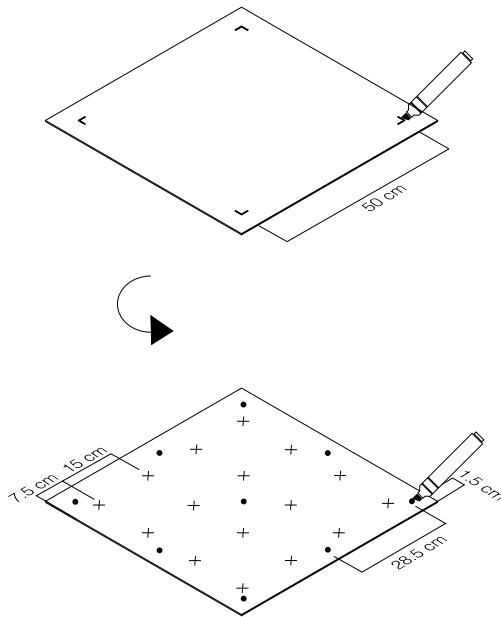
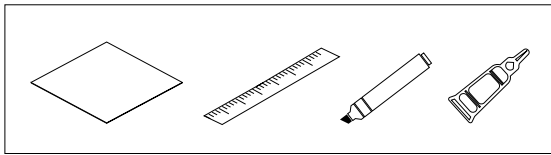
- Place the corner cubes on the profile (with the slab) sides.
- Insert the screws in the corresponding holes and tighten them to bolt the corners cubes to the profile. The first time, you'll need to force as the profile center hole isn't threaded.
- The same way, bolt two profiles to the two corner cubes
- Bolt these profiles to the ones with the gussets and tighten the screws to keep the workpiece from coming loose easily.

5



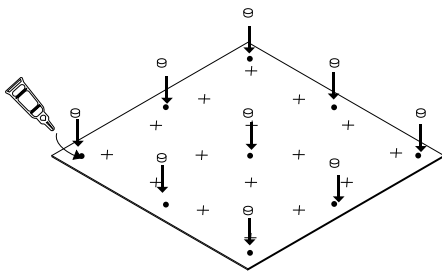
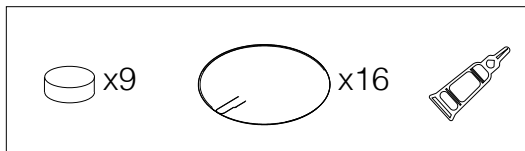
- Attach the paper base to the profile with four screws. You'll need to point four holes on the profiles to ease the screws tightening.

6

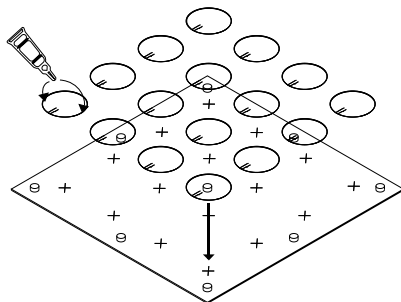


- Mark the cage position on the bottom plate with a pen.
- Flip the plate and mark the holders and the antennas positions on the other side.

7

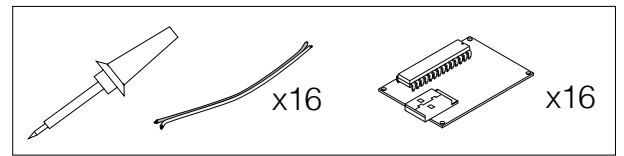


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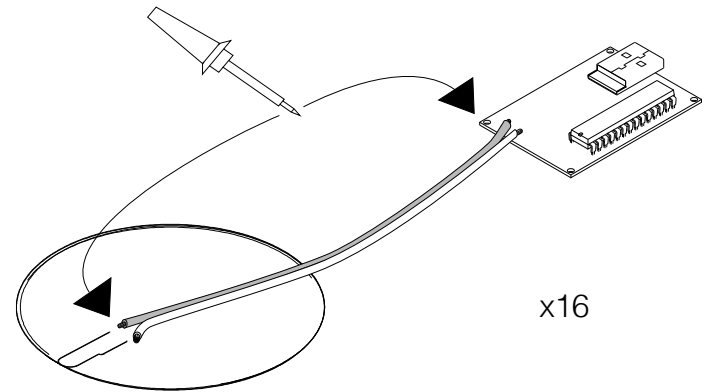


- Glue the holders and the antennas to the plate on the corresponding positions.

9

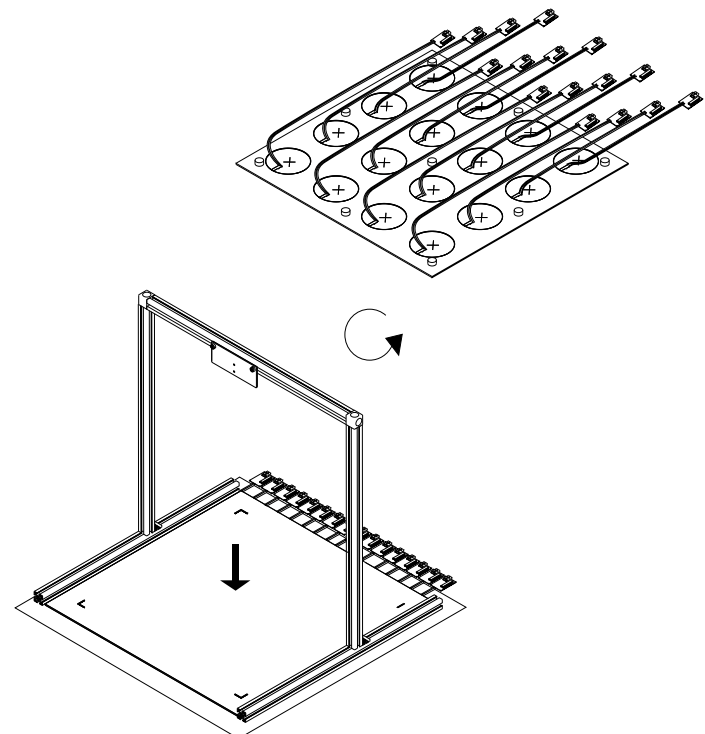


⚠ Connect on AR and A-



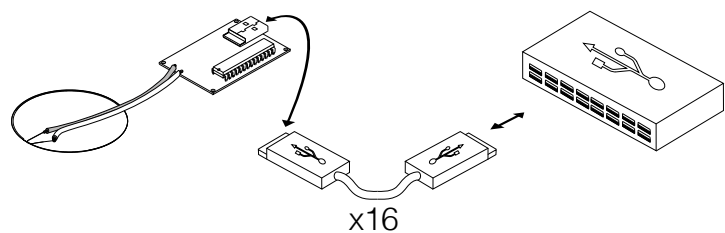
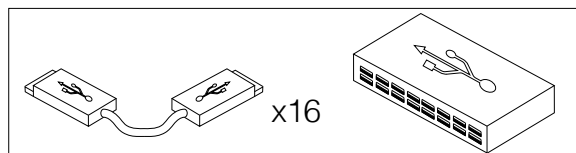
- Weld a 2 core Figure 8 cable to each antenna.
 - Weld the cable other extremity to a RFID reader.
- You will have 16 antennas wired to 16 RFID readers.

10

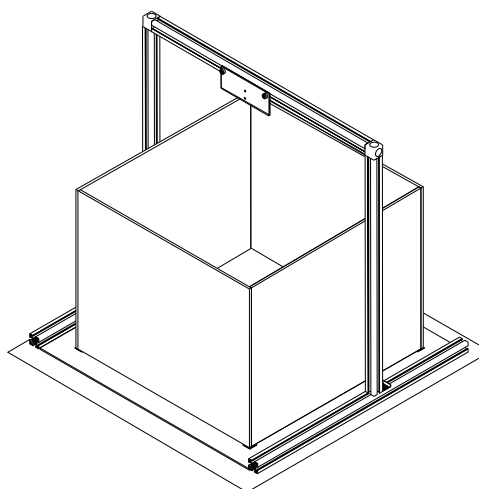
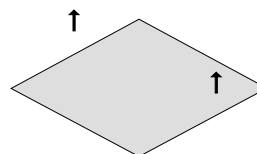
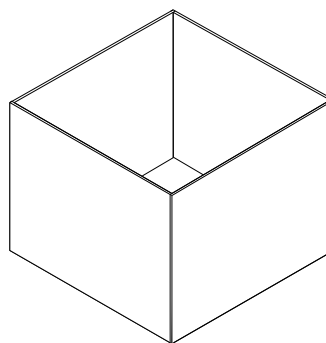
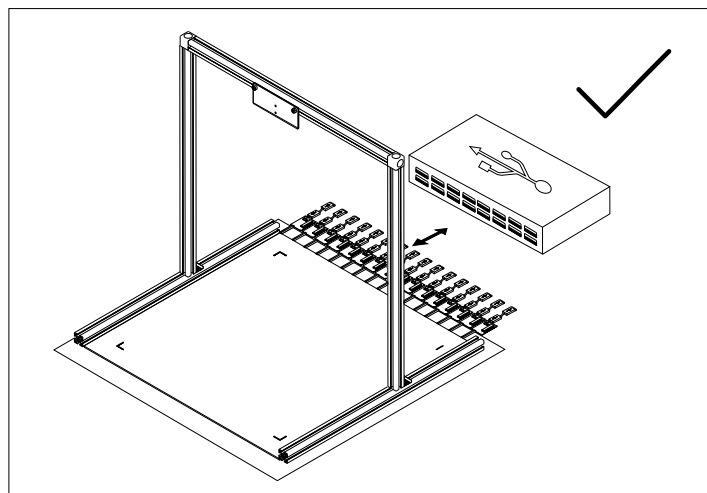


- Flip the bottom plate and place it on the bottom paper.

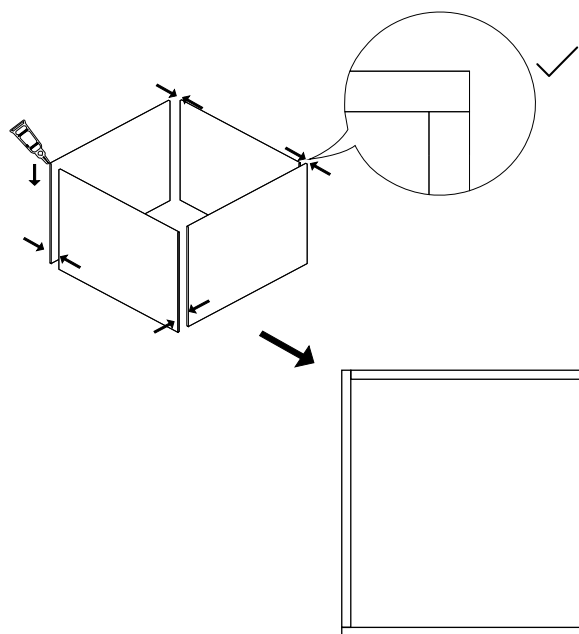
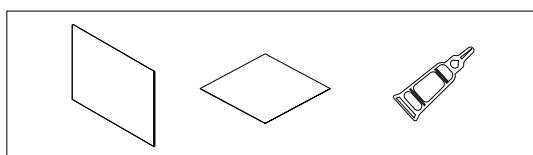
11



- Connect each RFID reader to the USB hub.

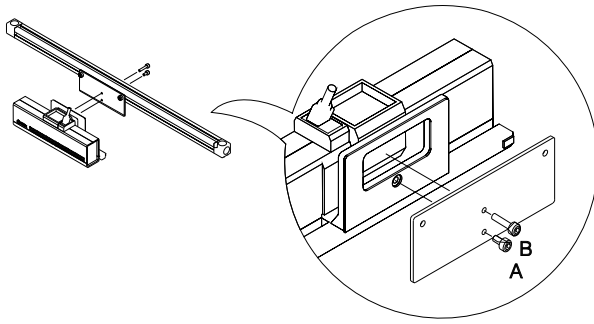
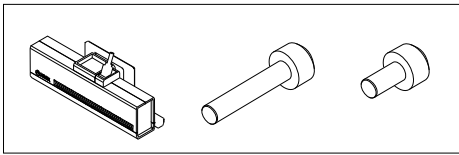


12

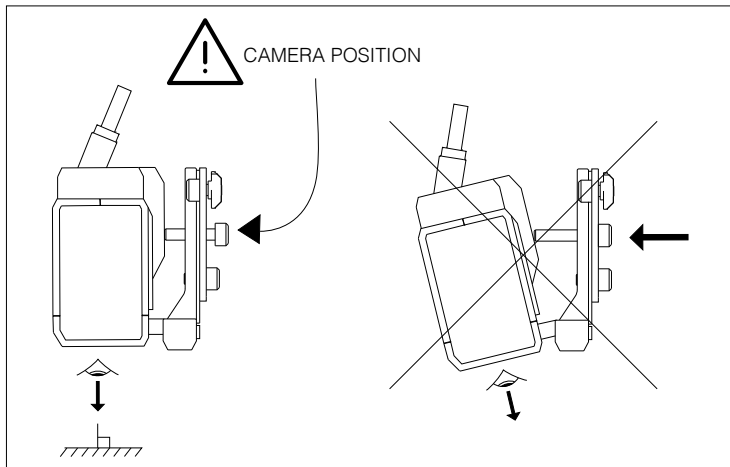


- Glue the PMMA cage parts together.
- Place the cage on the bottom plate in respect to the marks.

13

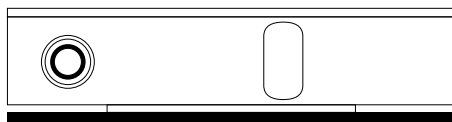
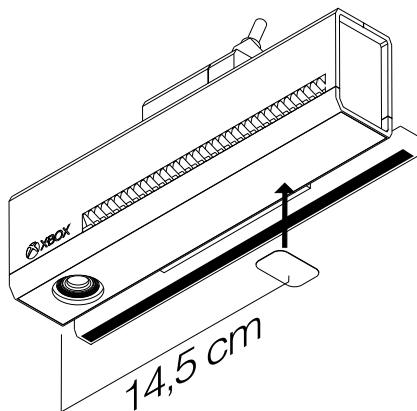
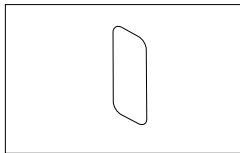


- Attach the Kinect to the Kinect support slab using the mount screw. Tighten the screw so the Kinect mount cannot move.
- Place the adjustment screw on the upper hole on the Kinect support slab.



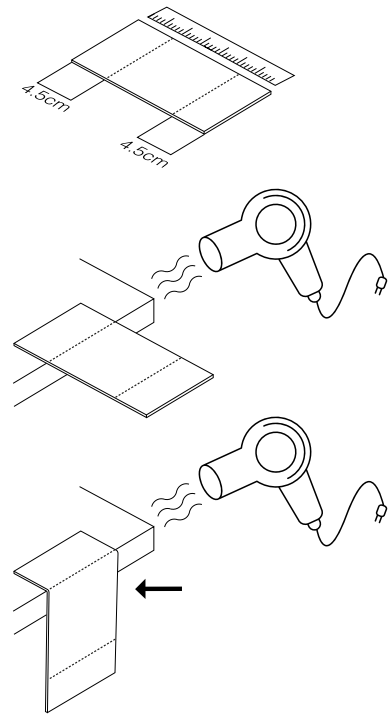
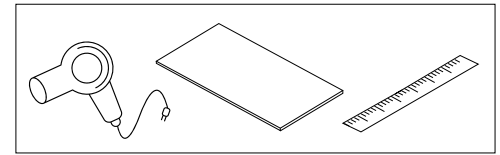
- Adjust the Kinect position with the adjustment screw so that the camera faces the bottom plate at 90°.

14

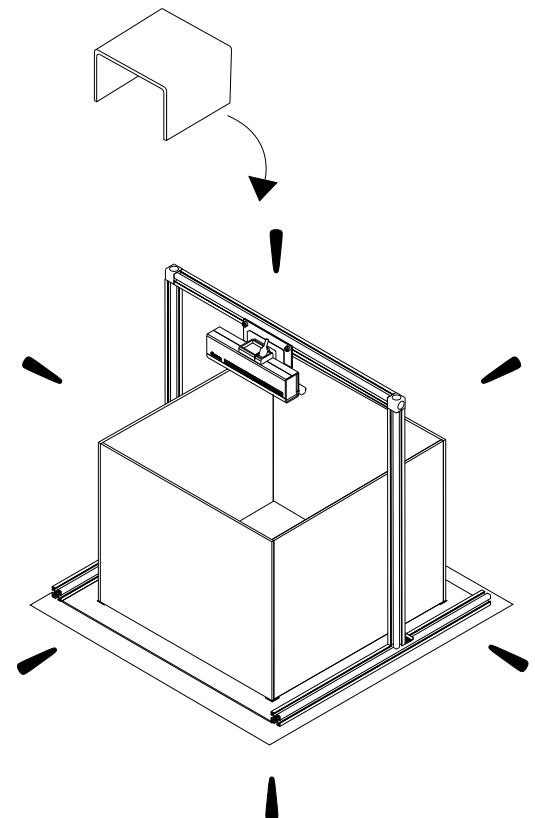


- Place a masking tape at the bottom of the Kinect.

15



- Make two marks on the house plate.
- Align the mark to the edge of the table.
- Heat the mark with a hairdryer until the plate starts bending. Be careful not to keep the hairdryer too close to the plate to avoid melting the surface.
- Stop when you get a 90° angle.
- Do the same with the other side.



- Put the house in the cage.

Bravo, you've built your own phenotyping setup!