MultiBall Pro - Setup Guide 3.6

LYMB.iO GmbH

Remote Control
MultiBall Admin

Dear customer,

The following are the user accounts for your https://multiball-admin.net/ web interface to update, edit, individualize and control your MultiBall remotely.

Admin Account :
To be used to edit, update, individualize and control the MultiBall.

Username:
Password:

Regular Account:
To be used on a daily basis (games switching permissions, session start and stop) e.g. at the counter.
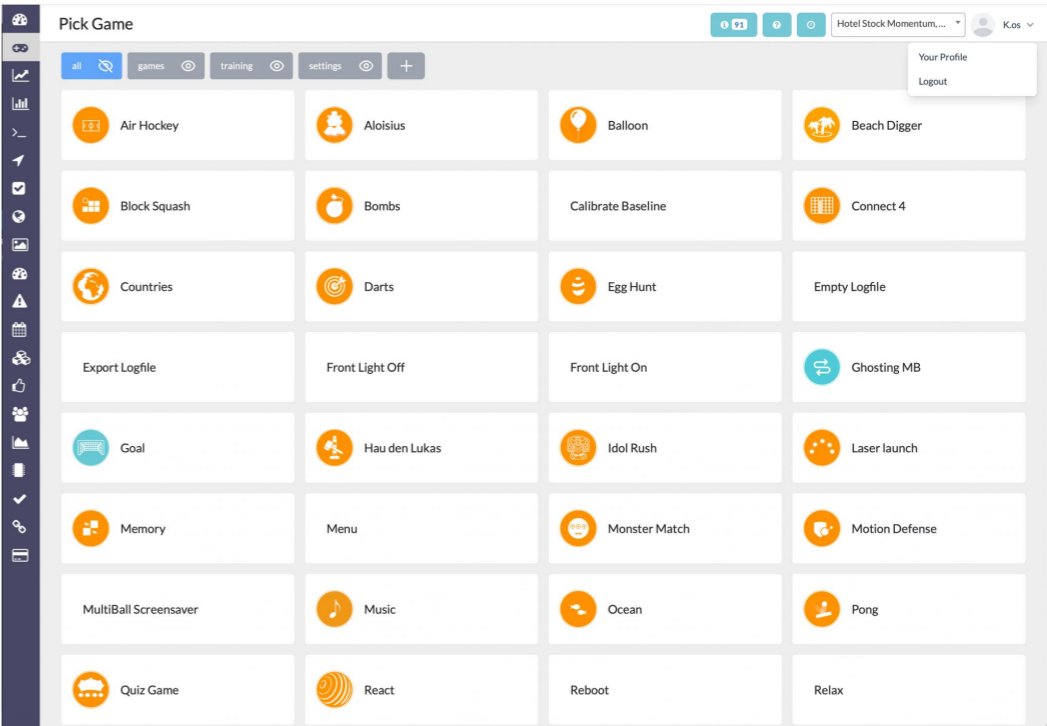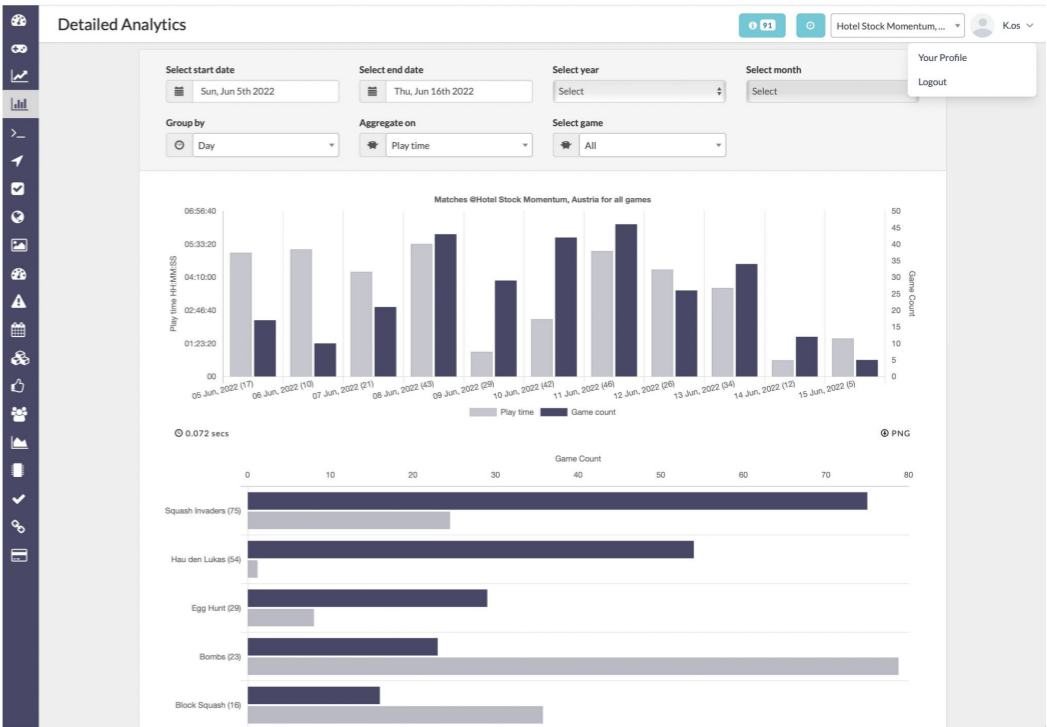
Username:
Password:

Default Account :
This account will be used in case MultiBall is used anonymously (no player logged in with the smartphone app).

Username:
Password:

System Information:
Serial Number (SN):

# MultiBall Admin
System Health

In case your MultiBall does not work, you can find out the cause in your MultiBall Admin.

Go to your MultiBall system under the menu item called **Health**.

Here you can see if the system is online or not. Furthermore, four statuses are displayed, with which the system can be checked by yourself.
All green shows that your MultiBall has the latest updates, is logged in, has a running connection to the projector and the sensors are free of dirt.

If one of these points lights up red, it means there is a problem. In the case, click on the label to get further information on how to fix the problem.

Example on the right:
Sensors are dirty and should be checked. Click on the red field and you will get a message showing you where the sensors are dirty exactly. Please clean the sensors and the light will turn green.
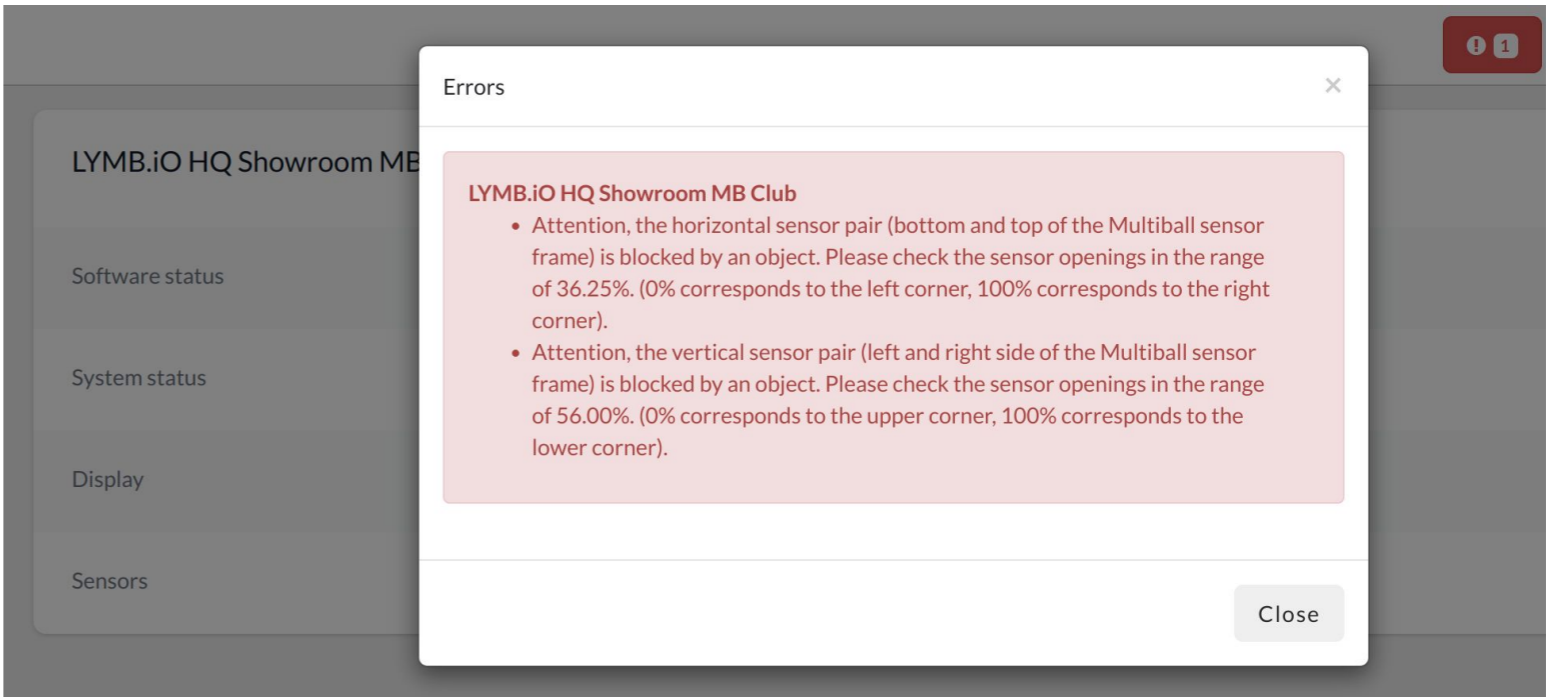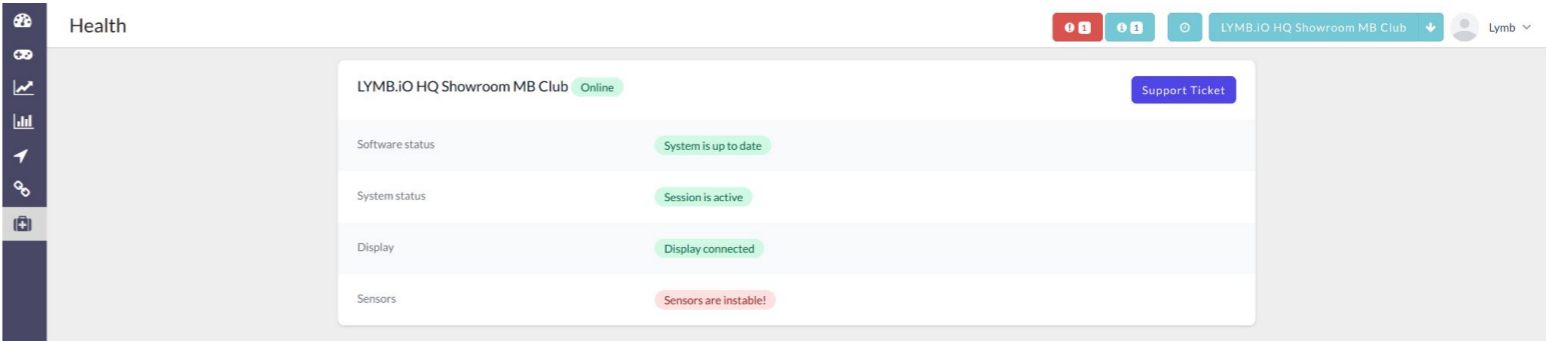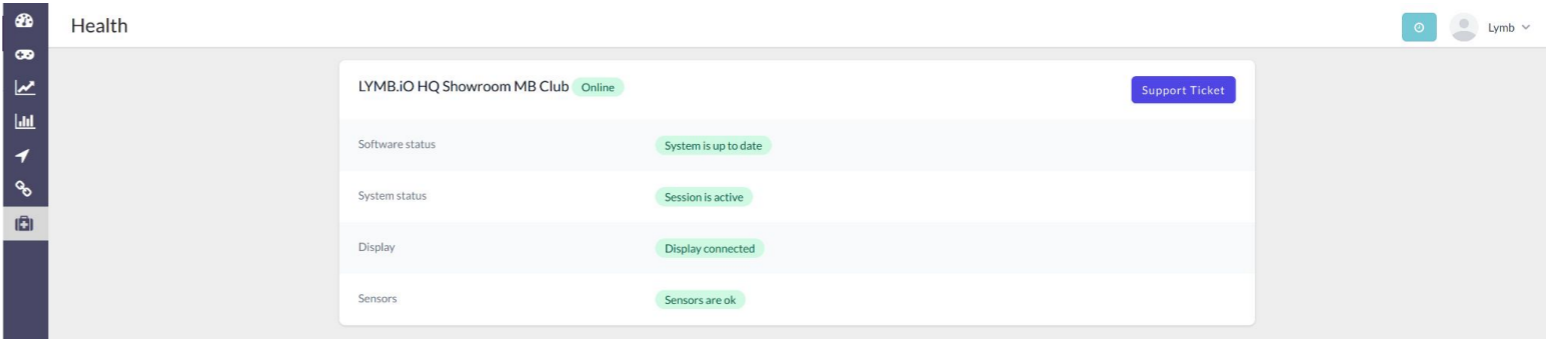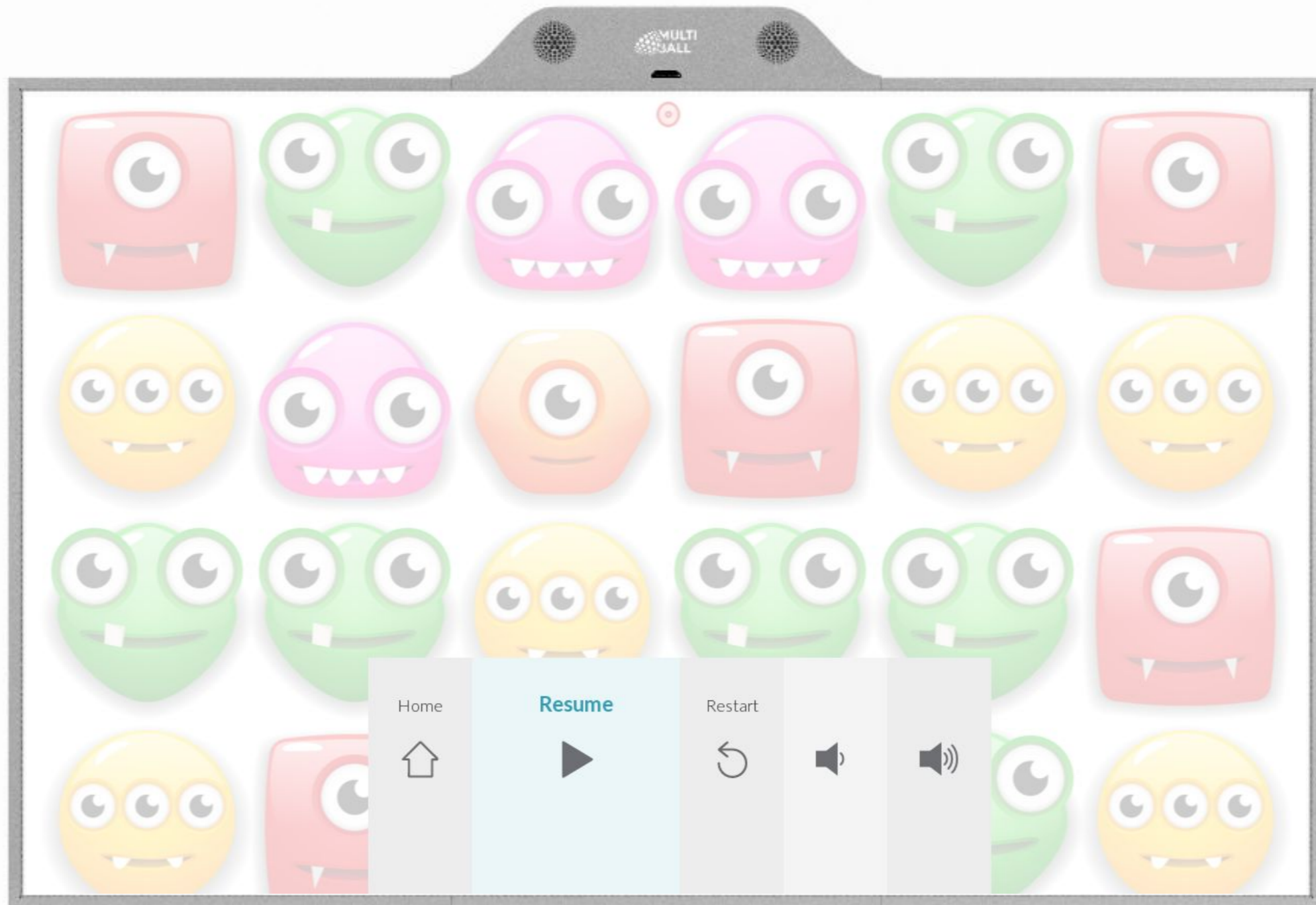
System Control
Menu - Home Screen

1. Choose between Games and Trainings.
2. Start an application by touch and hold an icon for 2 seconds.
3. Remote control by smartphone.

TRAINING

MULTI BALL

Switch to Training

Switch to Training

Touch wall to select

Scan QR-Code to connect with the LYMB.iO smartphone app.

System Control
In-Game Menu

1. You can open the In-Game menu by touch and hold the surface for 2 seconds while playing a game.
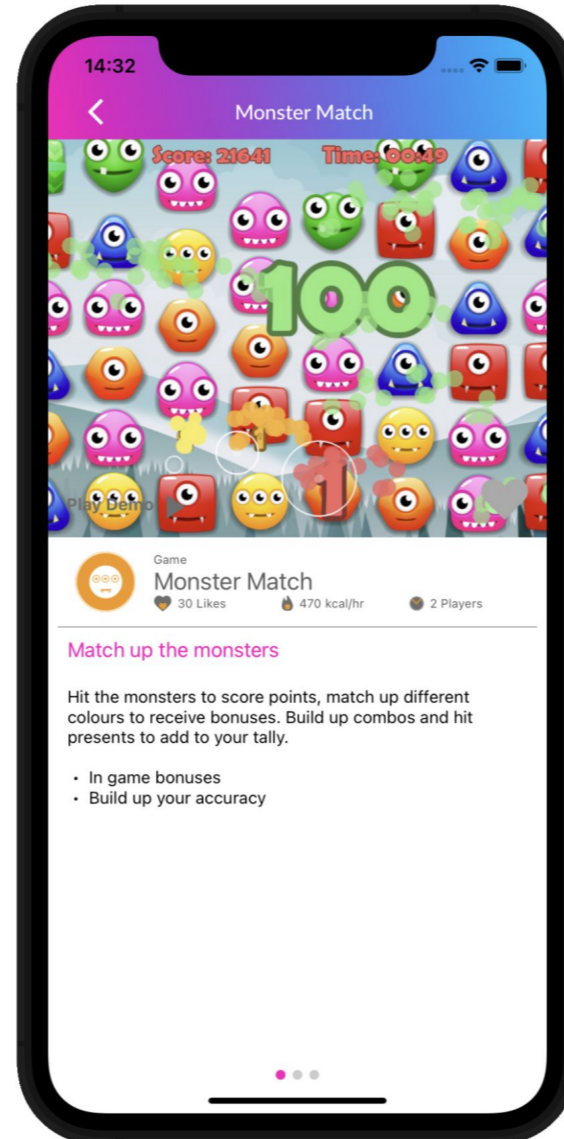2. Here you can go back to the home screen, resume or restart the game and adjust the volume.

System Control
LYMB.iO Player App

App download:

Apple:

Android:

Technical Specifications MultiBall Pro

What's In The Box
Console
Sensor Frame
AC Power Cord
Installation Guide

Dimensions (WxHxD)
489 x 335 x 14 cm
192 x 132 x 6 Inch

Connectivity
Power: 110V / 220V / 230V
Internet: Ethernet
Video: HDMI (use quality cables)

Audio
Internal Sound System

Technical Specifications MultiBall Pro

The system needs a projector, that is mounted as close and high as possible to avoid shadows.
Please use a high quality HDMI cable (no active cables).

Recommended Projectors:

- Brand: Panasonic
- Brightness: min. 5000 ANSI lumens
- Physical resolution: 1920 x 1200 WUXGA
- Light Source: Laser (long lasting)
- Keystone Correction: horizontal, vertical
- Corner Correction

Use this site to accurately calculate the distance you need for lens and projector:

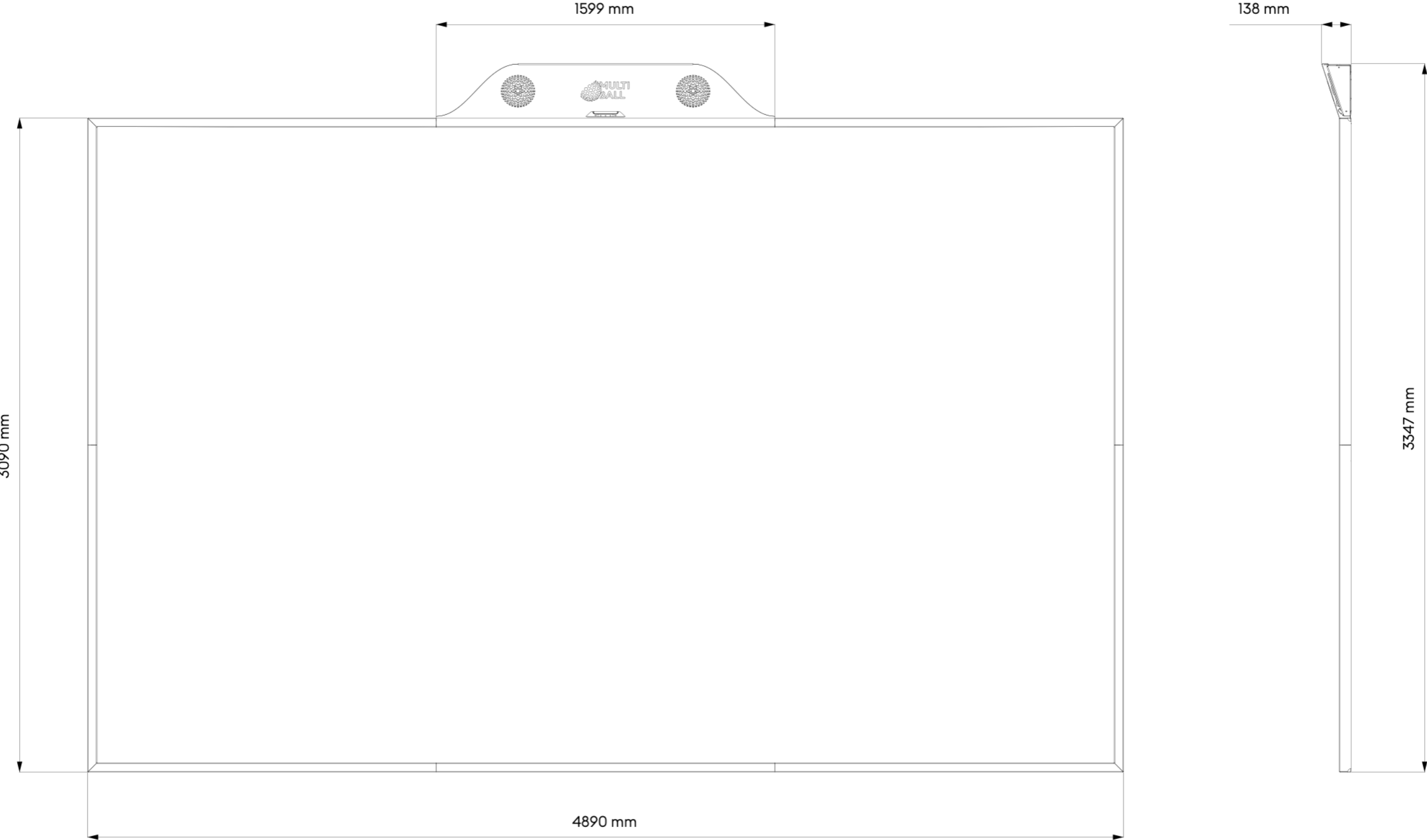https://panasonic.net/cns/projector/calculator/tdc/index.html
Please ask a local projector dealer to help you choose the right projector for your light conditions and the projector distance.
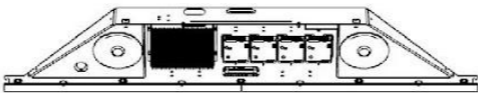
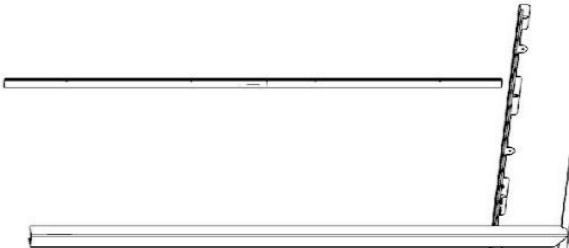**Recommended play area:**

5,8 x 5,8 m

Dimensions in mm

1599 mm
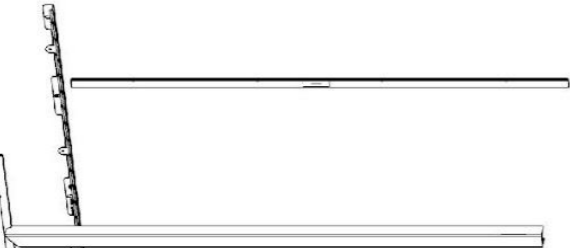
138 mm

3090 mm

3347 mm
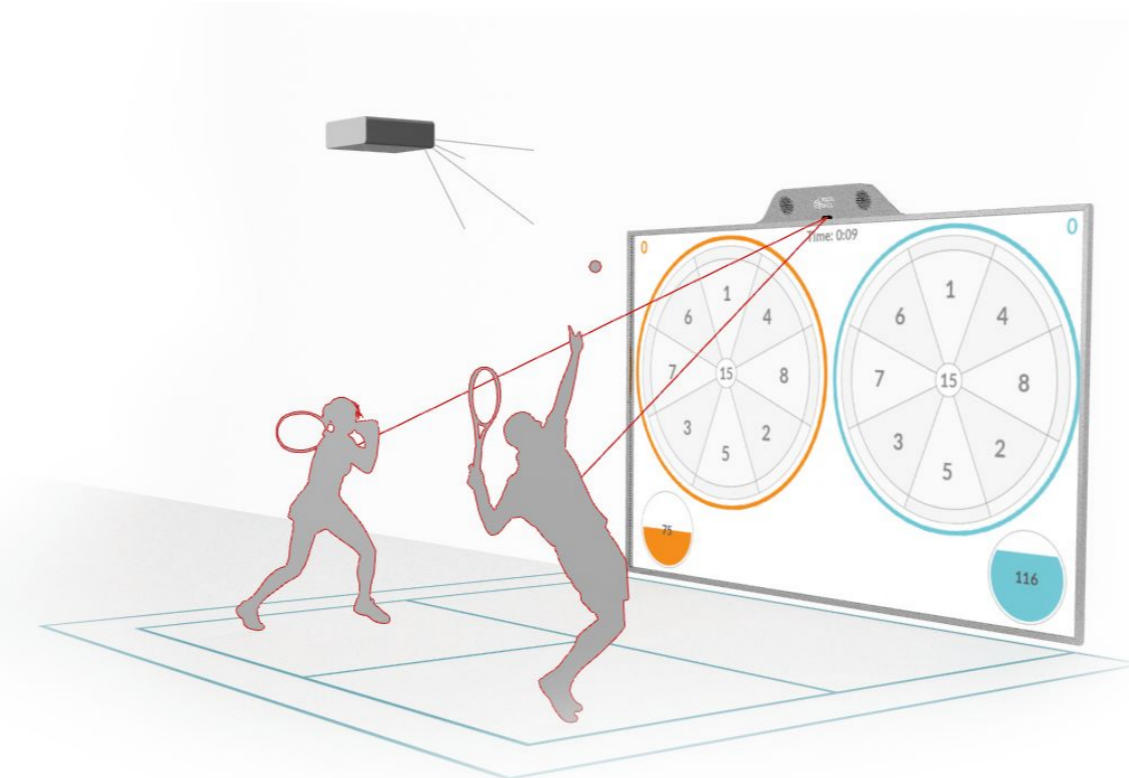
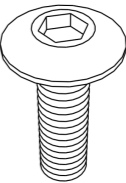4890 mm

Hardware

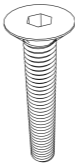Console (1x)

Console Cover (1x)

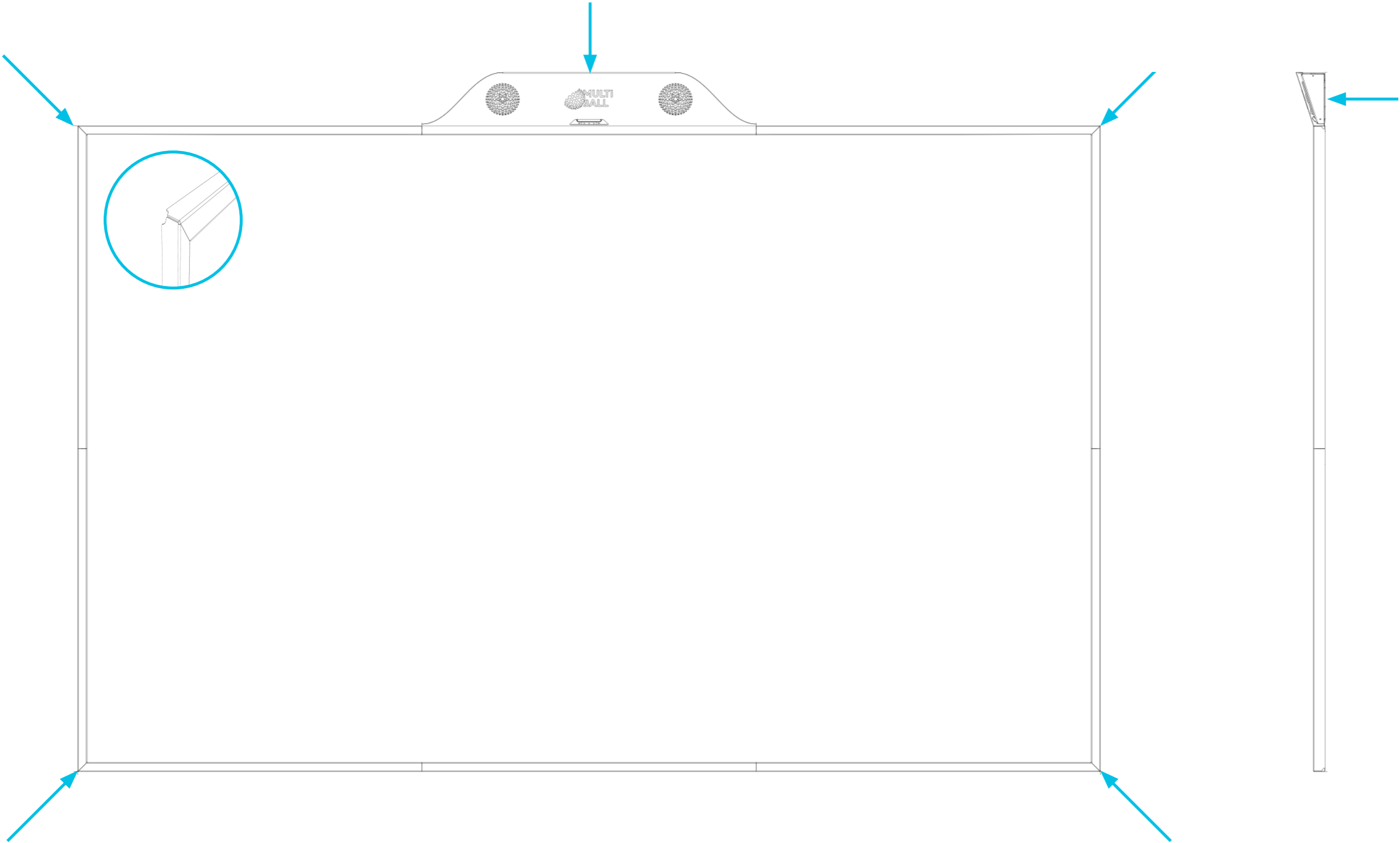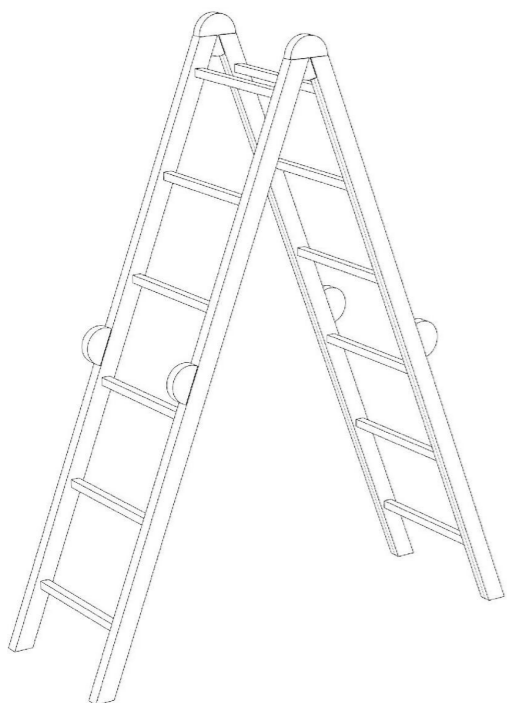Holder (x9) Sensor (x12) Cover (x8) Sensor Bolt **TX20** Torx, M4 (x40) Cover Bolt **TX30** Torx, M6 (x32)

Cable Management
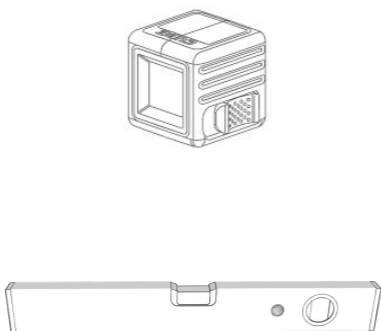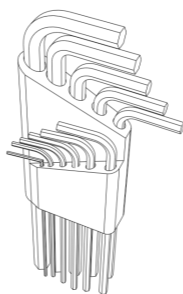There are 6 cable outlets to run the HDMI, LAN and power cable.

Recommended Equipment

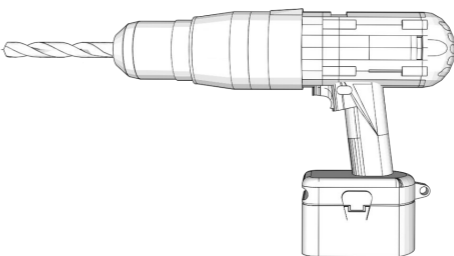Please consider you will need a power and an internet socket (LAN cable not included) close to the system.

There are 52 holes with a diameter of 8mm.

| Ladder	Laser Level	TORX Key TX20, TX30	Drill	Screws and Dowels for Wall Mounting

Wall Preparation
Mount Holders and Console

Paint the wall with normal white and **matte** wall paint.

Analyze the flatness of the wall.

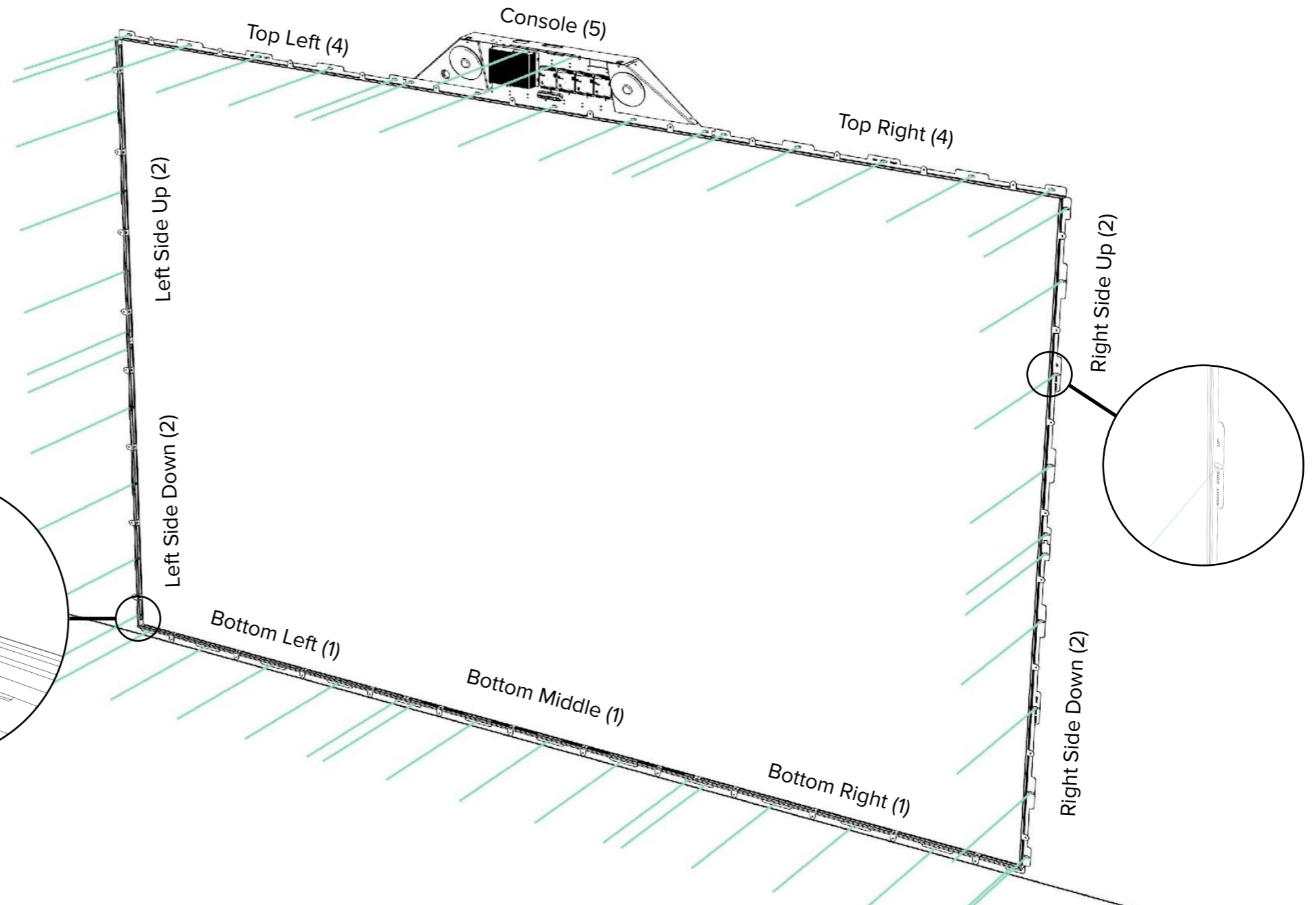Use spacers to compensate for dents in the wall.

Start with the bottom frame. Make sure the left and right sides are completely leveled and parallel. Mount the top left and top right, and then the bracket.

LAN / Power / HDMI
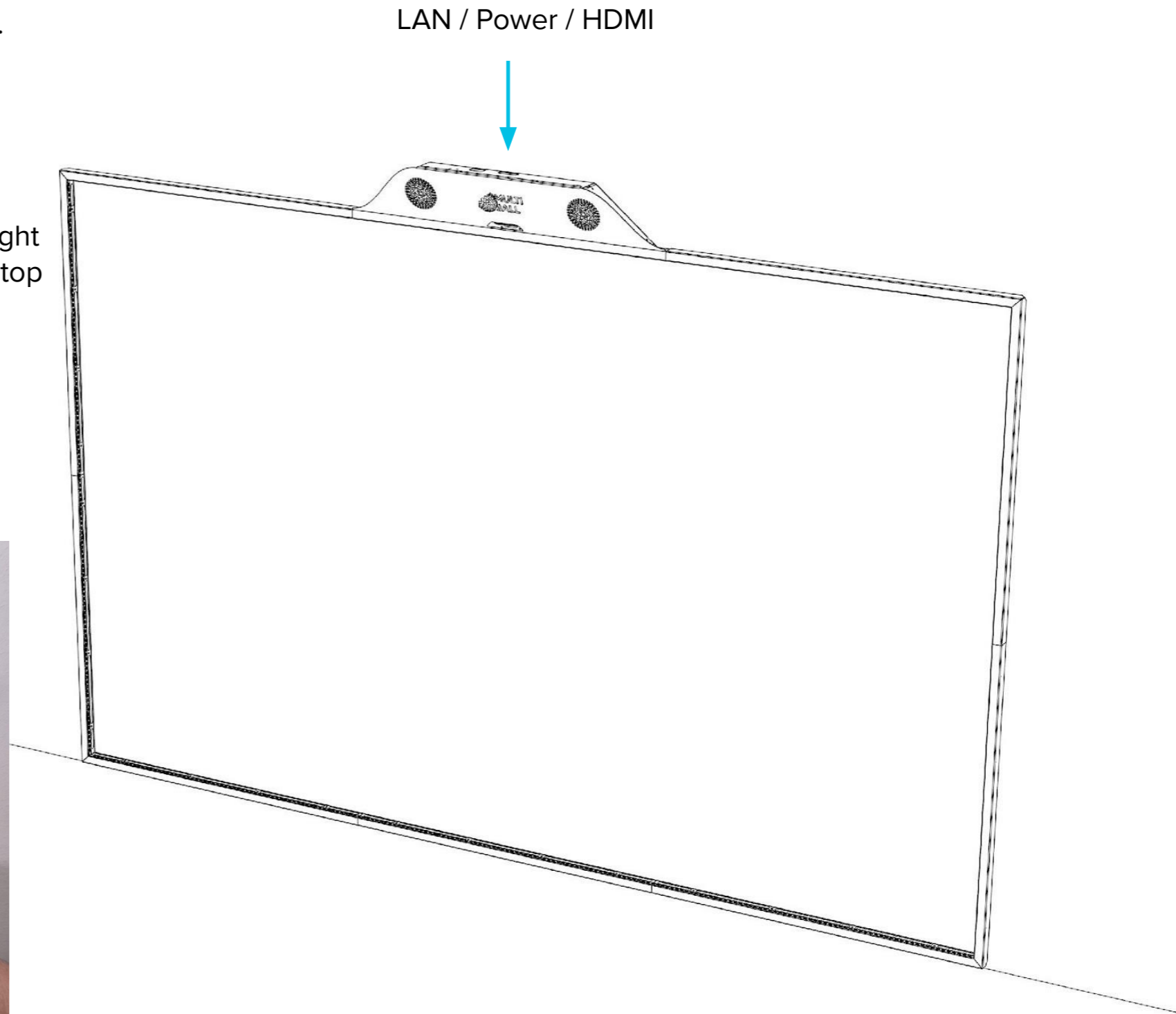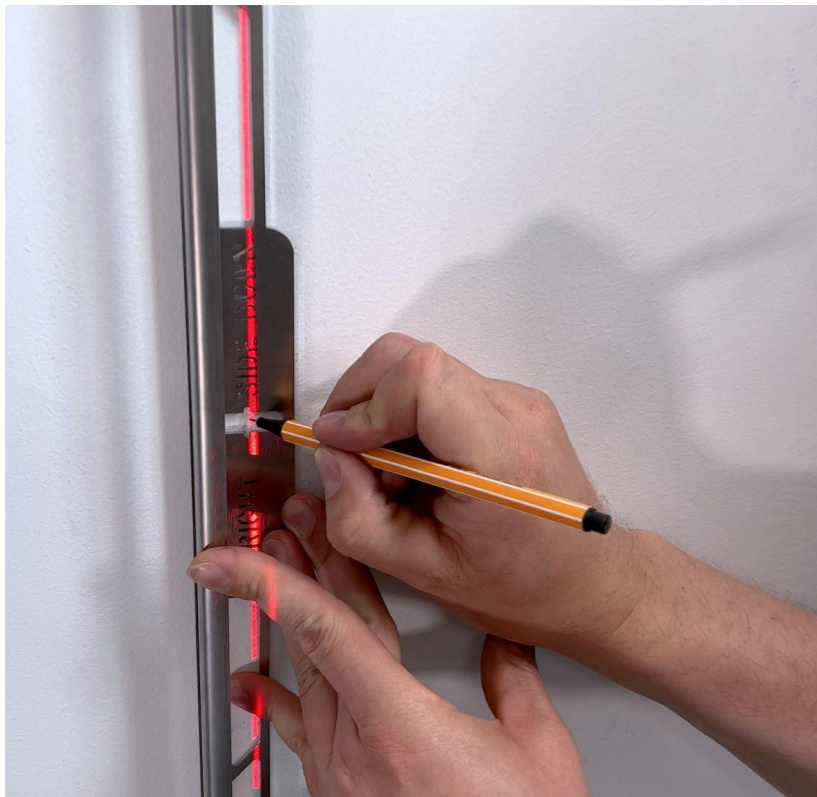
Step 1
Mount Holders and Console

1. Mount the Bottom Holders Left and Right touching each other (Recommended distance to floor 10 - 20mm).

2. Mount Left Side and Right Side.

3. Verify Left and Right are fully leveled and parallel.

4. Mount Top Left and Top Right.

5. Mount Console (next two pages).

Top Left (4)

Console (5)

Top Right (4)

Left Side Up (2)

Right Side Up (2)

Left Side Down (2)

Bottom Left (1)

Bottom Middle (1)

Bottom Right (1)

Right Side Down (2)

⚠ Please always make sure all profiles are leveled in order to make the top Frames touch each other with no gap.

ⓘ Please select the suitable bolts, dowels and washers to attach the frame to the wall according to wall properties (2-4 screws per part).

Step 2
Open Console
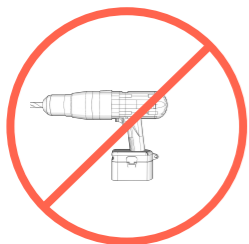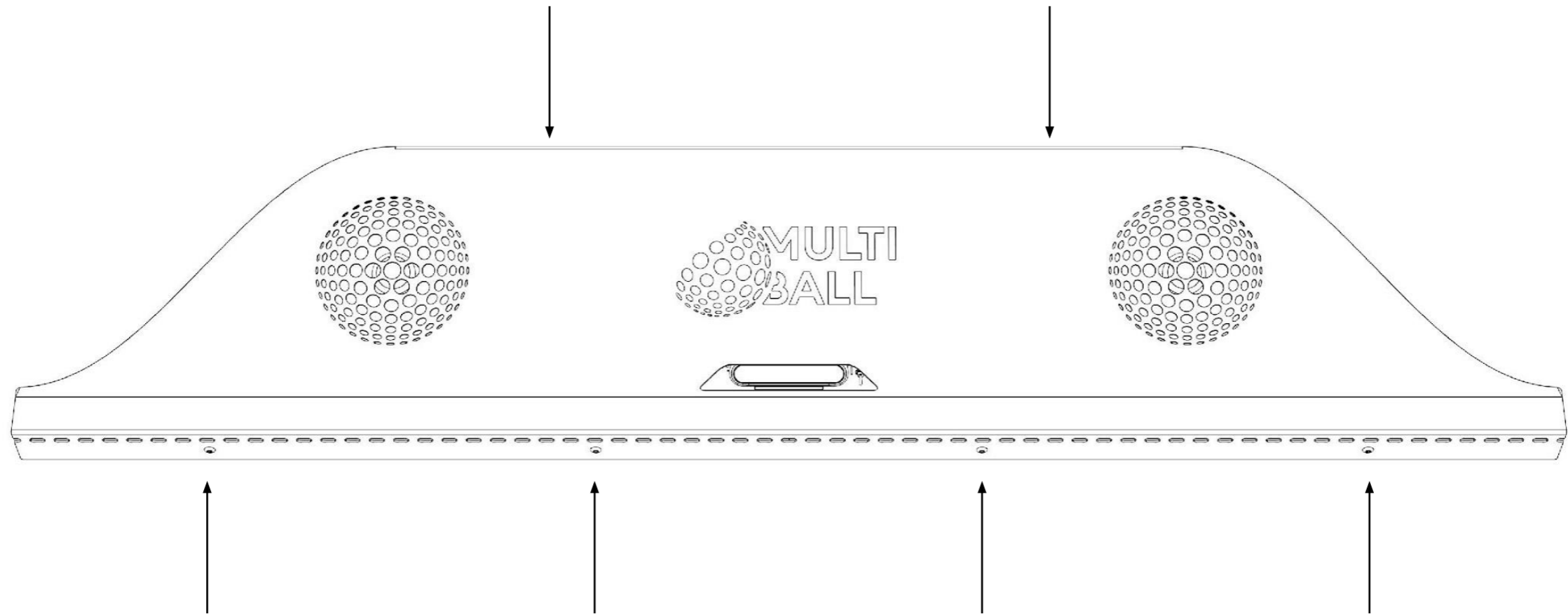
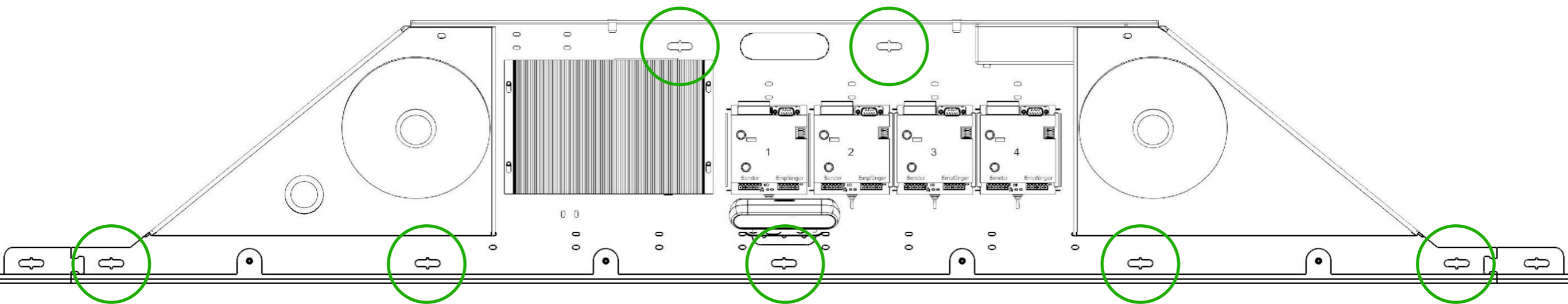Remove the 6 screws and lift up the cover.

Cover Bolt **TX30** Torx, M6

Step 3
Mount Console

Secure the Console with 7 bolts.

Step 4
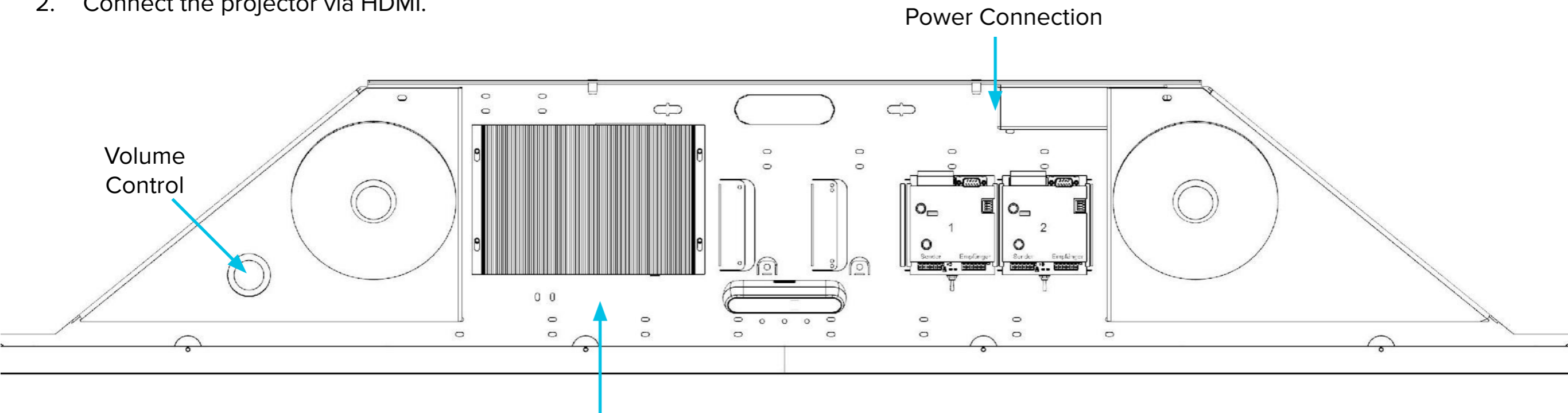## Cable Connections, Firewall

1. Connect the Console to power outlet and to Internet.
   Firewall Settings
   These Ports need to be open (outbound):
   - 22 TCP
   - 53 UDP/TCP
   - 123 UDP/TCP
   - 443 TCP
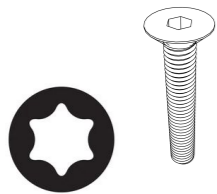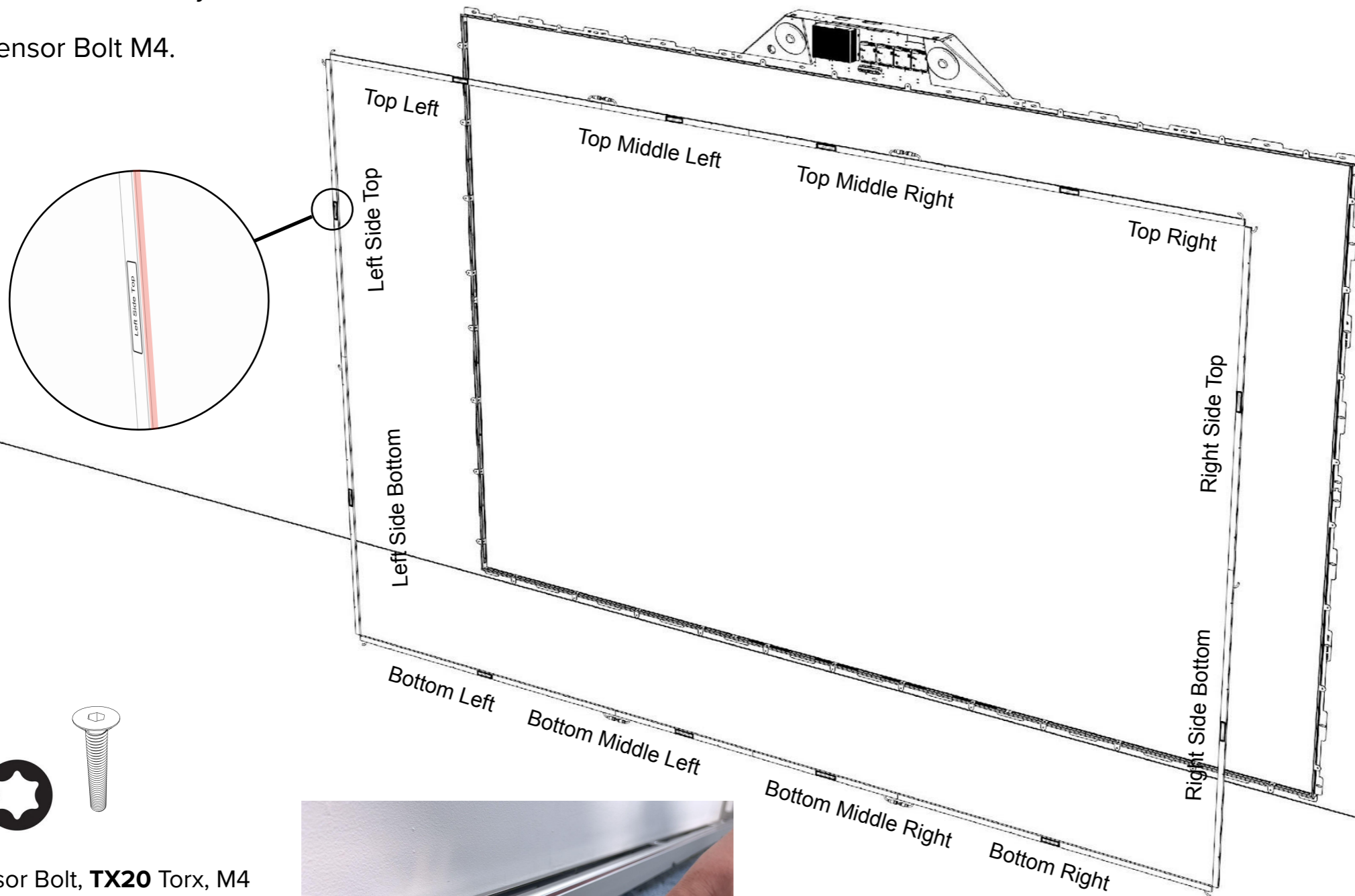   - 1194 UDP
2. Connect the projector via HDMI.

Power Connection

Volume Control

LAN   HDMI

Step 5
Mount the Sensors

Mount all Sensors with the red surface facing inwards.
The sticker must face you.

Use Sensor Bolt M4.

Top Left

Left Side Top

Top Middle Left

Top Middle Right

Top Right

Left Side Bottom

Right Side Top

Bottom Left

Right Side Bottom

Bottom Middle Left

Bottom Middle Right

Bottom Right

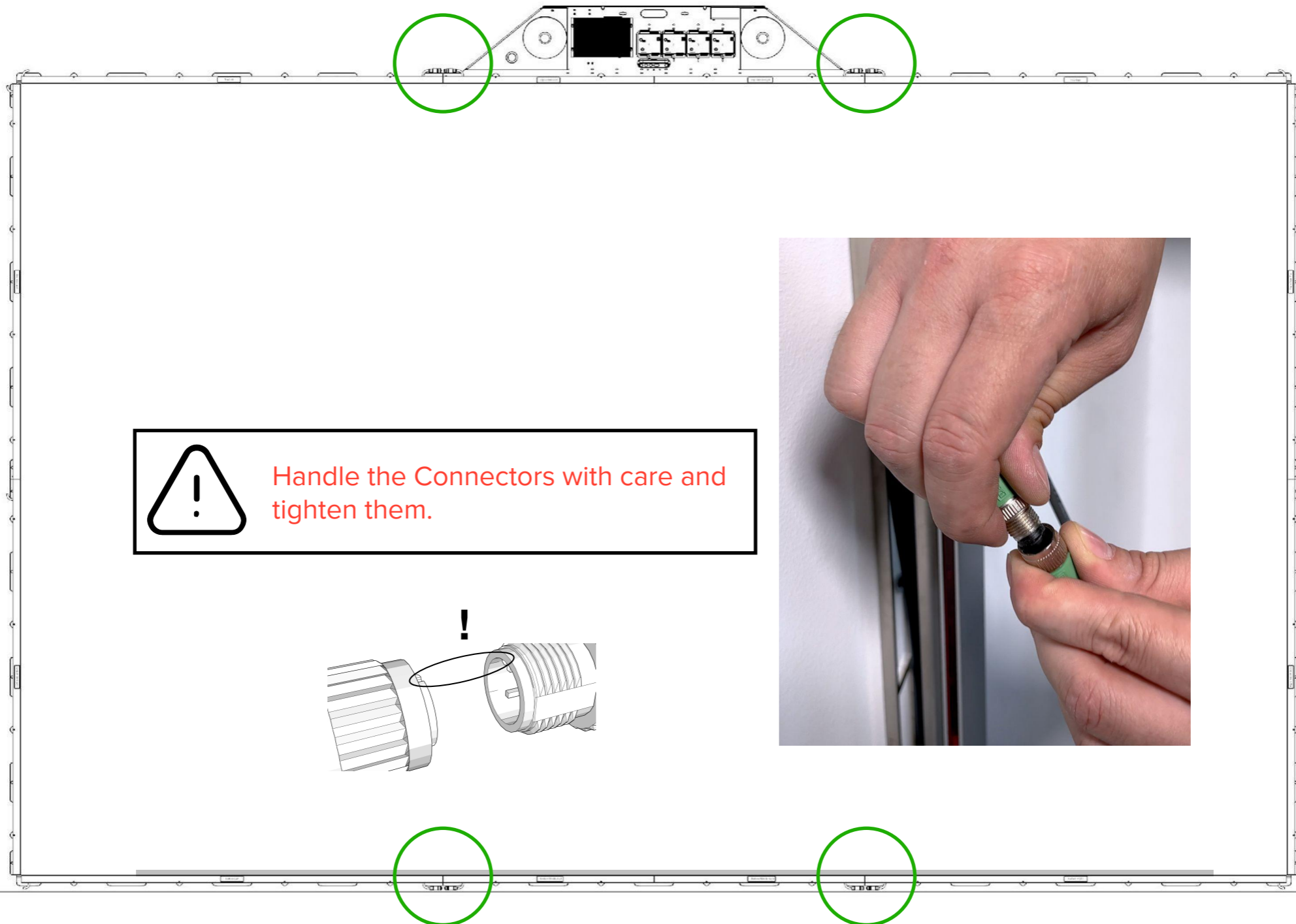Sensor Bolt, **TX20** Torx, M4

Bottom Right

Do not over-tighten the bolts!

Step 6
Connect Sensors

1. Connect the Sensor Top Left with Top Left Middle and the Sensor Bottom Left with Bottom Left Middle.

2. Connect the Sensor Top Right with Top Right Middle and the Sensor Bottom Right with Bottom Right Middle.

⚠ Handle the Connectors with care and tighten them.

Step 7
Cable connections

Connect the Sensor Cables with the Controllers.

| 1 | 2 | 3 | 4 |

1S   1E   2S   2E   3S   3E   4S   4E

1 S

2 S

3 S

3 E

4 S

4 E

1 E

2 E
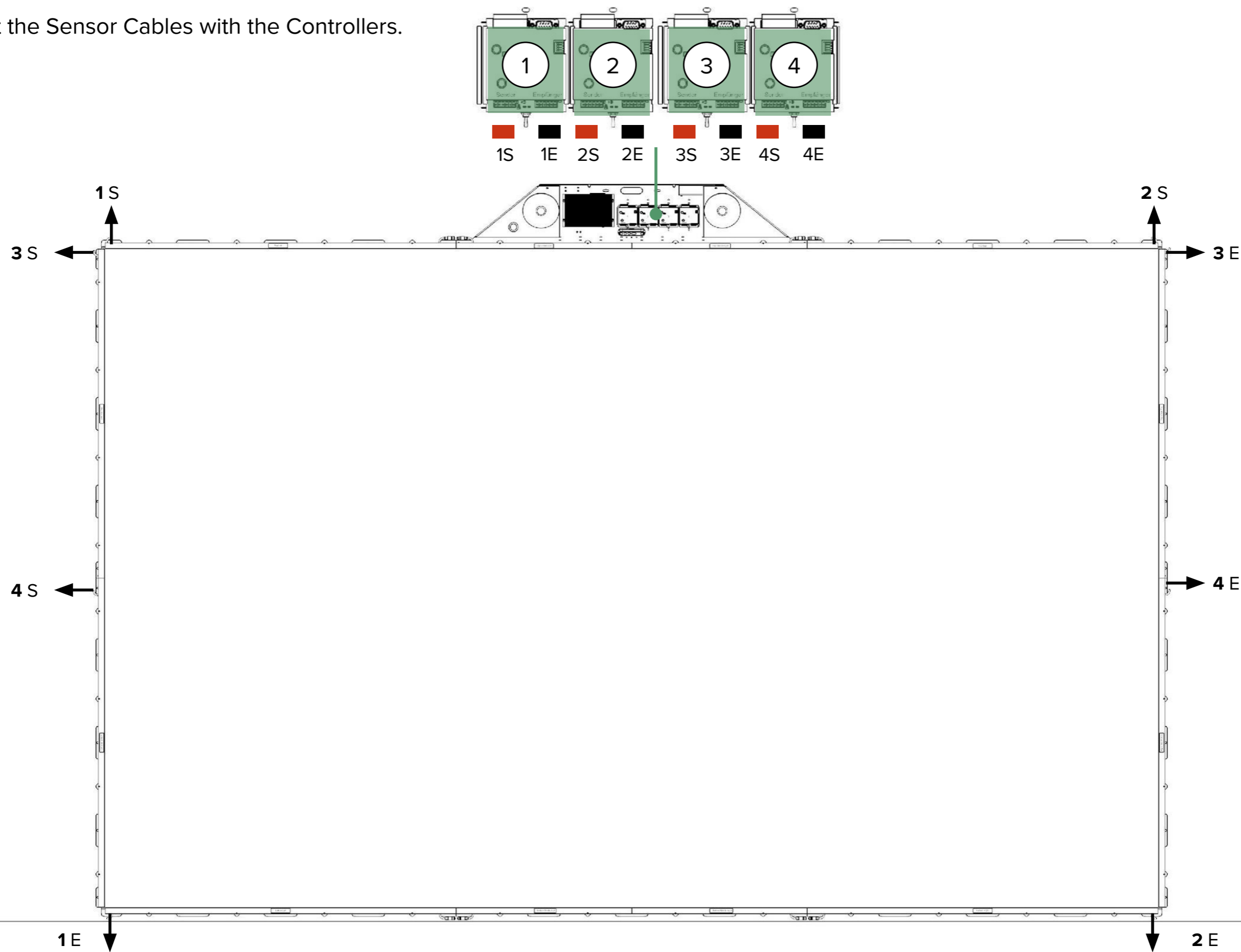
Step 8
Controller Setup (1, 2, 3 and 4)

1. Power off Controller 1, 2, 3, and 4 by the off/on switches.

2. Make sure no objects are between the sensors.

3. Switch up (ON) the DIP 3 on Controller 1.

4. Power on the Controller 1.

5. Switch down the DIP 3 on the Controller 1 and wait until the „OUT 4 / IN 2" green LED comes up (if this light never went off, please wait 5 seconds).

6. Test the sensor by touching the wall:

   "OUT 1" green LED blinks as you interfere the light bars.

   Center LED blink in a steady interval to show that the unit is alive and working.

7. Power off Controller 1 and repeat the same steps with Controller 2, 3 and 4, starting from step 1 - 6 and move on to step 8.

8. Power on Controller 1 - 4.

OUT 4

DIP 3

DIP 3

⚠
- Don't change any of the DIP in the MB sensors except DIP 3
- LEDs in the center show the signal's strength in real time and these might flicker with slight signal changes, which is FINE
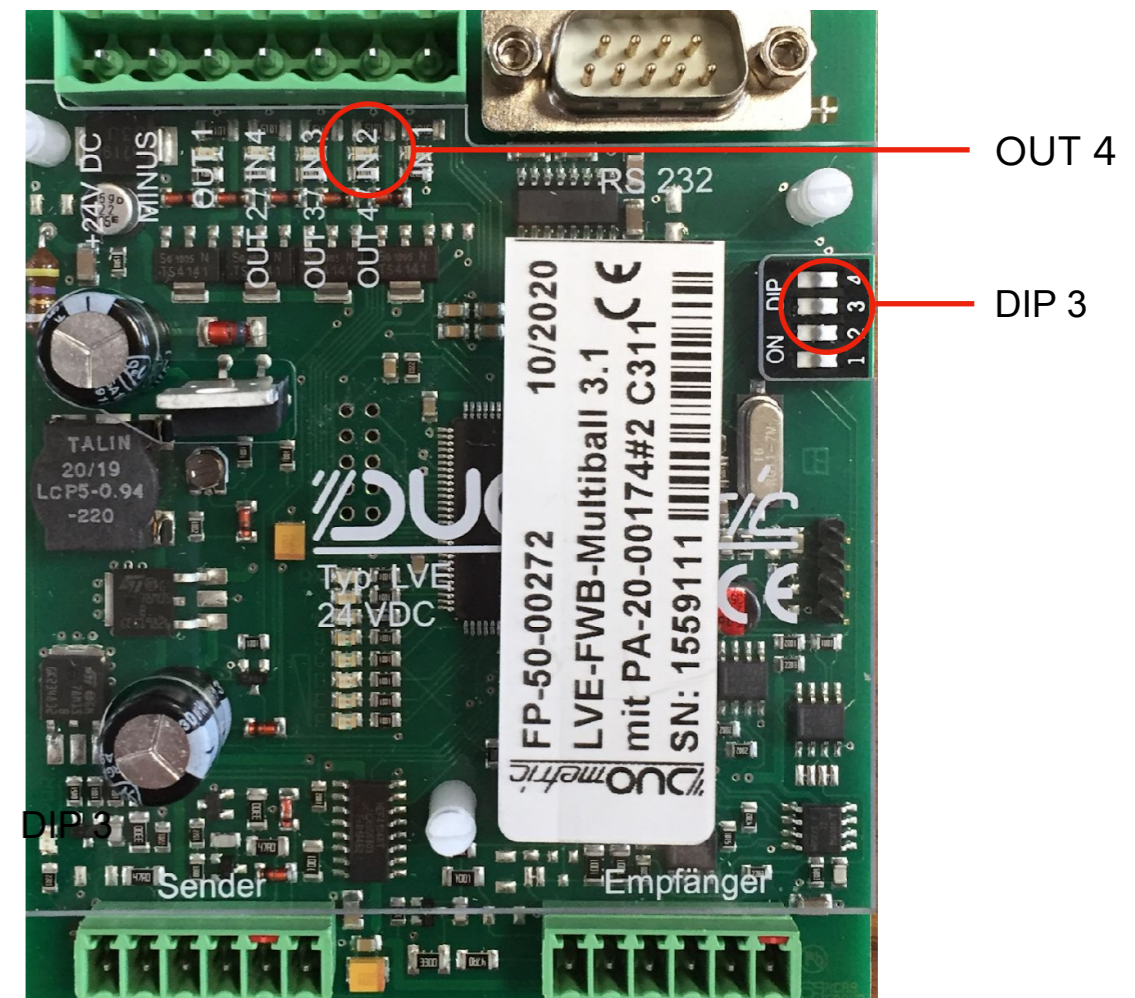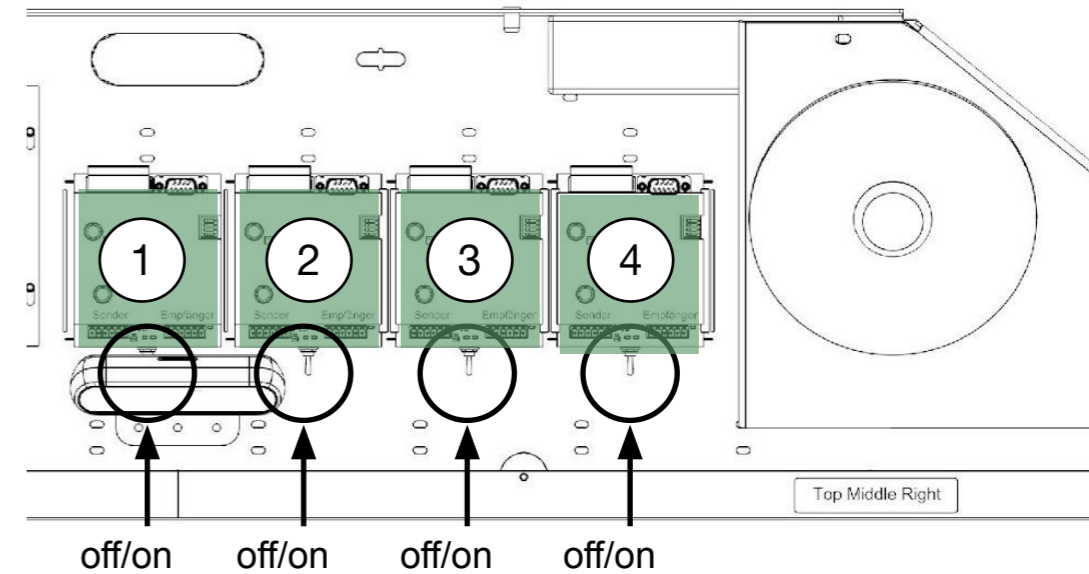
Step 8
Controller Signal Strength Details

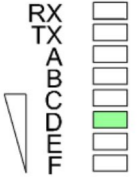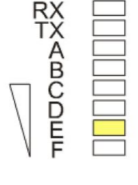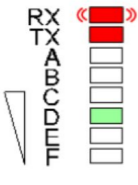Signal strength: C is maximum, F is minimum.

D is what the controller tries to reach during calibration.

These conditions are referred to when nothing interrupts the beams.

You can see these level indicators also working during the normal operation.

If you have a weak signal, please check the sensors' fields of view and make sure the sensors can see each other.

LED-display during calibration

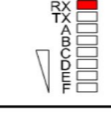| LED				Description
	D	E	Rx, Tx	
RX TX A B C D E F	On	Off	Off	Calibration OK.
RX TX A B C D E F	Off	On	Off	Calibration acceptable. Possible reasons: – Distance between sender and received too large => Reduce distance; use senders with "extended range" option – Individual beams interrupted or profile contaminated – Intensity differences between strongest and weakest beam to large
RX TX A B C D E F	On or Off	On or Off	On or flashing	Calibration failed Individual beams have been recognized as faulty. Only limited functionality available!

LED A

		Signal	Status	Possible causes
RX TX A B C D E F		A (yellow) illuminated	Warning	Blanked beams, watchdog.

LED B

		Signal	Status
RX TX A B C D E F		Even flashing (approx. 2 Hz)	Normal operation
		Double-flash	Configuration mode
		continuously ON or OFF	Sync error, serial communication "crashed", defective

Error-LEDs

		Signal	Error
RX TX A B C D E F		RX (red) on	Receiver A
RX TX A B C D E F		TX (red) on	Transmitter A
RX TX A B C D E F		RX & TX on	Controller; SyncError

Special LED combinations

|		Description				Description
RX TX A B C D E F		Hardware fault, please inform manufacturer		RX TX A B C D E F		Hardware fault, please inform manufacturer
RX TX A B C D E F		Parameter outside of permitted limit values => correct in configuration mode (reset to defaults if necessary)		RX TX A B C D E F		Length of connected profiles does not correspond with stored values => perform calibration

Step 9
Mount Covers

1. Mount the Covers with the sensor holes facing inwards.

2. Use Cover Bolt M6.
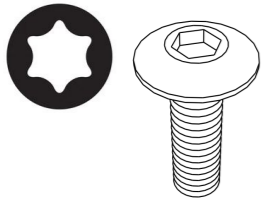
Cover Bolt **TX30** Torx, M6
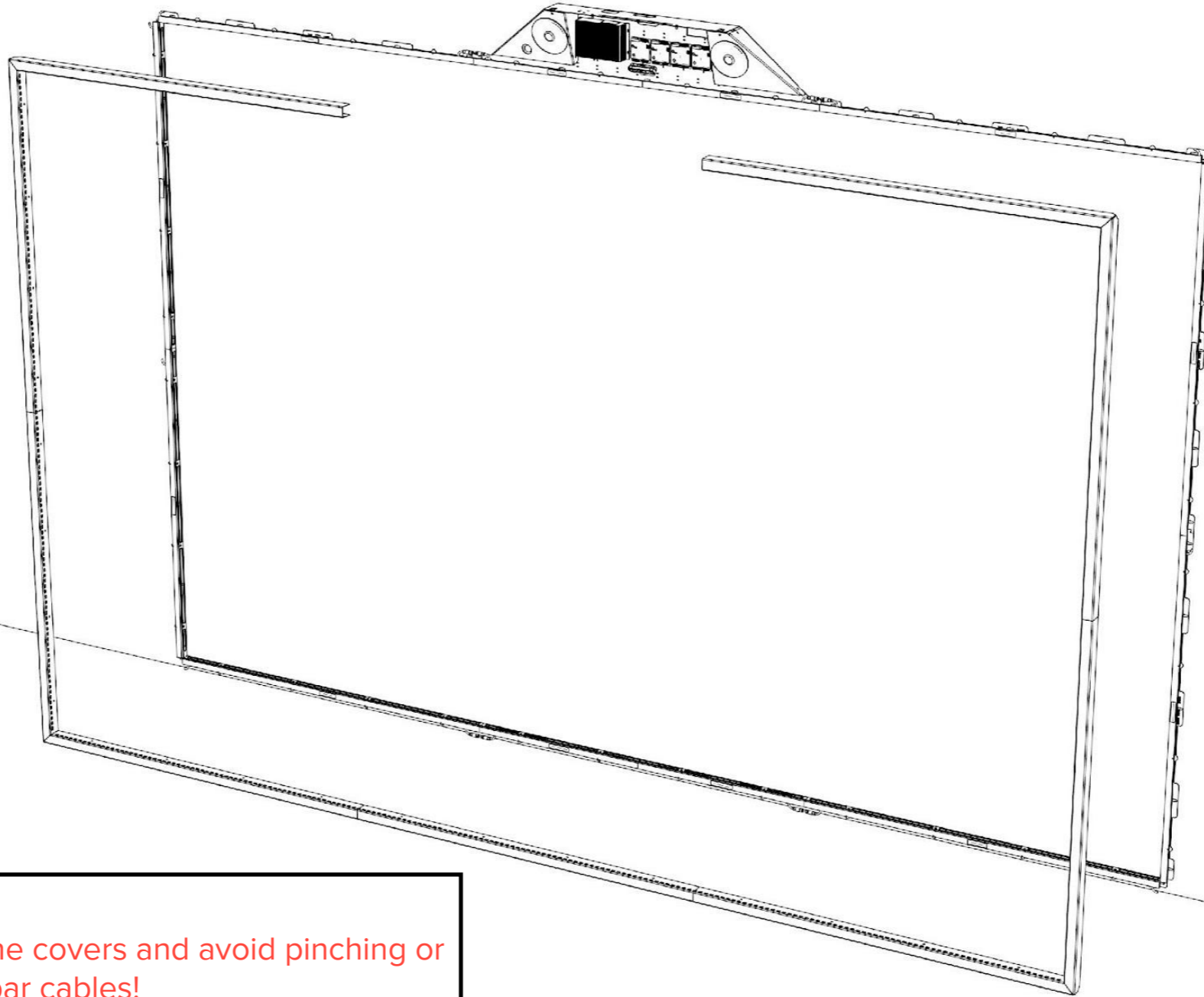
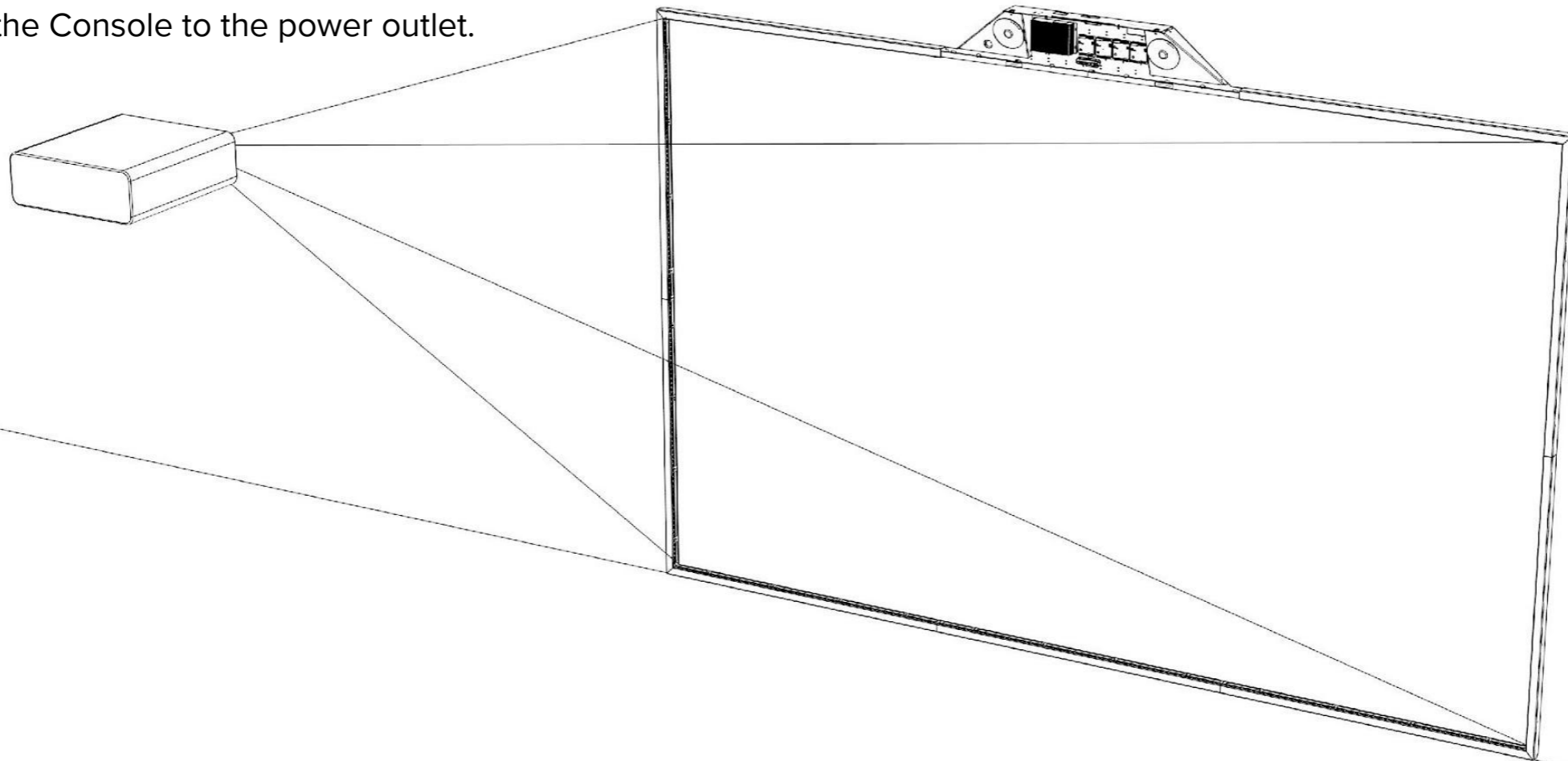⚠ Carefully slide in the covers and avoid pinching or bending the light bar cables!

ⓘ Once the covers are on you can repeat Step 8 "Controller Setup"

Step 10
Connect Projector

1. Disconnect the Console from the power outlet.

2. Connect the Projector with a HDMI cable and switch on the projector.

3. Connect the Console to the power outlet.

⚠️ To set the picture first time make sure you power on the projector first and then the MultiBall console.
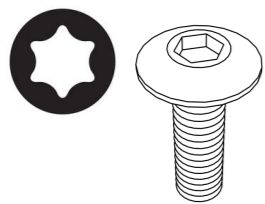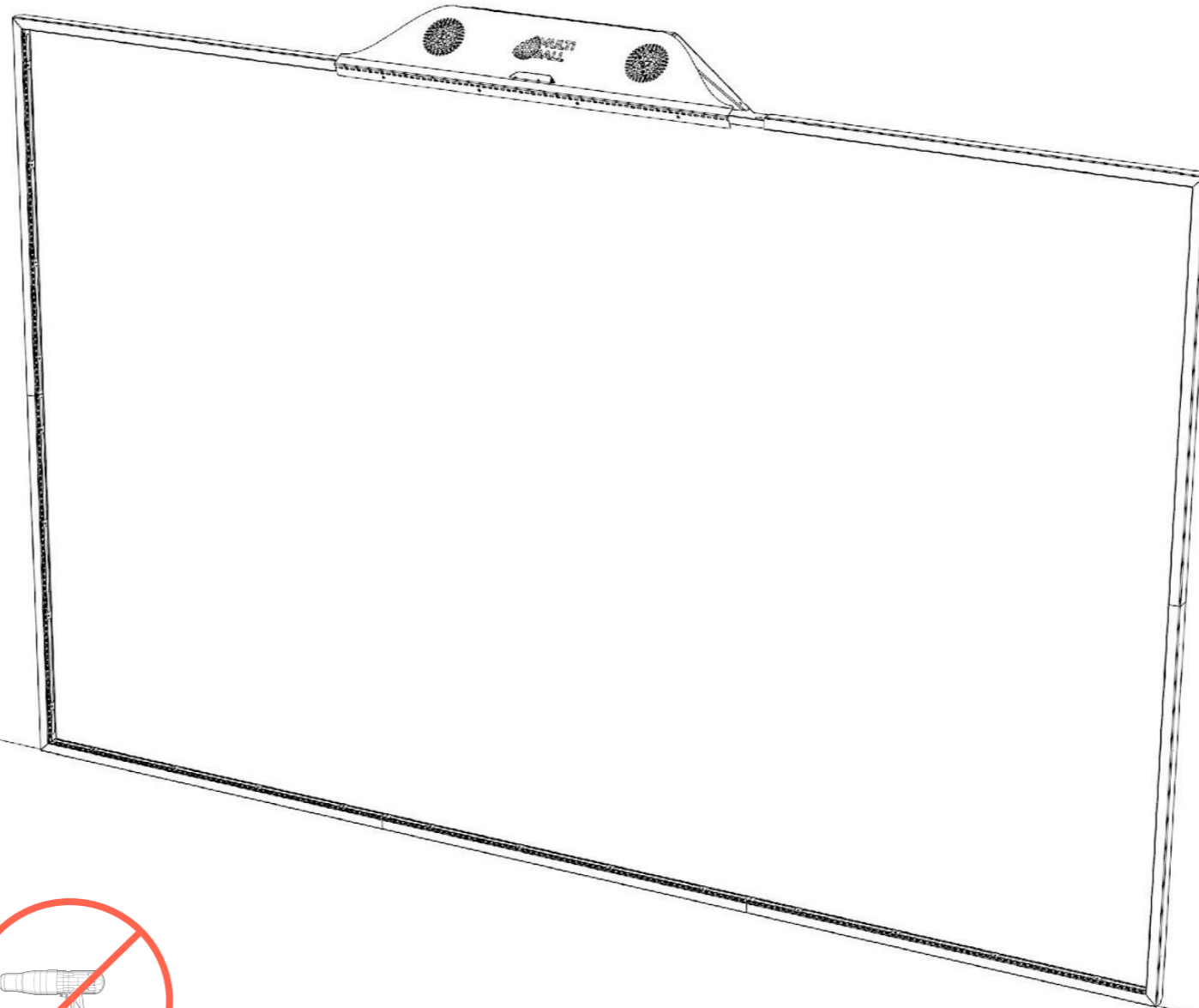
ⓘ Use 'Corner Correction' in your projector setting to align the picture so that it perfectly fits into the frame.
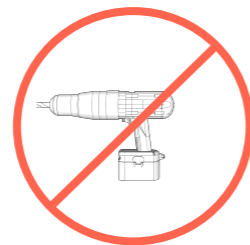
Step 11
Mount MultiBall Console Cover

1. Put back the Cover.

2. Use Cover Bolt M6.

Cover Bolt **TX30** Torx, M6

Use this step to adjust the volume of the amplifier. The volume can also be adjusted in the menu so try to find the best level suitable for you.
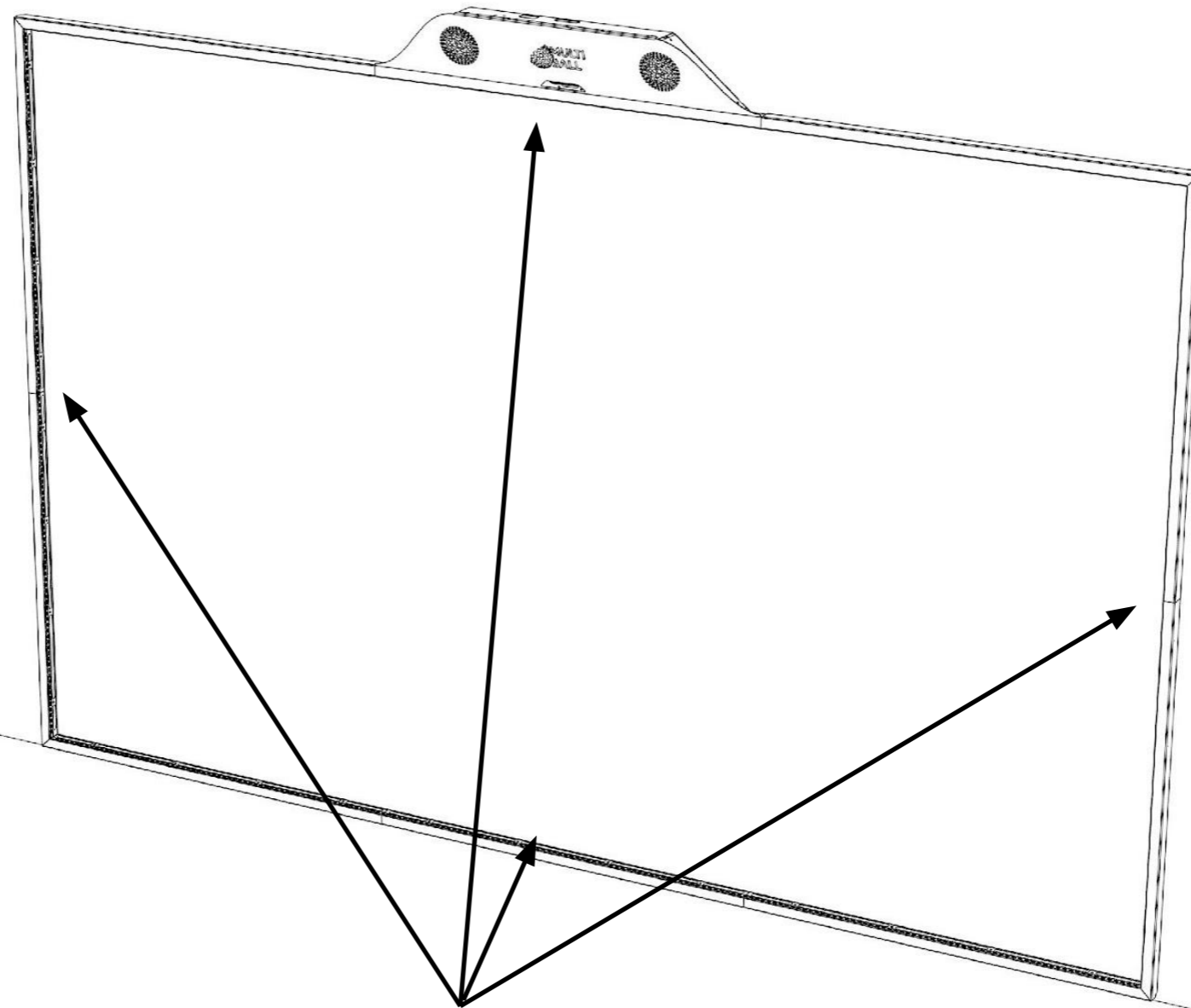
Maintenance
Support

In case of any problems of system not working, always first check the Sensors if they are clean and without any obstruction.

Take care of the system to avoid any kind of physical damage.

Do not step on the Sensor Frame.

You can reach us via https://multiball-admin.net/. Navigate to the page called **Health** there and create a **Support Ticket.**

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80805 Munich
Germany

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www.multi-ball.com

Vacuum sensors once a week.
(with covers on)