

INSTALLATION MANUAL

AVAone 3D Bodyscanner

version 1.3



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Used symbols



Attention:

The following notes or instructions are important and, if not followed, can cause damage to people and equipment.

Safety notes

Mechanical assembly



During mechanical assembly there is a risk that parts can fall over.
The assembly must be carried out by trained mechanics.
We recommend that two people do the mechanical assembly.

Equipotential bonding



Both walls do contain connection points that can be used for equipotential bonding if this is necessary.

Please note that the system is only meant to be used in dry indoor conditions.

Danger of slipping



Feet or socks must be dry to avoid the risk of slipping on the base plate.

A non-slip mat is included in the scope of delivery to minimize the slipping of the base plate on the floor. Please check carefully whether this effectively prevents the floor slab from slipping, taking your floor conditions into account. If this is not the case, it is advisable to glue or screw the base plate to the floor.

General safety



Position the system in a way that no escape paths are obstructed.

Please respect any safety rule that may apply at your installation location.

In case that the scanners roof may be accessed please install the end caps provided.

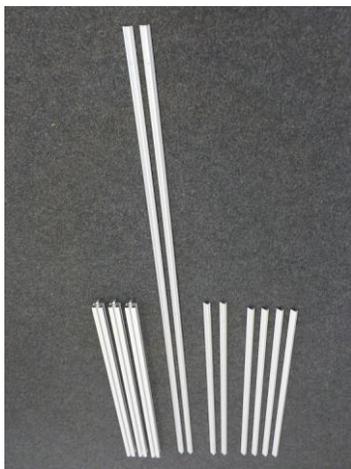
Package content

Scanner

- 2 large (preassembled) side walls (containing sensors etc. and markers)



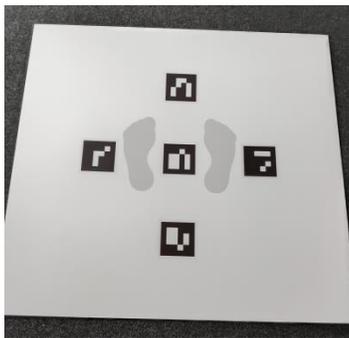
- 3 aluminum profiles 45x45mm (connecting 2 side parts, image below left)
- 4 shorter aluminum profiles L-shaped (ceiling, image below right)
- 2 long aluminum profiles L-shaped (back side wall, image below 2nd from left)
- 2 short aluminum profiles L-shaped (back side wall, image below 2nd from right)



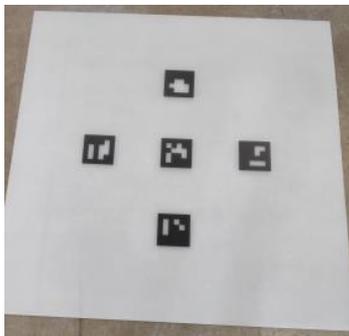
- 1 Forex plate (back wall, with AVAone logo)



- 1 Forex plate (floor, with marker and footprints)



- 1 semitransparent plastic plate (ceiling with marker)



- 1 Network connector



- 1 multi outlet with mains switch (please see the notes below if this does not fit in your county)



Transport aids

- 4-6 short aluminum profiles



Anti-slip mate

- 1 anti-slip mate for under the floor plate



Endcaps

- 2 end caps front
- 2 end caps rear (with holes for network cable)



Tools

- 1 Allen key 5 mm (disassemble transport profiles)
- 1 Allen key 4 mm (basic frame; between side walls)
- 1 Allen key 2,5 mm (backside wall)



Prerequisites before commission

- Electrical Connection (in case the delivered multioutlet does not fit)
Please either provide a multi outlet with mains switch providing at least two CEE 7/7 connectors and one external connector

or

a connector adapter with CEE 7/7 (female)

to connect the multi outlet provided with the scanner to mains voltage.

Please respect any local laws that may apply.

- Standard Patch-Network cable (Cat 5 to 7) connecting scanner to a network with a DHCP Server
 - (If no network or no DHCP server is available please contact Avalution Support for help)
- Control-PC (attached to the same network)
 - PC, running Windows 10 (64bit)
 - 2 GB space on harddrive for software install
 - OpenGL 1.1 enabled graphicscard

 - Minimal: i3 1 gen CPU, or similar from AMD 4 GB RAM, HD, onboard graphics
 - Recommended: i5 current gen. CPU or similar from AMD, 8 GB RAM, SSD, Desktop PC, dedicated mid-range graphics
- Anthroscan software and manuals
 - download the newest version from:
<http://anthroscan.human-solutions.com/AVAone/>
- Anthroscan Licence key
 - Please contact Avalution Support to get your Anthroscan key
- Ladder (for mounting the ceiling parts)
- Scissors / knife (to cut packaging material)

Understanding the minitec profile connectors

If you do not know the minitec profile system already we highly recommend watching the following video first to get a basic understanding of the connectors working principle

<https://youtu.be/IJSgDXNBkRc>

Unpack delivery

Cut plastic straping



Unwarp packing material



Disassemble the 4 aluminum transport profiles with 5mm Allen key



Assembly of the scanner

Build the basic frame of the scanner cabin

Place the **right side** wall upright.

The wall with the mains connector and network connector should be near to the ground.

The type plate should be on the bottom side of the profile, on the back side of the scanner cabin.



Place the 45x45 profile like in the picture, so that the screw is facing towards the inside of the cabin.

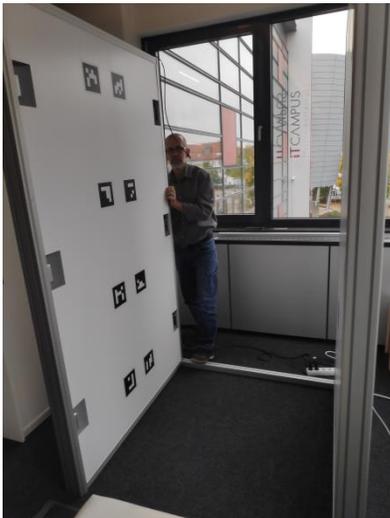


Insert 45x45 profile while holding the wall upright.

Tighten screw between side wall and profile while holding the wall upright.



Place left wall parallel to first wall so that mains connector is at the bottom.
Insert the second wall into the floor profile.



Tighten the screw between left side wall and profile on the floor profile while holding the wall upright.

Place the ladder on the back side.

Insert the ceiling aluminum profile on the back side into the profiles of the left and right side wall at a time.
Tighten the 2 screws for this profile.



Place the ladder on the front side and mount the third 45x45 profile in the same way as before.

Reassure that the profiles are aligned correctly (loosen screws and readjust if needed).

Make sure that at the end all 6 screws (2 at the ends of the profiles) are tightened correctly at the end.

Mount the back wall

Partially insert the L shaped aluminum profile at the bottom side into the 45x45 profile.



The screws in the L shaped profiles are meant.
Loosen (but not completely unscrew) any screw in the L shaped profile if needed (2.5 mm Allen key).



Tap the profile slightly with a rubber hammer to fit into the groove.



Place the back Forex plate into the aluminum profile (markers facing inwards).
While one person holds the plate upright insert the two long L shaped profiles on the sides.

The markers should be visible from the inside of the scanner and the Avalution Logo should not be upside down.

Insert the ceiling side profile into the groove.

Push all L shaped profiles completely into the rooves of the sidewall and top and bottom side profiles.
Tighten all screws of the L shaped profiles so that they are flush to the side walls.



Mount the ceiling plate



Attention: Be especially careful to handle the plastic ceiling plate. It may slip your hands and fall down during assembly!

Place the ceiling plate onto the top.
The marker stickers should be directed to the inside of the cabin.
Center and rotate the plate so that the grooves of the profiles are free.
Insert the 4 short L shaped profiles on all sides of the ceiling plate from above to secure the plate in its position.



Place the ground plate

Place the anti-slip mate under the ground plate into the cabin
Adjust the sidewalls by pushing slightly if needed to fit the groundplate



Remark: by rotating the groundplate 180° the person scanned can be oriented in the opposite directed as in the picture above. Please note that you need to register before proceeding.

Put the provided anti slip mate underneath the floor plate (for further details please see safety instructions).

Mounted Scanner



Commissioning the scanner

Network assembly

The two side walls must be joined together. To do this, pull the network cable out of the rear 45x90 profiles (if necessary, attach the supplied end caps with holes to the profiles beforehand) and connect the network cables using the network adapter supplied. Lay the cable on the ceiling plate and attach it to the rear profile rail, if necessary.



Connect the scanner to your network



The scanner will integrate into your network via DHCP

End caps

In the event that people can come into contact with the scanner roof, we recommend attaching the supplied end caps for safety reasons.

Front end caps



Rear end caps



Power supply

Pull the power plug out of the wall on both sides as far as it will go and plug both into the multiple socket provided.



Notes:

- Should an electrical equipotential bonding be necessary, you can establish this at the connection socket on both pillars of the scanner.
- If the connector on the multiple socket outlet does not match your power supply, please see the note above
- If problems arise with the power fuse when switching on the scanner using the switch of the multiple socket, please use a switch-on delay adapter for one of the two column plugs.

Anthroscan Software install

Unpack the package you downloaded.

Start the Antorscan Installer.

Select "AVAone" during install.

You will need a licence to proceed; therefore please contact the Avalution support.

Operate the Scanner

Start Anthroscan Easy via the link on the desktop.

Configure Anthroscan Control to be visible.

Register the scanner every 24h or after movement of the scanner housing

For more details please refer to the Anthroscan Easy Operation manual.

Cleaning instruction

Do not use any kind of mechanically abrasive tools or cleaning fluids to clean the system. Also do not use any sort of solvent harming the sensors or detaching the stickers. We recommend to wipe the surfaces with a slightly dampened, lint-free antistatic cloth.

Switching Off/On

Before switching off the system via the mains switch on the multi outlet please shutdown the system cleanly via the "shutdown" software command.

Please note that the systems needs to be in the off state for some time (up to 2 minutes) before it may reliably turn on again after you triggered the mains switch to its "on" position.

Disassembly the Scanner

Disassembly is performed in the reversed order of the installation.