

Installation Manual

Dynamic 2TB



PLEASE READ PRIOR TO INSTALLATION



Before installation of this projection screen you should fully read these instructions to ensure you are aware of the full installation procedure. In addition to the screen and accessories and in order to carry out the installation you will need:

- Spirit Level
- Philips Screw Driver
- Suitable screw fixings of at least 70mm long if the wall which is being fixed into is not a wooden structure.

In the Installation accessories you will find:

- **White Cotton Gloves to be used at all times when handling the white screen fabric**
- Fabric Installation tool
- 70mm fixing screws

It is recommended that at least 2 people install the screen as larger screens can be heavy and awkward to lift. Good lifting practices and lifting aids should be used as required to aid installation.

Important Notes

The symbols below show important notes that must be read and understood at each stage of installation



= Warnings (Safety or Installation Quality)



= Information (Installation requirements or tips)

Unpacking



Do not unpack each piece from its protective packaging until you are ready to install it. This will ensure that you do not damage any of the velvet finished pieces accidentally during installation.



Note that the Dynamic 2TB is designed to be assembled on the wall so that a clear floor area big enough to build the screen is not required. However it can also be built on the floor if preferred you will just need to follow the same instructions but substitute the wall for the floor then lift and attach the screen to the wall once built. **DO NOT** built the screen face down on the floor under any circumstances as this will result damage to the screen and mechanism.

The screen is a 4 part frame. Two 'C' sections that make the Top and Bottom of the screen with the masks incorporated and the left and right sections that join the top and bottom sections. The right section also has all the electrical connections.

Frame Layout



Frame Section Configuration Fig. 1



Note that the screen will ship with a separate box for the two 'C' section covers that make up the completed velvet frame.

Installation

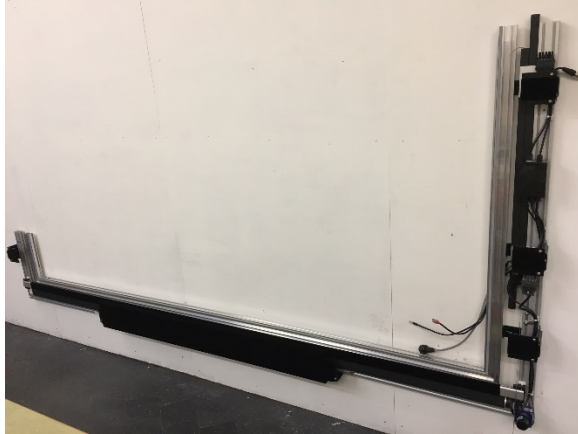
- Decide on the height you want the bottom of your finished screen to be from the finished floor level (FFL). Now add 28mm from the FFL to bottom of screen height and mark a level line on the wall at this height. This will be the height of the screw holes for the bottom.
- Now mark the central left to right point for the screen (normally the centre line of the room). This will be the centre of the Bottom screen section.
- Now using these lines to position the central section of screen labelled 'BOTTOM' fix this to the wall using the 70mm screws and countersunk washers provided. The screw holes are located in the middle of the main aluminium cross brace marked 'Fixing Point'. Do not over tighten these as that will bend the frame, they should just contact the frame. Use a spirit level to ensure that this section is level and central. **This is very important as it will form the basis for the rest of the screen to be built to.**




- Now fix through the slot in the black mount plate on both sides of the bottom section. Again do not over tighten these as the green foam behind is designed to allow the screen to 'float'.



- Prepare the right end section to be fitted. There are two joining sliders which join the bottom section and right section. These can be secured in place using the grub screws to stick out of one of the profiles half way.
- Now lift the left section and mate the joining slider into the respective profile until the two ends of the profile meet fully.
- Using a spirit level check that the section is vertical.




 Ensure that the feed wires to the screen come behind the right screen section towards the centre of the screen as shown in the image above

- Screw the right section to the wall in the location marked 'Fixing point'.



- Now fix the 'Left' section in exactly the same way again tightening the joining sliders using a spirit level to check it is vertical.
- Fix the Top section to the Left and Right sections again with the sliders ensuring that you tighten the grub screws and the fixing screws. Only fix through the points marked 'Fixing Point' and take care with the cable running across the top frame.

-  You may need to slacken the screws on the Left /Right section while aligning the top section to ensure that the joining sliders are able to fully engage. Ensure that the ends of the two sections meet fully together.
- Mechanically you now have all the sections fitted to the wall.

Electrical Connections

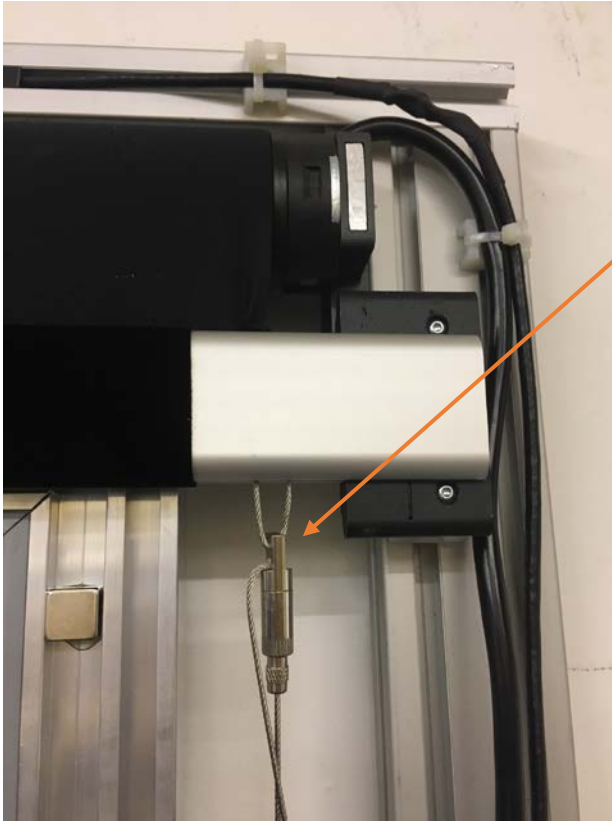
- On the Right side section there are 4 connectors. 2 – Power and an signal XLR to connect the bottom and 2 to connect the top. Make both all 4 of these connection. The mask power simply pushes together. The signal XLR also pushes together.
- On the feed cables that go towards the middle of the screen there are 3 additional connectors. These additional ones all come from the control box and should be routed through the wall from the back of the screen.
- Connect the 8 Way power connector, screwing the connection together to ensure that it is secure.
- Plug the two RG45 connectors together. **Care should be taken to ensure that the RJ45 connections are connected correctly according to the colour coding on the plugs.**

Mask Connections


The masks are tensioned via large spring mechanisms in the side sections. At each end of these sections you will see a small hook.



- Pull the hook towards the mask taking care not to release the hook as it will be under spring tension. Once you have pulled it right the way out to the mask hook the hook onto the small wire loop attached to the mask bar.



- Do this for all 4 spring hooks at each end of both mask bars. Ensure that the mask are all now under tension and that no wiring has become loose in transit or during installation that will impede the travel of the mask bar along the linear bearing track it travels on.

 Ensure that the tension wires are running vertically. If they are not you can slide the wire fixing loop along the mask bar to make sure they are.

Screen Covers

- Fit the left and right 'C' section screen covers onto the magnetic plates. Note that at the top corners of the screen there is a levelling Alan screw that the covers should sit onto. Ensure that the cover is right back onto the magnets and that the joints are tightly pushed together.

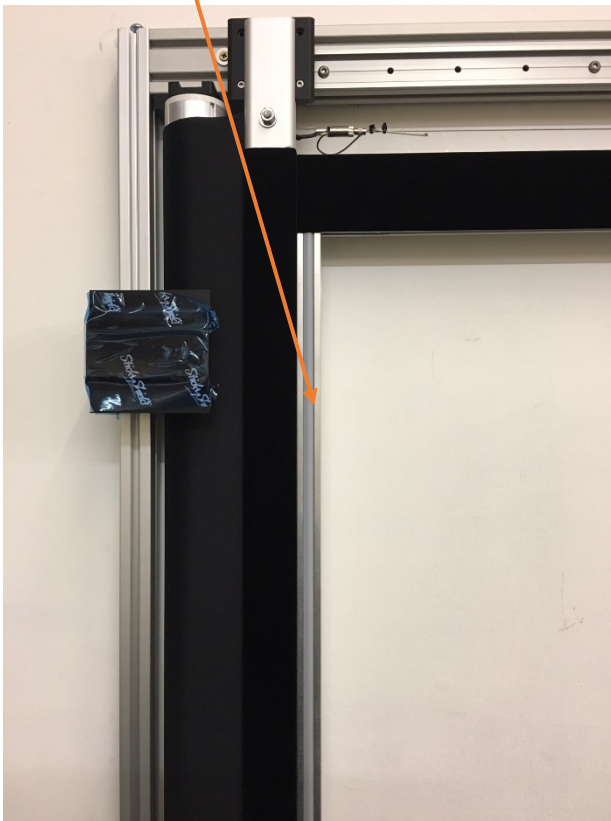
Fabric Installation

Your screen is delivered with two fabrics; the black backing fabric and the main screen fabric. The first one to be installed is the black backing fabric.



Care and time should be taken during handling and installation of the fabric. On larger screens you will need 2 people to complete this task.

- Take the roll of backing fabric and the fabric installation tool. Start to unroll the fabric from the roll by about 500mm. Holding the top corner of the fabric in one hand, line it up with the top left hand corner of the screen so that the edges of the fabric are in line with the outer edges of the screen frame.
- With the fabric tool push the tool onto the fabric and down into the grey plastic fabric retaining track.

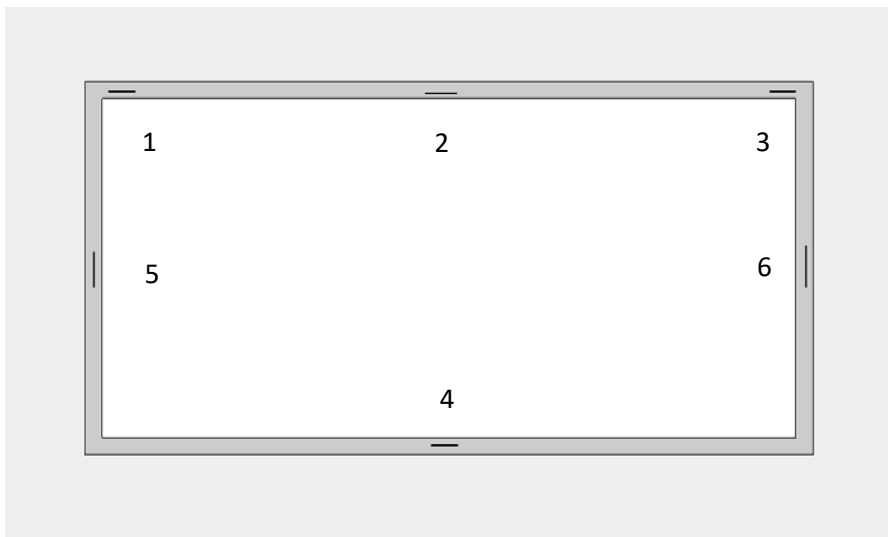


You may want to try pushing the fabric tool into the fabric retaining track without any fabric first to get a feel for where it goes in and how much force is required.



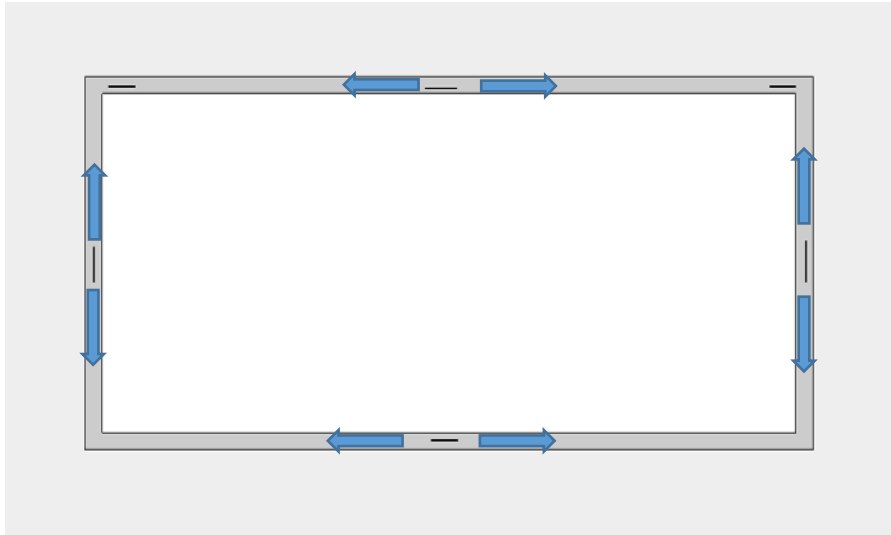
Retaining track insertion point Fig. 8

- Now unwind enough fabric from the roll to take you to the middle of the screen. Again ensuring that the top of the fabric is in line with the top of the screen push the fabric into the fabric retaining track in the centre of the top rail of the screen.
- Now unroll the remainder of the black backing fabric and repeat the process of tucking the fabric into the top right of the screen.
- You should now have the fabric hanging from the three tucked points on the top of the screen.
- Now using one hand apply a little bit of tension to the fabric at the bottom in the middle and then using the fabric installation tool tuck fabric into the centre bottom of the fabric retaining track.
- Now repeat this process on in the centre of the left and then right sides. See Fig.9.




Fabric Tuck Order Fig. 9

- Now continue to tuck in the fabric along the length of the retaining track working out from each central tuck. Only tuck max 300mm at a time in each direction and then go to the opposing side and tuck the same amount. This will ensure an even stretch across all the fabric.



Direction of fabric Tucking Fig.10

- Continue this process until you reach the corners of the screen. You may have to pull out the original tucks in the top left and right corners and re-tuck them to ensure that you have no wrinkles in the fabric.
- Ensure that you are happy that the fabric is flat and wrinkle free.
- Using sharp scissors cut the excess fabric off on the outside of the fabric retaining track leaving a 15mm – 20mm excess.
- Work around the screen to push this excess down into the fabric retaining track. It is best to do this in the same manner as the original tucks working out from the centres until all the excess is tucked in.
- Now repeat the exact same process you have just done for the black backing to install the white projection fabric. Ensure that you have the 'FACE SIDE' label of the fabric facing out in the room as this will be the side the projector will project onto.

 **Ensure that you use the white cotton gloves to handle the white projection fabric at all times and keep it away from dust or dirt as it can easily be marked.**

Front Cover Installation

- Install the side covers. The covers are magnetic and simply align and clip into place allowing the magnets to 'grab'. The barb on the back of them will slot into the groove on the aluminium profile just below the grey plastic fabric retaining track. Slide the bottom of the cover down behind the bottom mask until you can get the top in behind the top mask. Fit to the magnets then push the cover up slightly behind the top mask. You will be able to feel when the magnet has made contact with the steel plate on the cover



If you need to remove the covers at any point, lift up the cover from the edge nearest the screen fabric and rock up and lift away from the magnets.

Electrical Operation

- Power on the electrical control panel
- The main control screen will be visible on the touch screen once it has booted up.



- To start operation press 'Home' this will set the masks to their home position (just covering the edge of the screen surface but showing the full width aspect of the screen).

- Now press 1.78 this will move the masks to a 16:9 image size.
- Cycle between Home and 1.78 2-3 times just to initialise the masks and ensure that everything centralises in the mask runners following transit.



If at any time a mask sticks during this initialisation procedure and becomes slack, hit stop and then manually push the mask bar towards the middle of the screen slightly. This will free it and continue with the initialisation sequence.

- The screen is now ready for operation and external RS232 control of operation.