smart VR-Wall

schneider digital

Professional 3D-Hardware

Wall Manager Manual

Contents

1. Switching on the smart VR-Wall 3

2. Switching off the smart VR-Wall 4

3. Switching to Blank/Freeze mode 5

4. Changing the presets 6

4.1. Selecting presets 6

4.2. Changing position and extending the inputs 7

4.3. Changing the eyes for stereoscopic output 8

5. Calibration 9

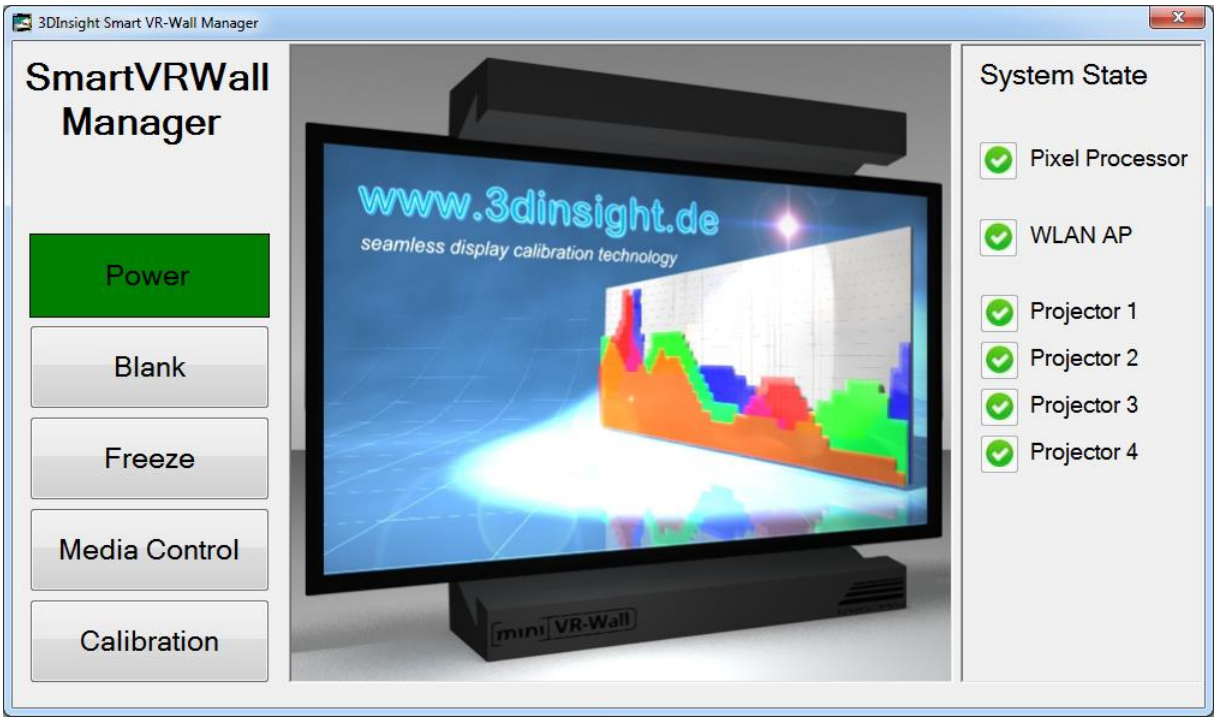
5.1. Camera 10

5.2 Camera position 10

5.3. Projector parameters 11

5.4. Calibration 12

1. Switching on the smart VR-Wall



Boot up the tablet. Wall Manager is launched automatically by Windows Autorun.

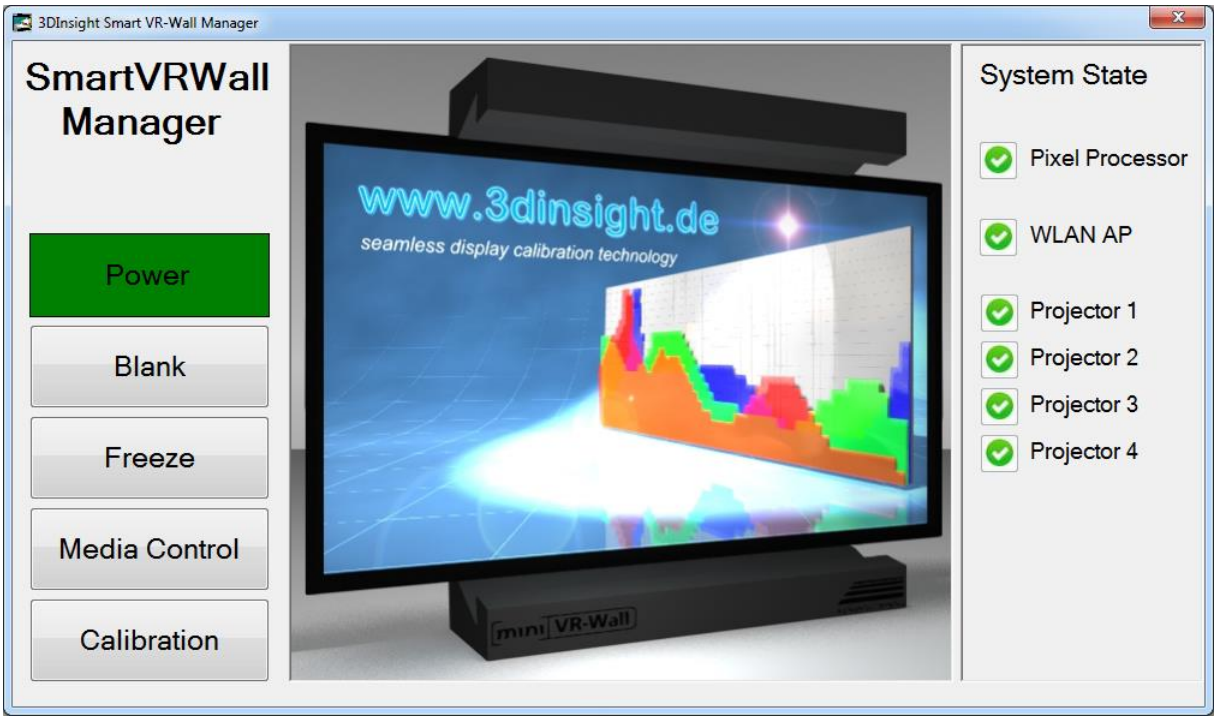
Touch the "**Power**" button in the left-hand section of the main menu. This starts the pixel processor. Once the pixel processor has booted up, it starts the projectors. Once the entire system has been booted up, a screen with "**No Signal**" appears on the wall.

If Mac addresses are specified for the workstations, they can also be booted up by the pixel processor using Wake on Lan.

Switching on the system enables the remaining functions of Wall Manager.

If the tablet is not available, you can also start the wall directly by pressing the button on the pixel processor.

2. Switching off the smart VR-Wall



Touch the "Power" button in the left-hand section of the main menu. Confirm the prompt with "Yes". The pixel processor is then shut down and the VR-Wall goes into cooling down mode. This lasts for approx. 5min.

If IP addresses and user logins are specified, the pixel processor can also shut down other workstations.

Shutting down the smart VR-Wall deactivates the remaining buttons in Wall Manager.

If the tablet is not available, the smart VR-Wall can be shut down by pressing the button on the pixel processor. In this case, the projectors must be switched off manually by pressing the Power buttons on the projectors themselves.
The projectors should generally only be shut down with the tablet.

3. Switching to Blank/Freeze mode

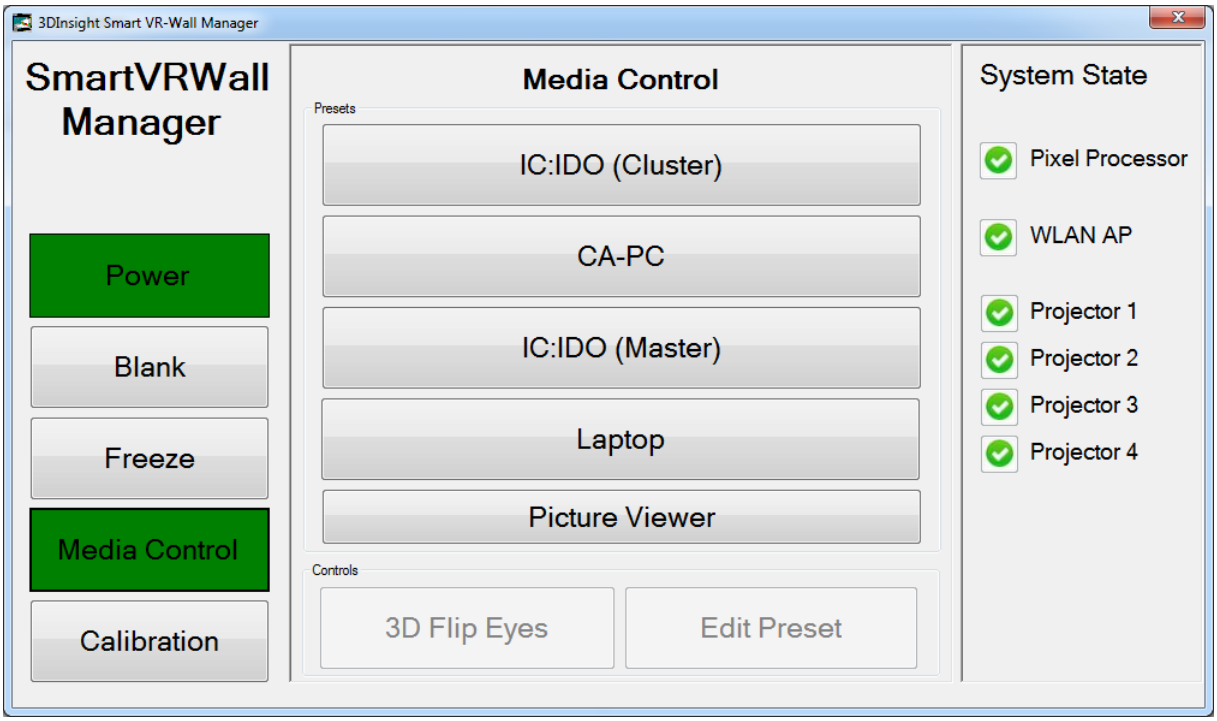
If you want to switch the wall to blank to draw your audience's attention, use the Blank button. The wall will then display a black screen.

If you want to freeze a particular scene on the wall in order to prepare a different scene, you can use the Freeze button.

4. Changing the presets

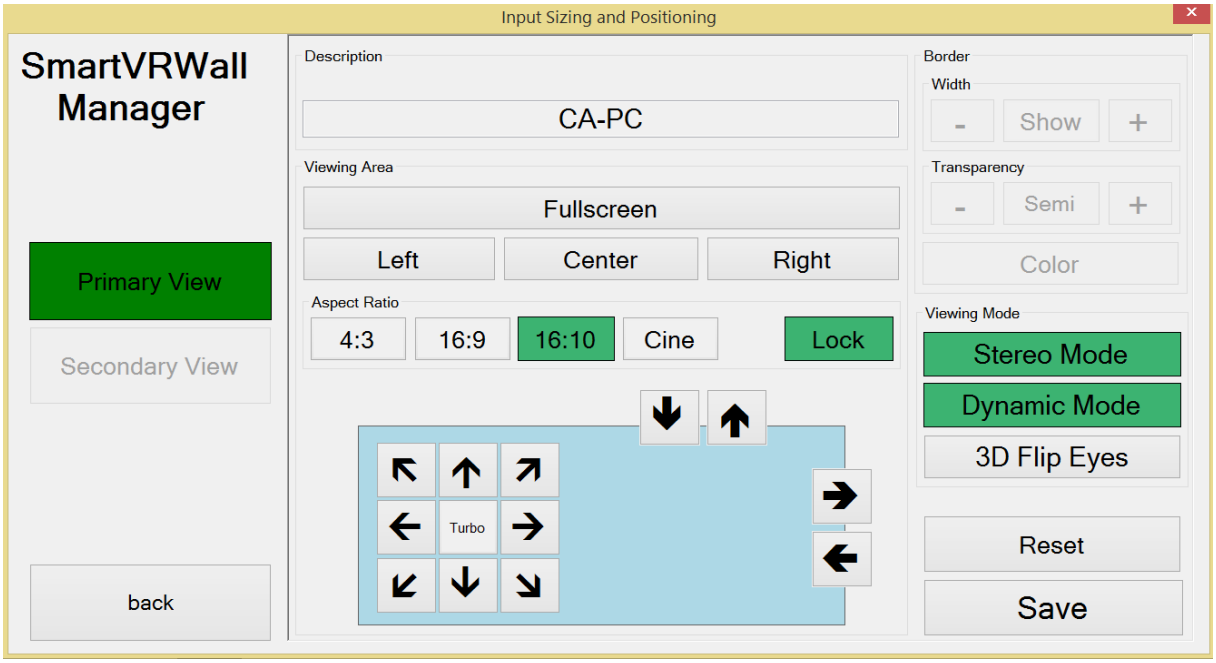
4.1. Selecting presets

You can select different predefined viewing configurations depending on the number of inputs on your smart VR-Wall. Up to 24 input signals can be displayed alongside one another or in picture-in-picture mode.



4.2. Changing position and extending the inputs

Touching the "**Edit Preset**" button takes you to the configuration menu.



Here, you can set the position and aspect ratio. You can also change the **Description** of the preset.

The image properties can be adjusted for the required operating mode under **Viewing Mode**.

Important:

For the 3D stereoscopic display, the "**Stereo Mode**" button must always be active.

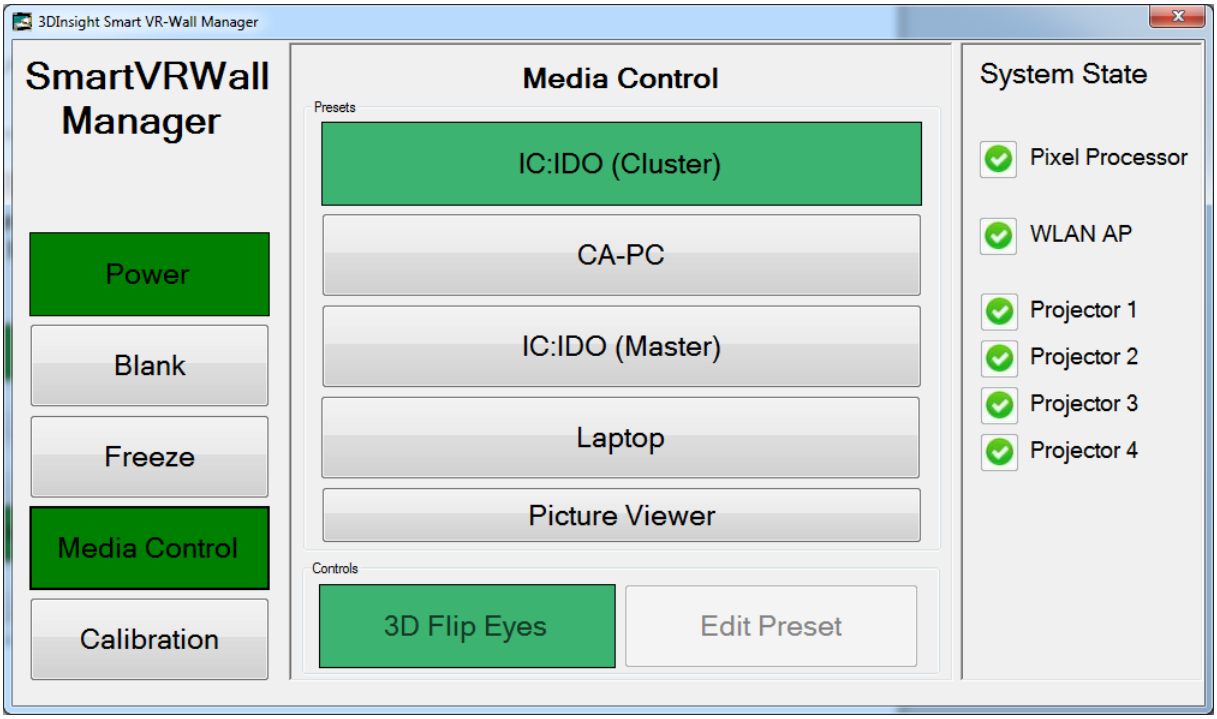
The "**Dynamic Mode**" button can be used in unfavourable lighting conditions to increase the overall brightness of the system.

Touch the "**Save**" button to save your settings; this is confirmed by a system message. The "**Reset**" button discards your settings.

You can use the "**back**" button to return to the main menu.

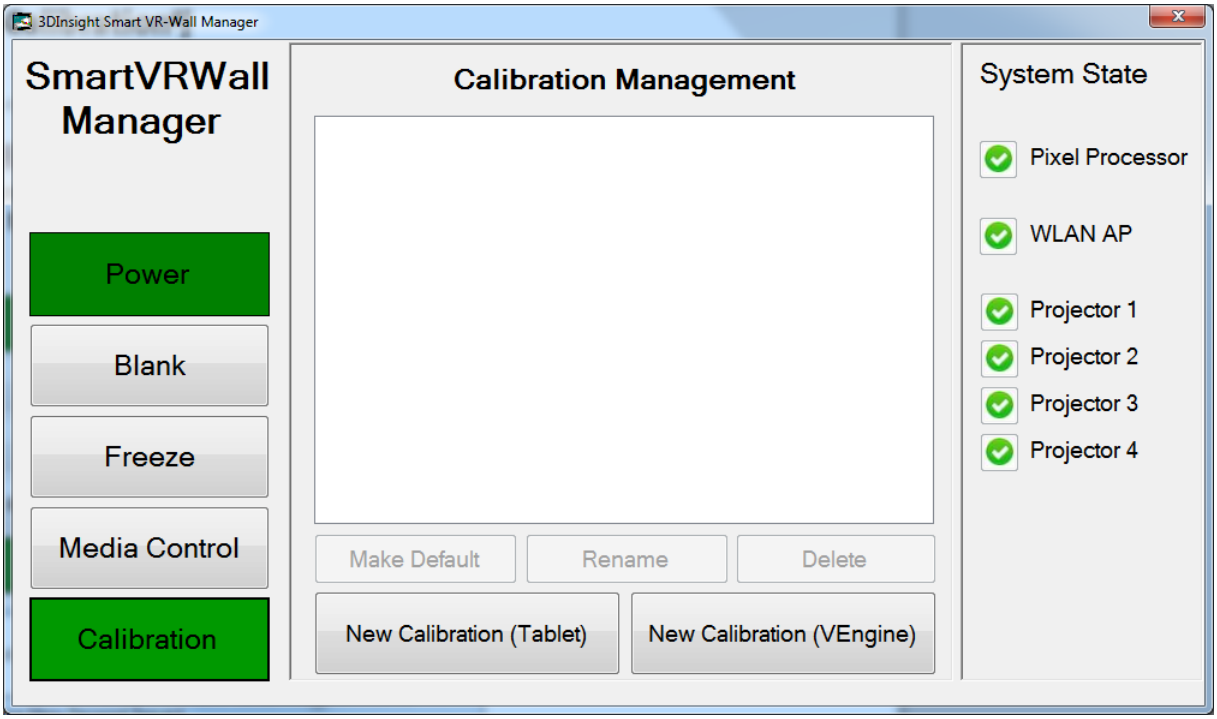
4.3. Changing the eyes for stereoscopic output

Touching the "**Flip Eyes**" button exchanges the left and right eye for stereoscopic output.



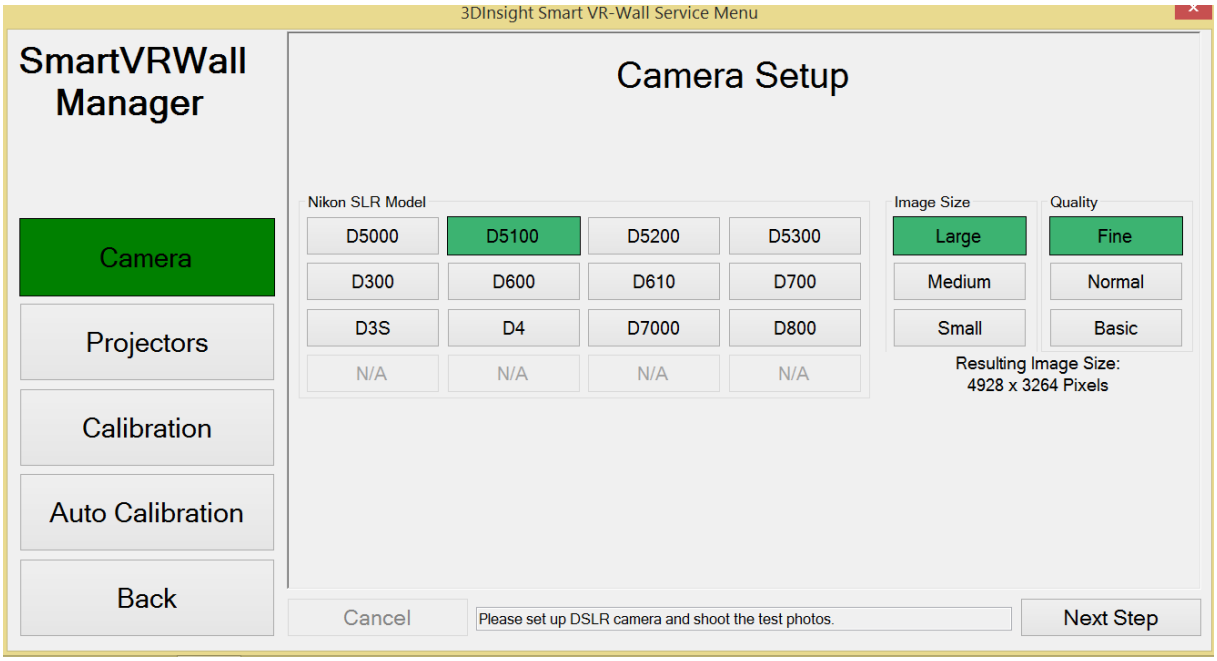
5. Calibration

1. Go to "Calibration" in the main menu.



2. Enter your PIN (default 2345) and confirm your entry with "OK"

5.1. Camera



Connect your Nikon camera to the tablet using the UC-E6 USB cable supplied.

Select your Nikon camera. Make sure that the camera is set to **Manual** and the **Auto Focus** on the lens is set to **Automatic**.

Image Size: **Large**

Quality: **Fine**

Image file format: **JPG**

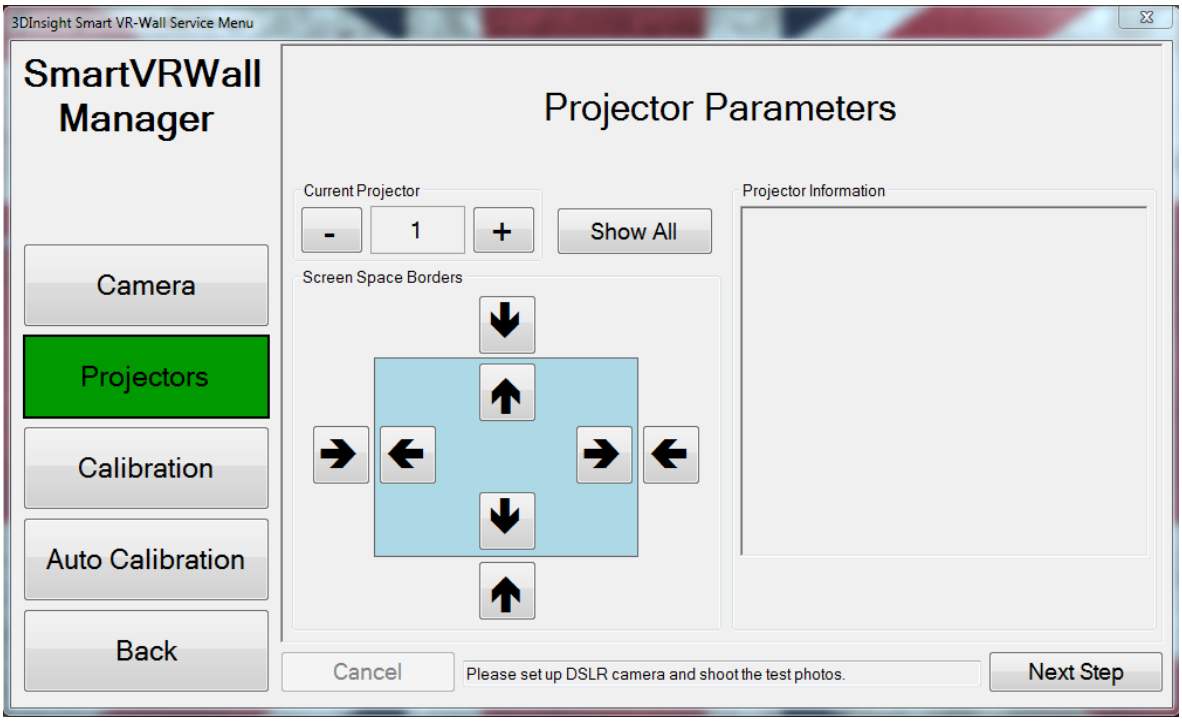
5.2 Camera position

With the Nikon fish eye 14-24, set the camera lens to a **focal length of 20mm**.
With the cheaper KIT lenses from Nikon, a focal length of 40mm is recommended.

Now position the camera and tripod centrally in front of the screen, approximately 3m away.
Make sure that the camera itself is straight on the tripod. (Horizon)

Move away from the screen with the camera until you see the left and right black frame of the VR-Wall in the centre of the camera viewfinder.

5.3. Projector parameters

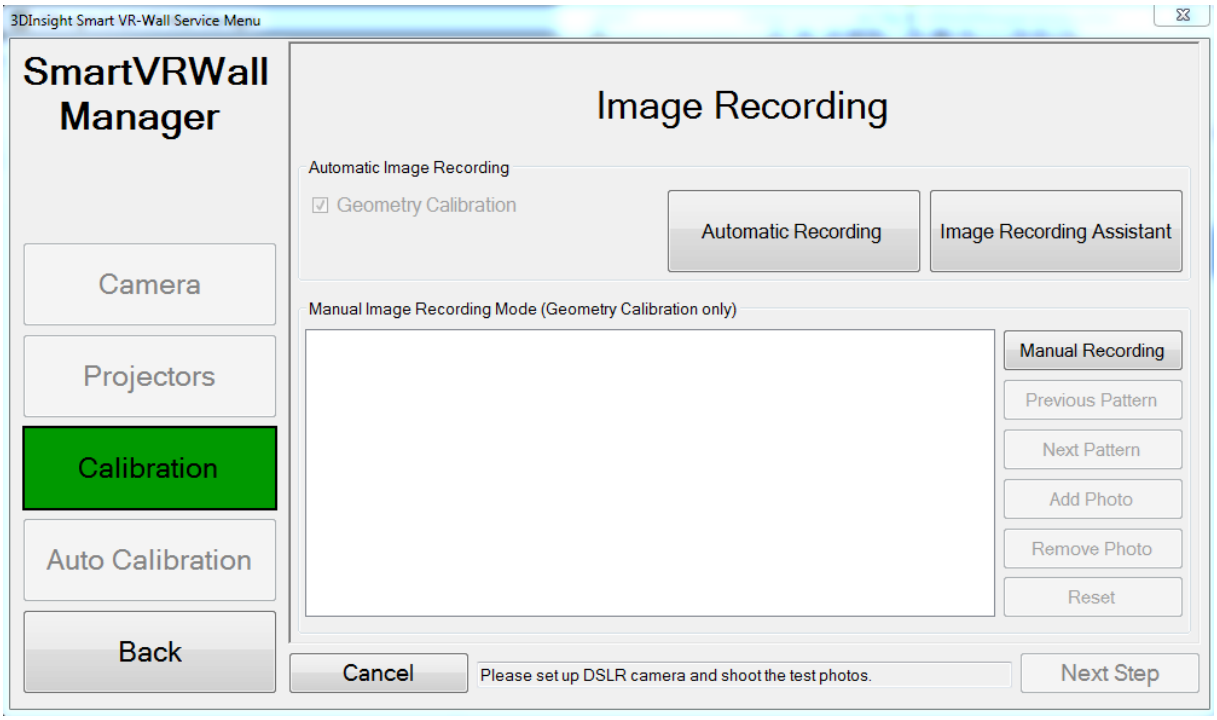


If the wall has been mechanically shifted, the projectors have to be re-adjusted. To do this, align the green grids on each projector with one another.

Use the arrow buttons. Give the grid a width of approx. 2-3 pixels inside and 5-10 pixels for the outer frame. If the 10 pixel tolerance value for a projector is not sufficient to display the outer green frame, adjust the projectors mechanically.
Refer to the **VR-Wall Operating Manual**, starting at section 10.8.

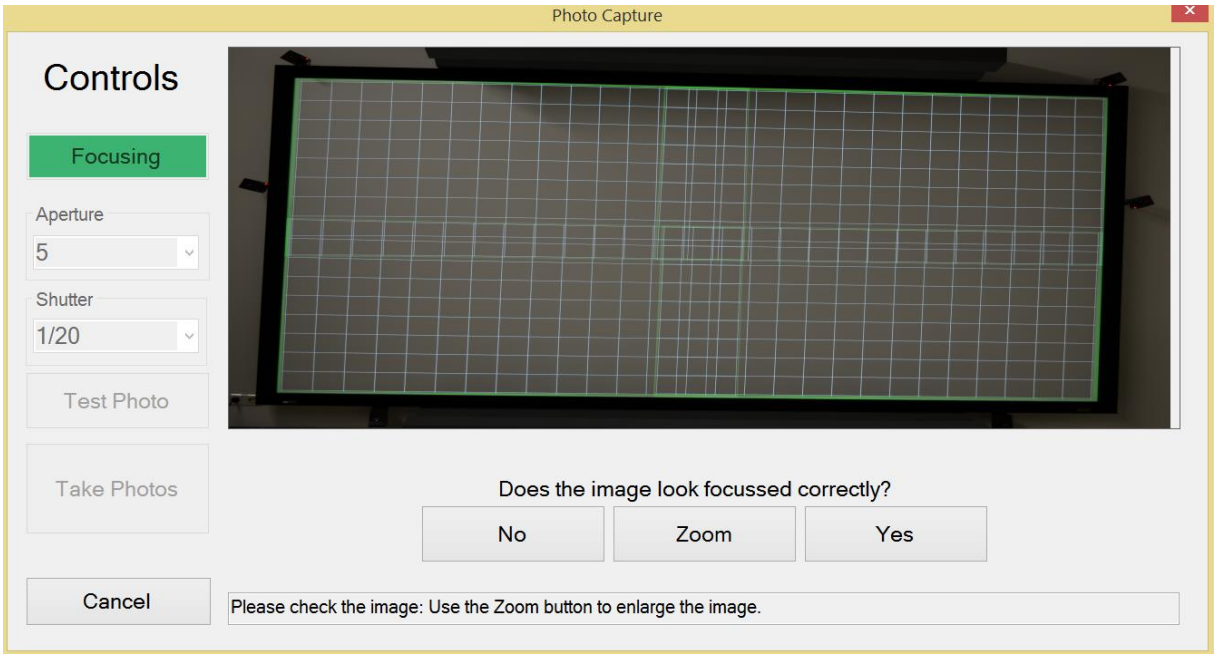
5.4. Calibration

1. Select "Calibration".



Make sure that the camera lens is set to Auto Focus and the camera is connected to your tablet.

Go to "**Automatic Recording**" and follow the instructions.



The entire projection area must be visible in the test image.
If the result is unsatisfactory, re-align the camera and repeat the process using the "**No**" button.

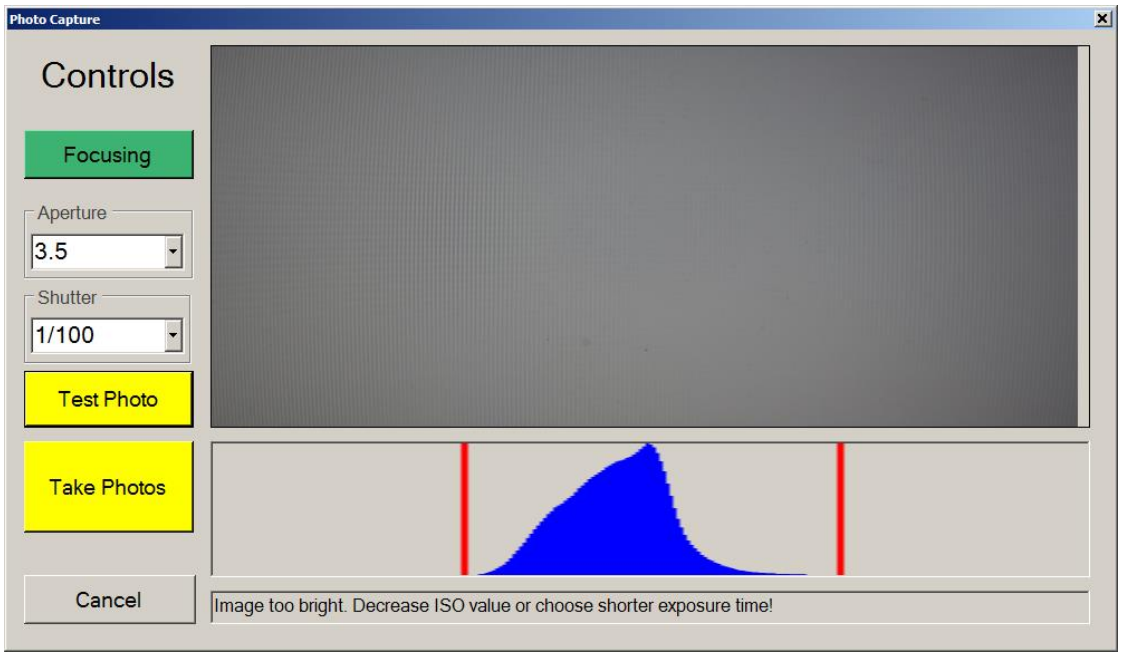
Then check whether the image displayed is correctly focused. The green grid should be sharply depicted. You can check this by enlarging the image with the "**Zoom**" button.

If the result is unsatisfactory, correct the focus manually on the lens and repeat the process using the "**No**" button.

Once you have finished with the Auto Focus process, switch the lens from "**A**" to "**M/A**". This switches the lens from automatic to manual so that all pictures are taken using exactly the same parameters.

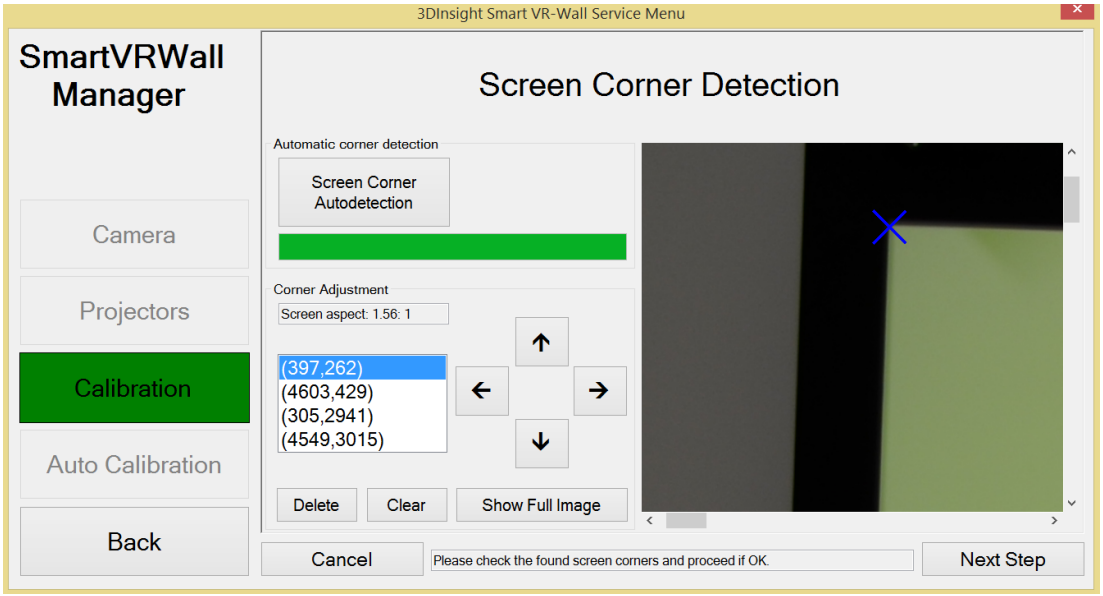
The relevant switch can be found on the left-hand side of the lens.

Touch "**Yes**". Wall Manager will then tell you to adjust the Auto Focus. Confirm this with "**OK**". The camera will now perform an exposure test.

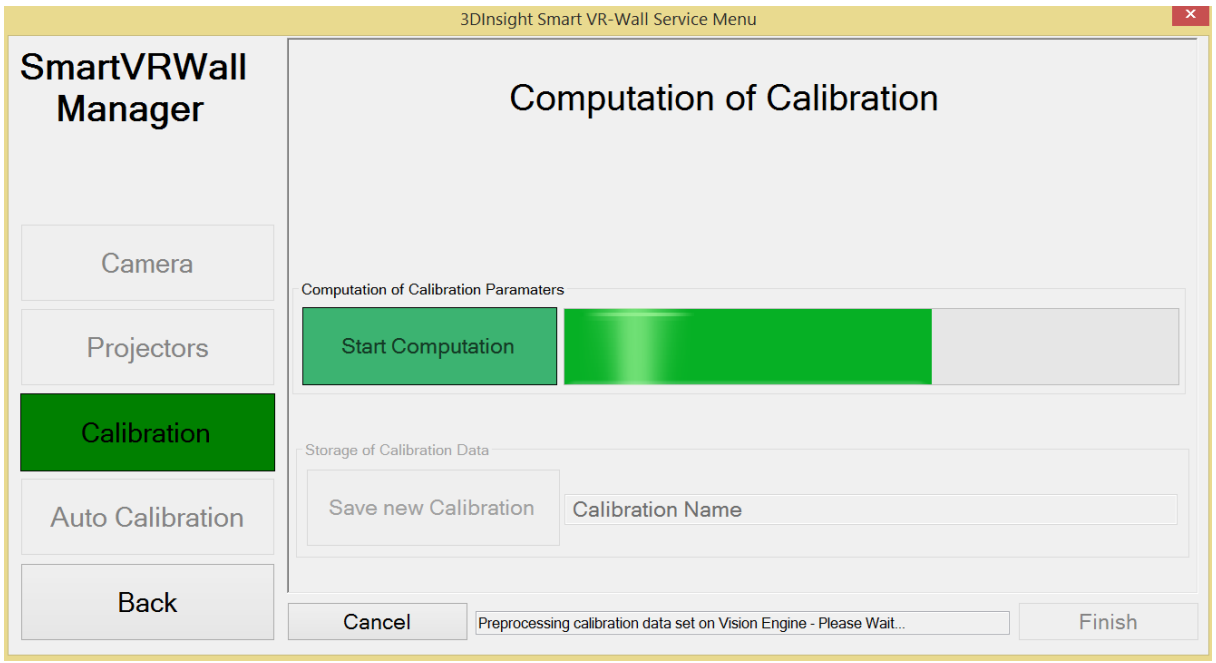


If the exposure leads to a poor result, Wall Manager will tell you to adjust either the shutter speed, the exposure time or the ISO setting. Set the new values according to the instructions shown underneath the histogram and then take a new "**Test Photo**". As soon as this test is successful, Wall Manager will automatically take all the pictures required for calibration.

Once all photos have been taken, Wall Manager switches to **Screen Corner Detection**. Here, the corners are automatically determined in order to define the scope for the calibration calculation. Check the 4 corners and, if necessary, move the individual corners using the arrow buttons.

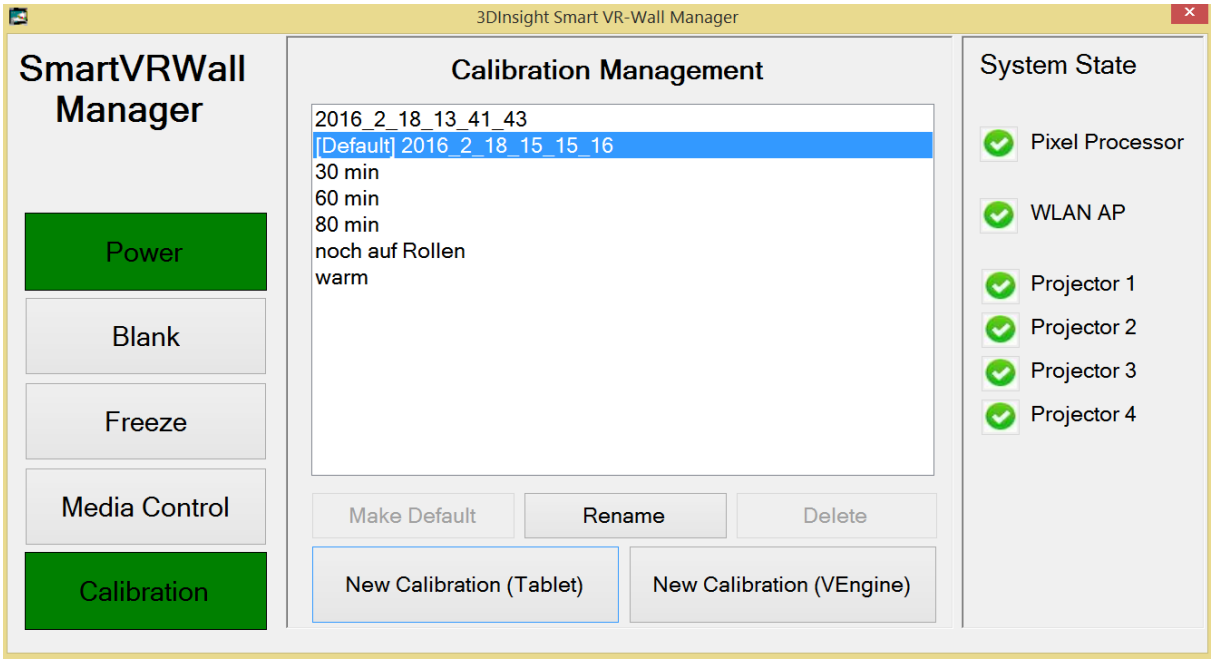


Continue by touching "**Next Step**".

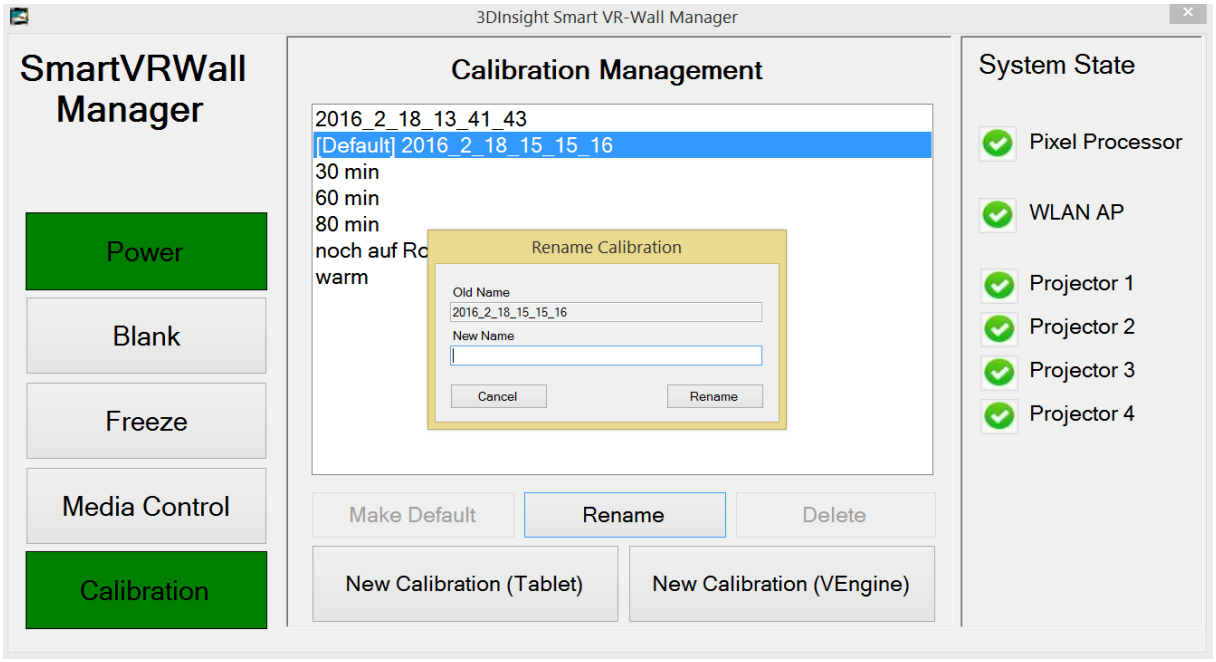


All data is now sent from the camera's RAM memory to the pixel processor's RAM memory. No images are saved. This process takes approx. 3 minutes.

From this point onwards, you can use the **smart VR-Wall** again. As soon as the calibration has been fully calculated, it is automatically applied and set as the new **Default**.



The new calibration is displayed in your menu with the current date and time. The automatically generated description can be changed at any time to a description of your choice.



SCHNEIDER DIGITAL
Josef J. Schneider e.K.

Maxlrainer Straße 10
D-83714 Miesbach

Tel.: +49 (8025) 9930-0
Fax: +49 (8025) 9930-29

www.schneider-digital.com
support@schneider-digital.com

Partner of:

Ver.: 2.4.1