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S8 360 DVR Calibration

KOHLTECH
VIDEO MANAGEMENT CENTER



Live



Playback



Evidence

360 DVR CALIBRATION GUIDE

- Auto Calibration
- Calibration Software
- Calibration Mat Adjustment
- Uneven Camera Adjustment

Vehicle Number
Device ID
Group
Type
Longitude
Latitude
Speed

300 m
1000 ft

Map data © OpenStreetMap contributors

Auto Calibration Setup

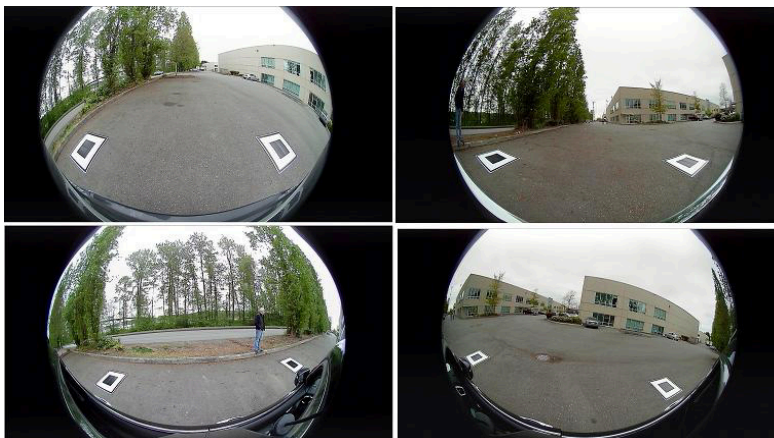
1. Locate and gather the appropriate calibration tools.
 - A. USB drive
 - B. Laptop
 - C. Calibration software
 - D. Calibration mats
2. Place all 4 calibration mats at each corner of the vehicle as seen in image 2A.

2A



3. Ensure all cameras are connected to the DVR using ports AV1-AV4
Left cam--AV1 (Channel 1)
Right cam--AV2 (Channel 2)
Front cam--AV3 (Channel 3)
Rear cam--AV4 (Channel 4)
4. Ensure each camera can clearly see two mats in each view as pictured in image 4A.

4A.



Ensure the mats are as close to the vehicle body as possible, while still maintaining a clear visual of all mats.

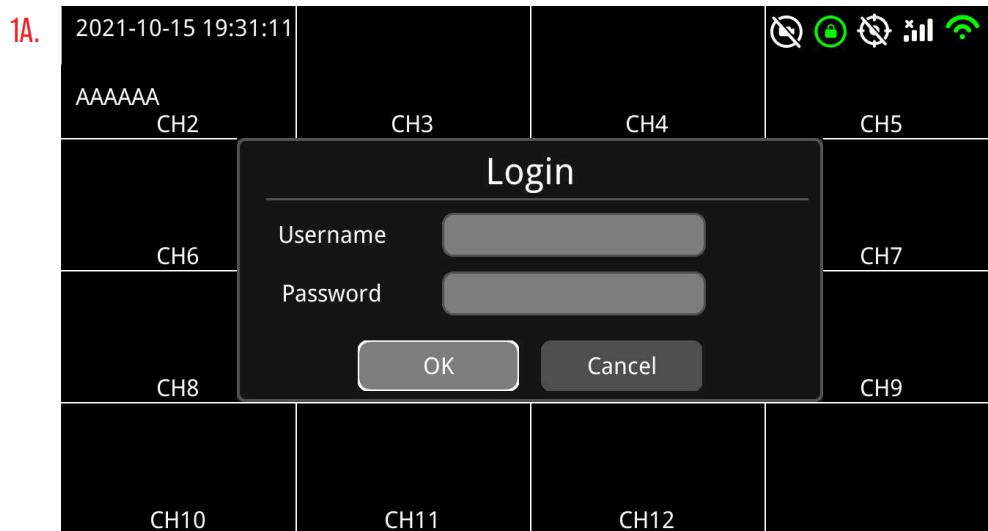
Have any questions or need additional information? | Call us today at 877.708.7803

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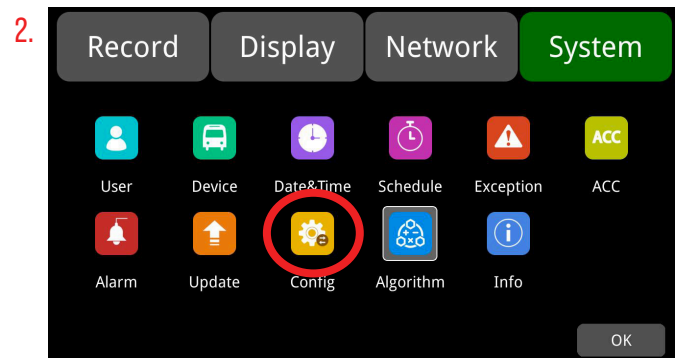
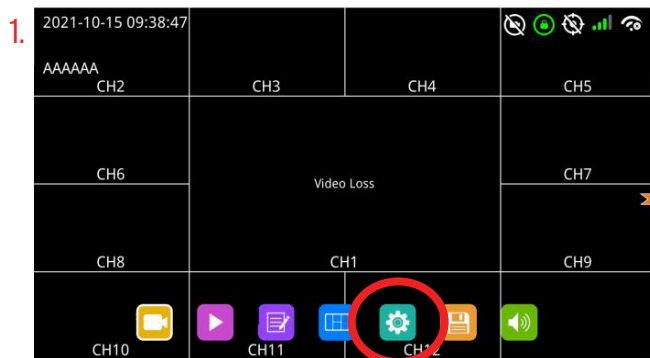
5. Once you begin calibration, along with ensuring an unobstructed view, the cameras must be secure and not moved as it will disturb the calibration sequence and prevent the system from functioning properly.

Calibration Steps

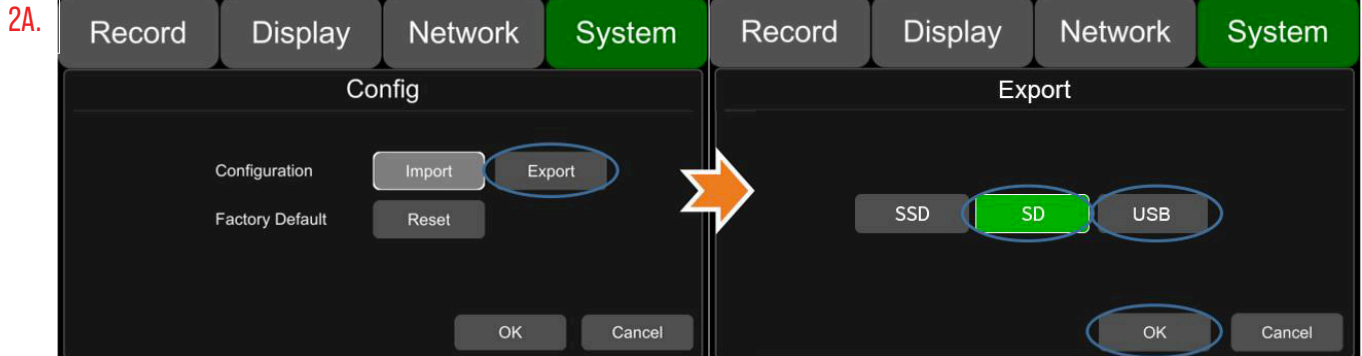
1A. To begin the calibration you must first login to the DVR by entering the provided user name “admin” and password “222777” as seen in image 1A.



1B. Navigate to the main menu by selecting the icon pictured in image 1 and then selecting config as seen in image 2.

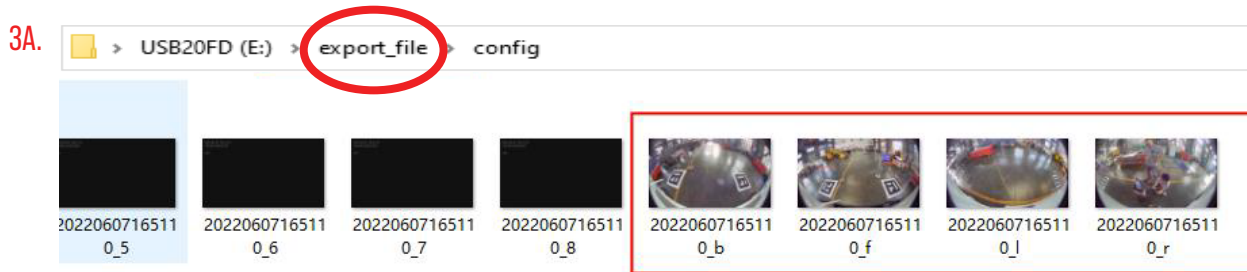


2. Once in the system menu select [Export] to export the calibration file to SD card or USB drive as seen in image 2A.

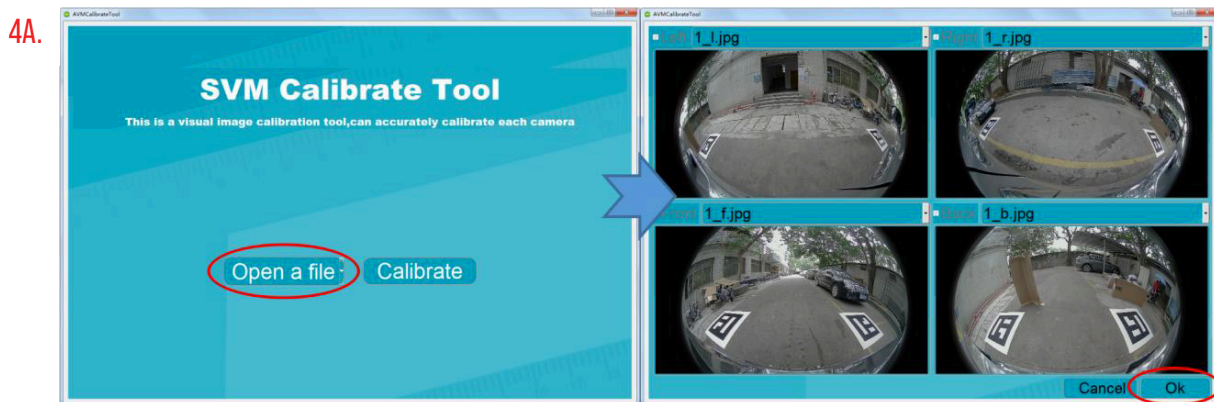


NOTE: Do not insert a USB or SD card until after the export is complete to prevent card damage.

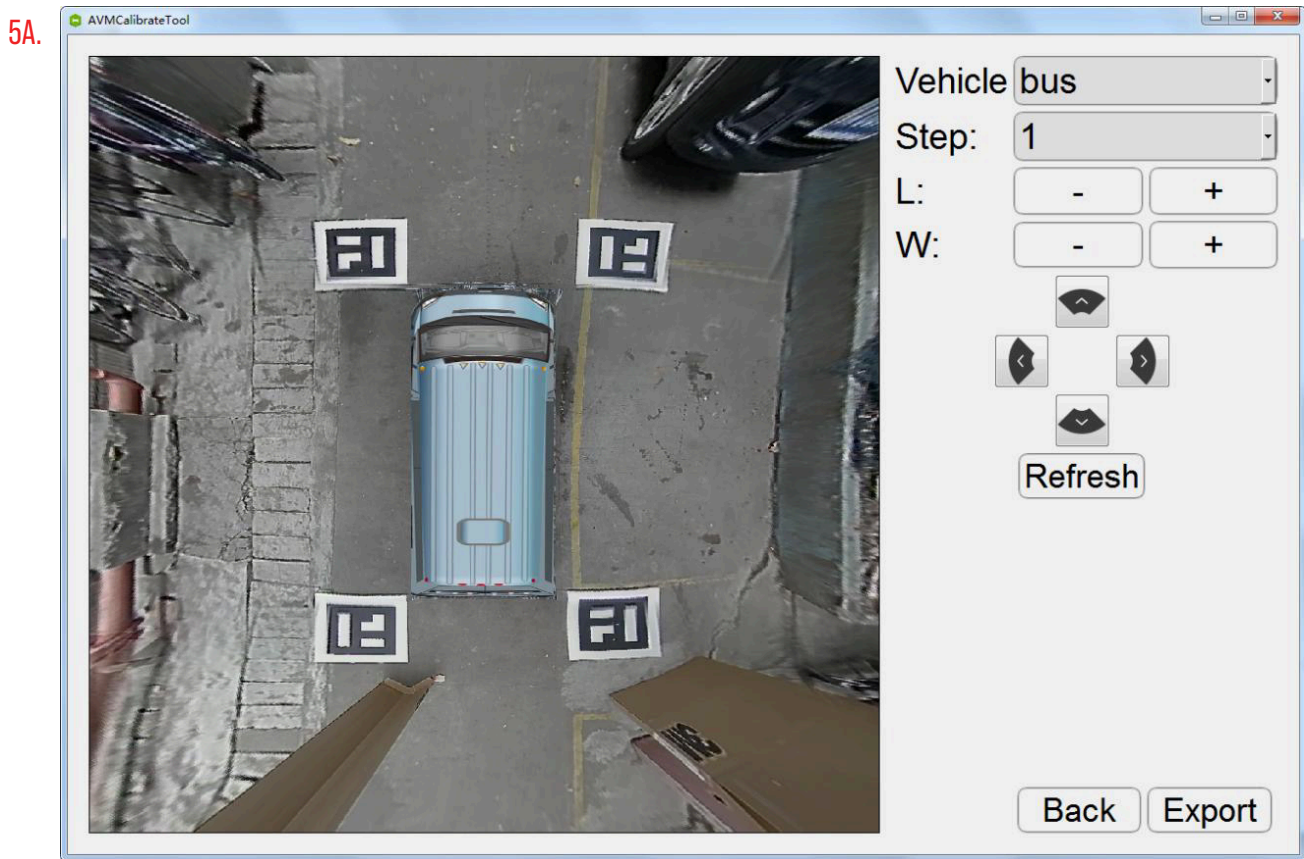
3. After successfully exporting, insert the USB/SD card into your computer and select the 4camera image out Directory \export_file\jpg as pictured in image 3A.



4. Open the “PC SVM calibration tool” and input the calibration pictures previously imported, as pictured in image 4A.



5. If the calibration was successful, you will be taken to the screen pictured in image 5A.



6. When in this window you can adjust length, width and position of the vehicle. Once the adjustments are complete, click “Refresh” to view the updated calibration.

7. The setting method is as follows:

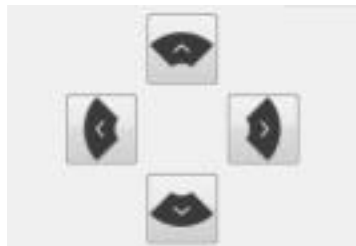
Vehicle: select the matched vehicle image;

Step: precision unit(1,5,10,15pixels) to adjust the length, width and position of the vehicle as pictured in image 7A.

L: adjust vehicle length

W: adjust vehicle width

7A.



8. Once you have completed your adjustments and are satisfied with the view, click “export”.

9. To save the calibration result you can find these files named “caliresult....xml” in the folder. Copy the “caliresult....xml” file to the root directory of the USB/SD as pictured in image 9A.

9A.



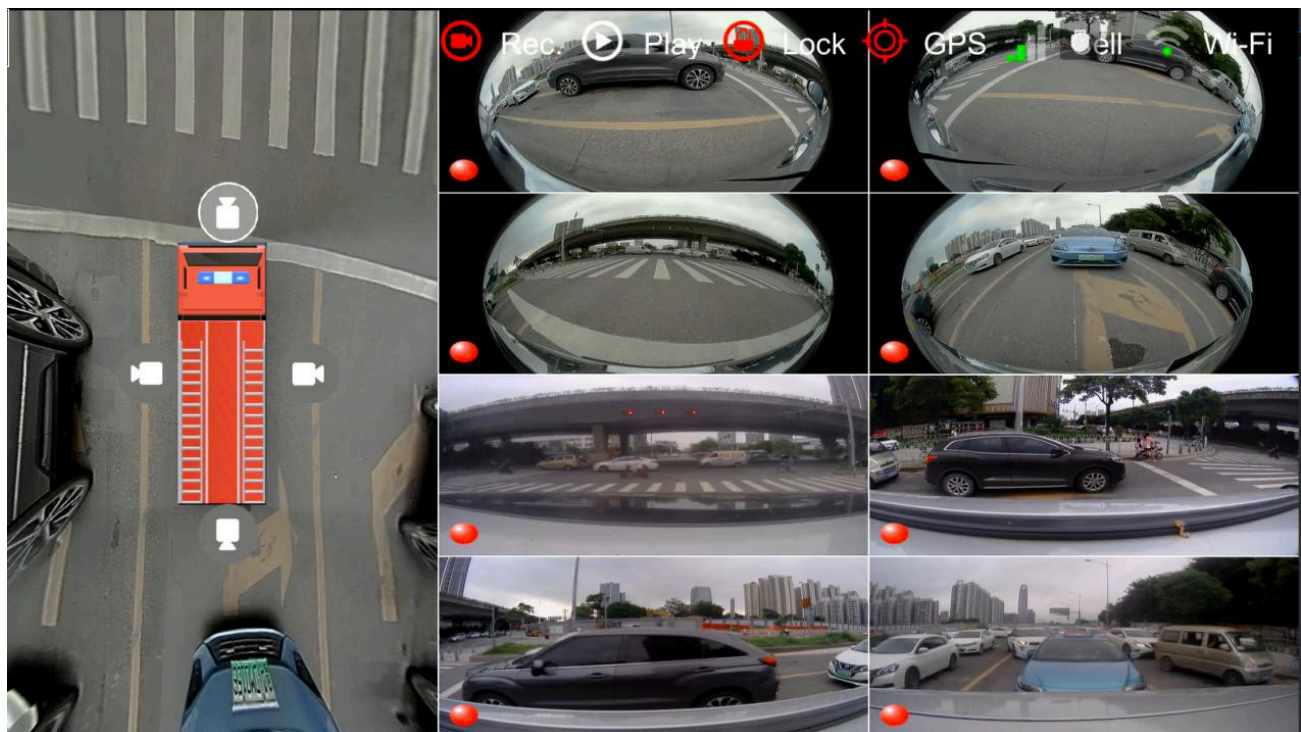
10. From here you can import your calibration settings into the DVR from the AVM menu as pictured in image 10A.

10A.



11. Once all settings are final and images have been imported the final result will be as pictured in image 11A.

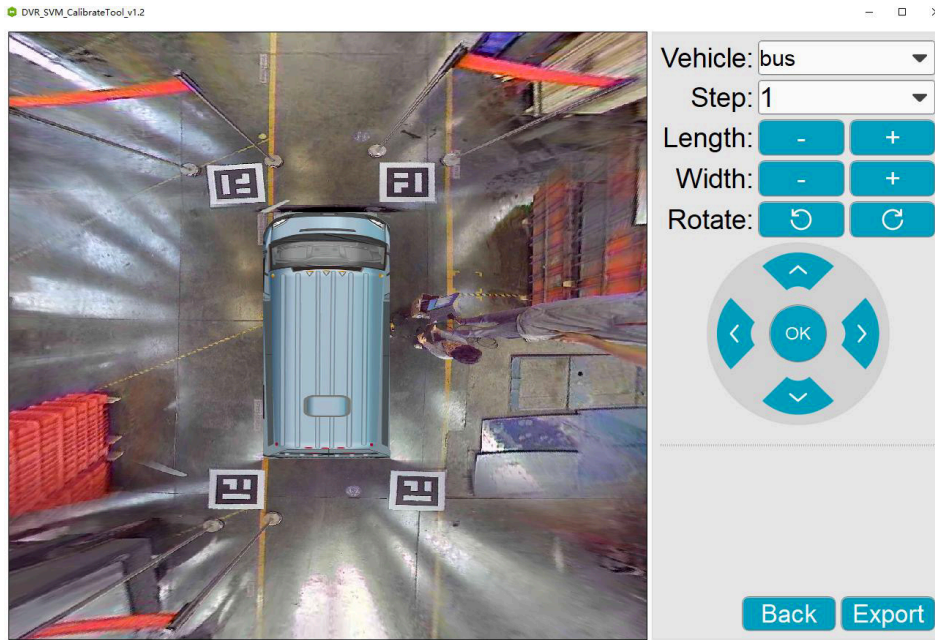
11A.



PC Calibration Tips

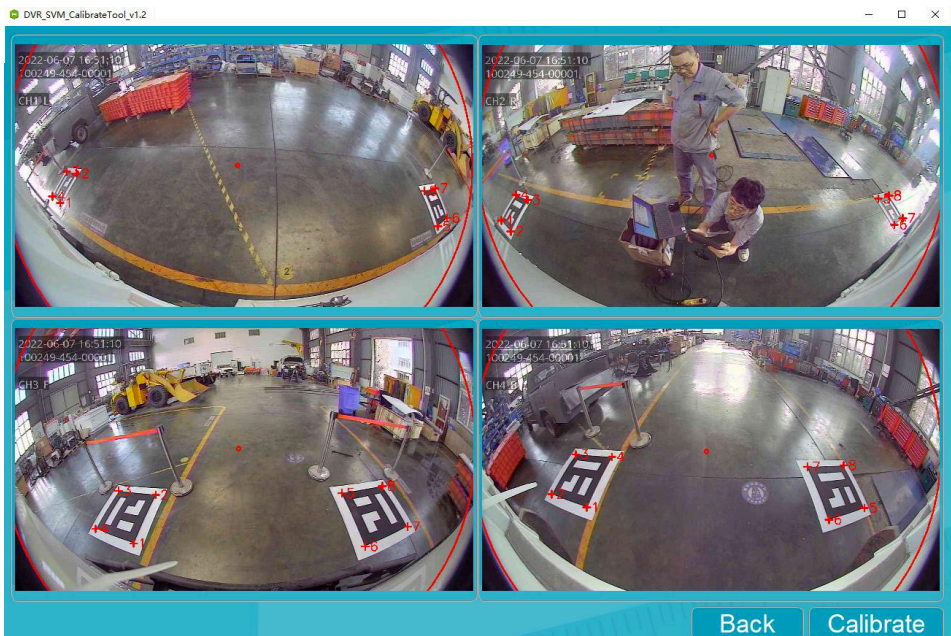
1. When calibrating, if the lines are not straight and the stitching effect near the 4 mats is not satisfactory, you can adjust the four pictures to achieve the desired view as pictured in image 1A.

1A.

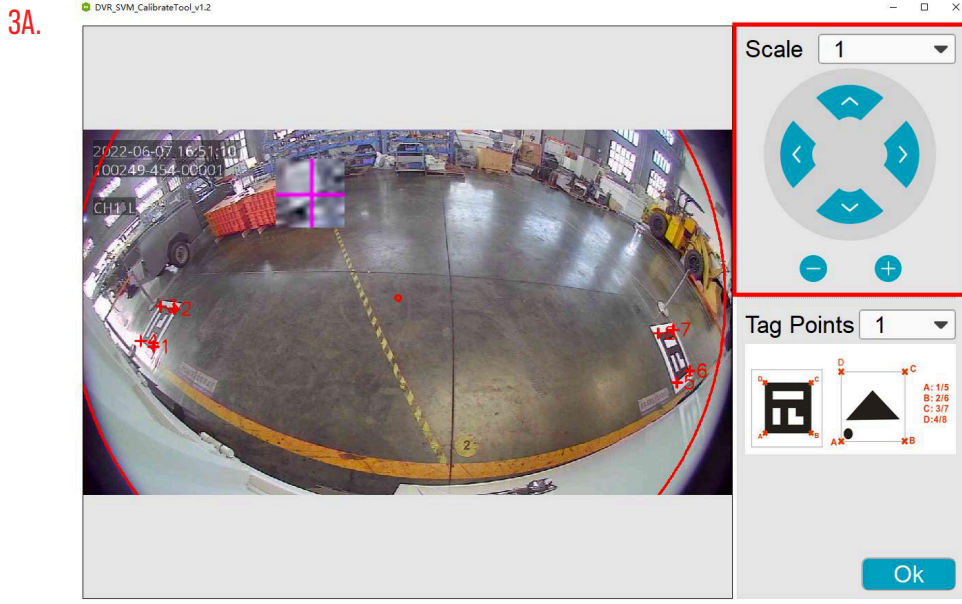


2. Click back to return to the adjustment screen. You will find that each picture has a circle and each QR code has a number. The circle is what we need to adjust, the numbers cannot move.

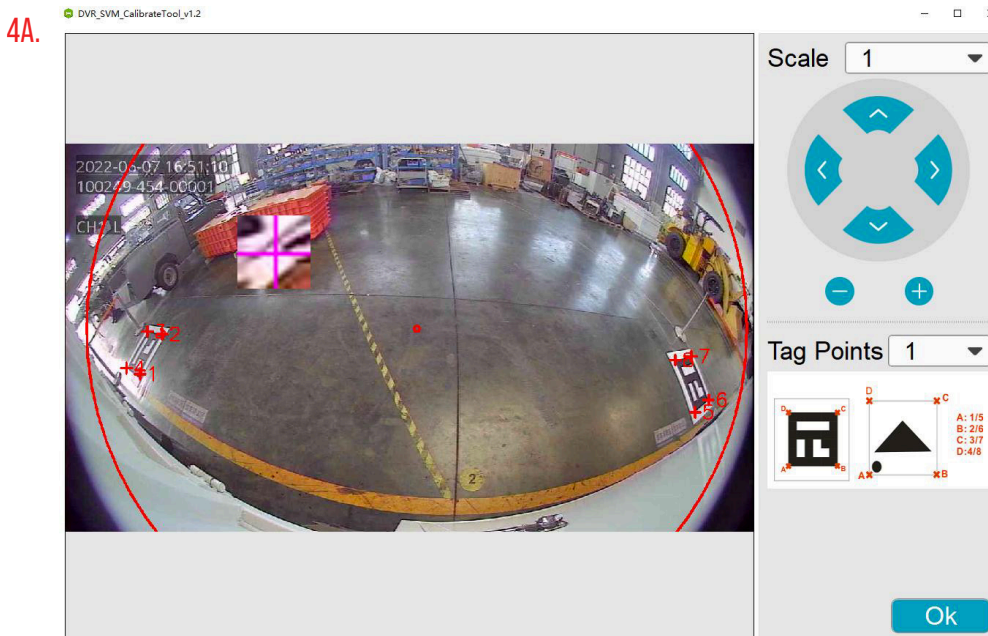
2A.



3. Double click on the first image to adjust the circle through the area on the right as pictured in image 3A. Ensure you do not move the numbers.



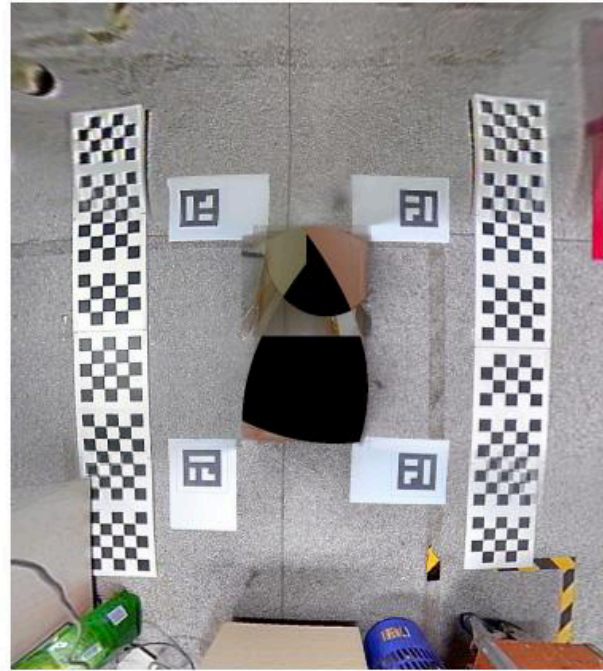
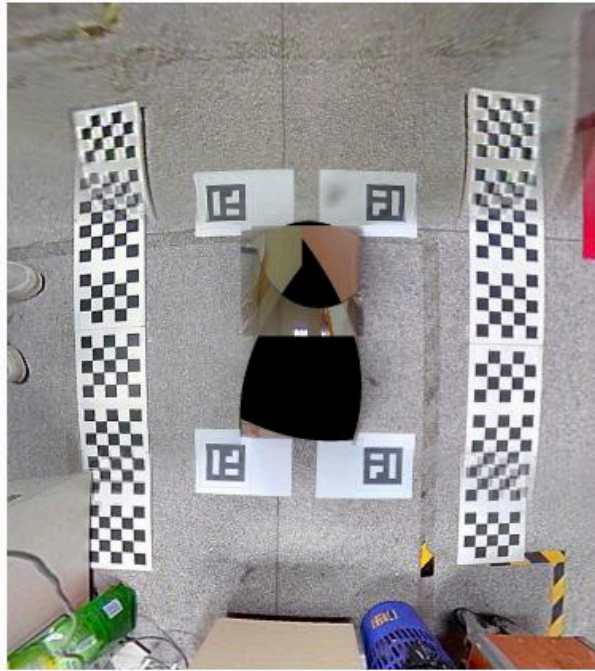
4. Make adjustments as pictured in image 4A.



5.
 - A. The red circle contains two QR codes
 - B. The red circle cannot be larger than the surrounding black area
 - C. The red circle is as close as possible to the vehicle body, including some part of the vehicle body.
6. Click OK, then adjust other pictures. After all four pictures are adjusted, click Correction to check the stitching effect

Uneven Camera Calibration

1. When the installation height of the front camera is different from the installation height of the sides/ rear camera



2. If the vehicle cab camera is lower than the rest of the vehicle, move the calibration mats to the left and the right until the lines appear straight.

Technical Support Contact Guide

For further assistance please contact KOHLTECH at:

support@kohl-tech.com

877.708.7803

www.kohltechnology.com/contact