



Series SAH SMART Air Hood® Balancing Instrument - Firmware Update

Specifications - Installation and Operating Instructions



The purpose of this document is to inform the user on how to update the firmware of the **Series SAH SMART Air Hood® Balancing Instrument** using the SMART Air Hood® application. This document will take the user through connecting to the hood using the old firmware and then updating the firmware using tools inside the application. Then this document will instruct the user on how to connect to the newly updated SAH.

NOTICE

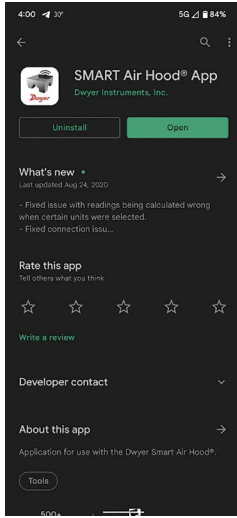
- The updating of the SAH firmware can only be done on an Android phone at the moment.
- Connection using the old firmware can sometimes not happen quickly or at all. If this happens just restart the application and the hood and try again.

Definitions and Procedures

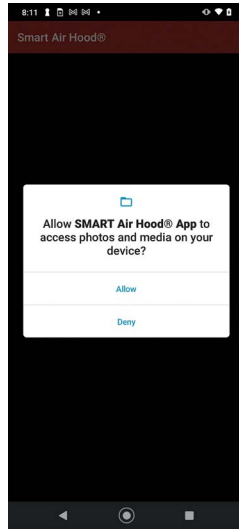
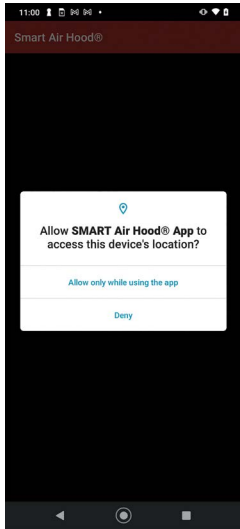
- **SAH SMART Air Hood®:** This is the device that is used to measure air diffuser flow. The SMART Air Hood® application connects to this device to display the air flow and log results.
- **SMART Air Hood® application:** This is the Android application used to connect to a SAH to measure and log air flow readings.
- **Firmware:** This is the software that is loaded on the SAH to allow the SAH to transmit the air flow to the SMART Air Hood® application.
- This is a list of the different meaning of the blinking lights on the SAH:
 - **Continuous steady blink:** This means that the SAH is waiting to be discovered and connected to.
 - **Fast steady blink:** This means that the SAH is attempting to connect to the SMART Air Hood® application.
 - **Blink with a delay between:** This means that the SAH is connected to the SMART Air Hood App® and is transmitting readings.
- **Navigation button:** This is the button on the main reading screen symbolized by the three horizontal lines in the upper left hand corner of the screen.
- **Restart the application by pressing the recents button(or doing a gesture to get to the recents screen) and clearing the SMART Air Hood® application from the recents.**

Instructions

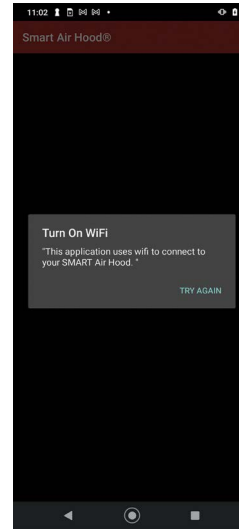
1. Navigate to the Google Play Store and search for “Smart Air Hood”
2. Select the SMART Air Hood App® shown with the Dwyer icon
3. Either select “Update” if the SMART Air Hood App® is already installed, or “Install” if it is not installed
4. If the screen looks like the screen below, select “Uninstall” and then reinstall the application from this screen.



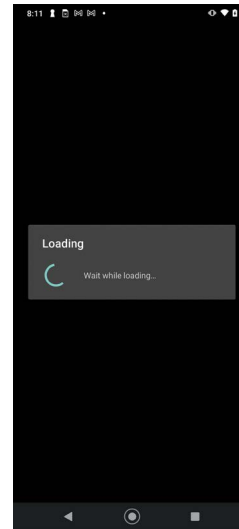
5. After installing the SMART Air Hood App®, start the application. You should see a screen asking for permission to access media. This is asking to access the storage on the phone. Allow the permission to continue.



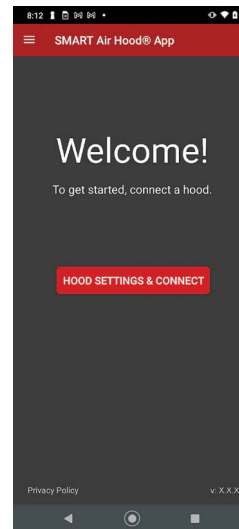
6. If at this point if you have the WiFi turned off you will get this screen.



7. Pull down from the top of the screen and turn on the WiFi setting.
8. Open the application back up and press “TRY AGAIN”.
9. The next screen will load the diffuser list to the phone.

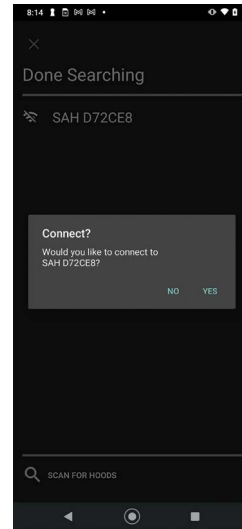
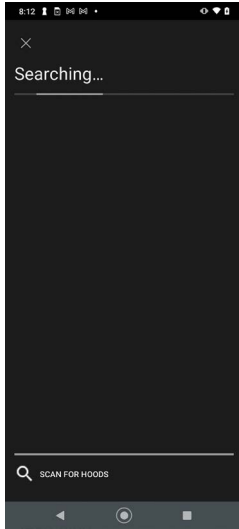


10. After the diffuser list is loaded, you should now be on the Welcome screen.



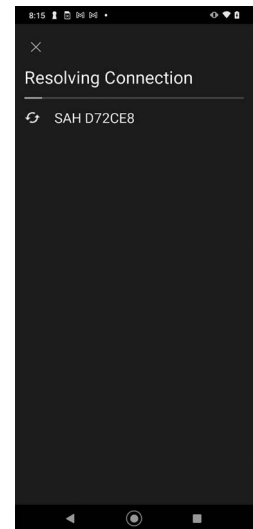
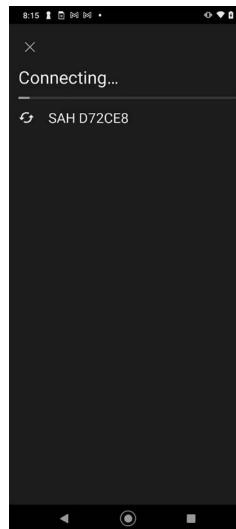
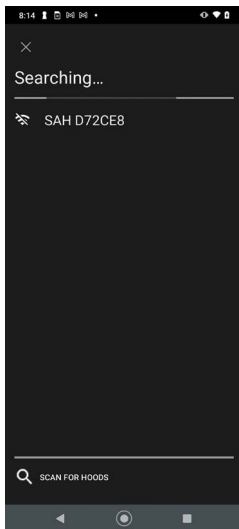
11. Verify that the version is the most recent version. The version number is in the bottom right corner of the screen.

12. At this time turn the hood on. The hood's light should be blinking in a steady constant state.
13. Press the "HOOD SETTINGS & CONNECT" button.
14. You should now be on the hood discovery screen and the application should be searching for a hood to connect. Give the application about 30 seconds. If the hood is not found, restart the hood and restart the application and try to search for the hood again.



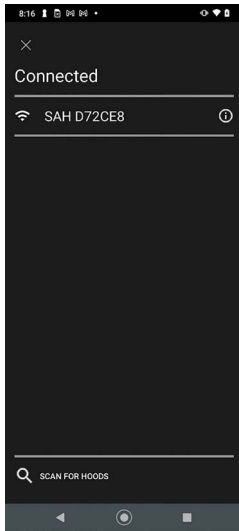
18. Select "Yes" to start the connection process. The hood should start blinking a fast steady blink.

15. If a hood is found it will show up under the search progression bar.



16. Verify that the hood's handle is the same as the handle labeled on the hood.
17. Select the hood on the application screen to connect to it.

19. Allow the application to connect to the hood. This could take a while. When the hood connects it should go into a blink with a delay after the single blink. The hood might stop blinking fast and go into a steady constant blink and then start blinking fast again. If it does this more than 3 times, restart the application and the hood and try again.

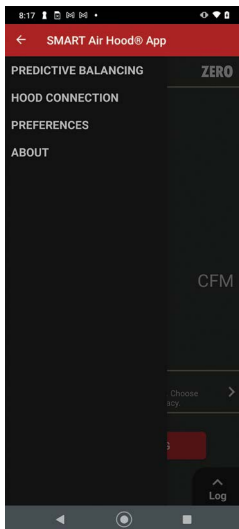


20. When the hood connects, press the "X" in the upper left corner to get to the readings screen.

21. Verify you are getting flow readings from the hood.

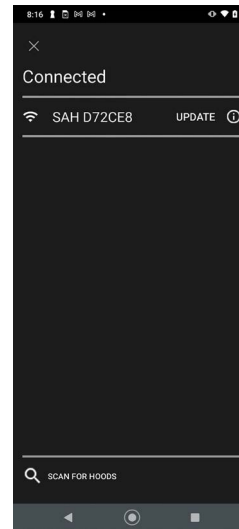


22. Press the navigation button in the upper left corner to open the navigation menu.

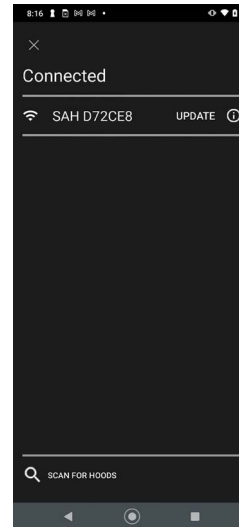


23. Press the "HOOD CONNECTION" option.

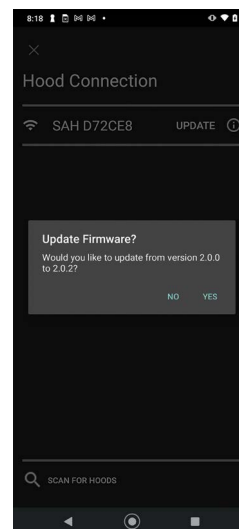
24. You should be back on the screen showing the connected hood.



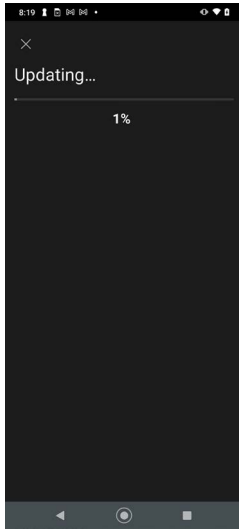
25. Press the "UPDATE" button to start the firmware update process. If the button is not showing, verify you have the most recent version of the application.



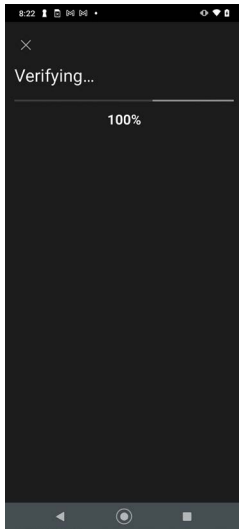
26. A dialog will come up asking you if you would like to update the firmware. The dialog will show the old version of the firmware and the new firmware version.



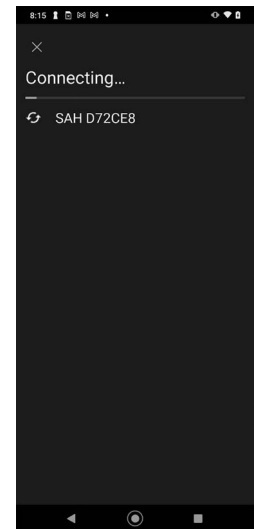
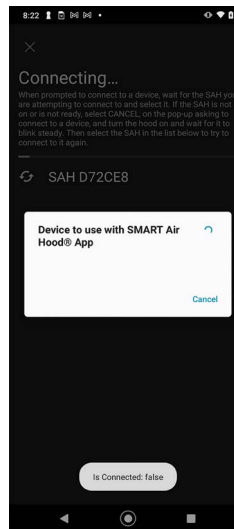
- 27. Press the "YES" button.
- 28. You should be taken to the firmware update page and the progress bar should start filling up.



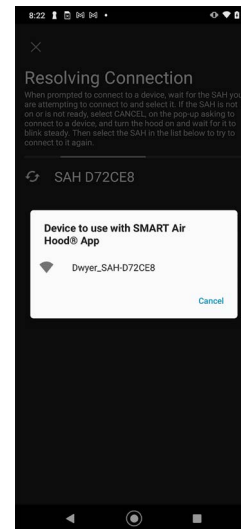
- 29. If the connection gets interrupted or the application is closed, this will not mess up the SAH. Just reconnect to the hood and try updating the firmware again.
- 30. After the update is loaded the application will verify the update.



- 31. Then the hood disconnects and you will be taken back to the connection screen to reconnect to the hood.
- 32. At this point if you want to use an IOS phone, close the application and you should now be able to connect to the hood using an IOS phone.
- 33. If you are still wanting to connect using an Android phone continue with the procedure.
- 34. If you are using an Android phone that has an Android version of 10 or more you will get a dialog as shown on the left, otherwise you will get one that looks like the one on the right.



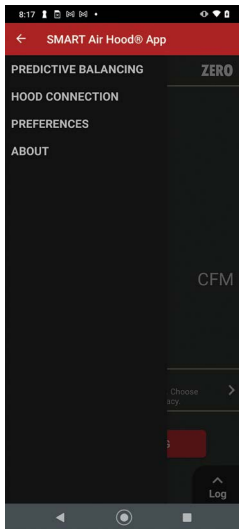
- 35. If you get the dialog for Android phones of version 10 and up, wait for the SAH's handle to show up in the dialog box. If you don't get it within 30 seconds, click cancel and press the hood's handle on the application screen to try to connect again.



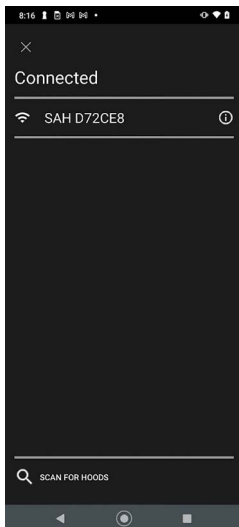
- 36. When you see the hood in the dialog select it to connect to the SAH.
- 37. The connection should be immediate.
- 38. You should be sent to the readings screen.



- 39. Select the navigation menu button in the upper left corner.

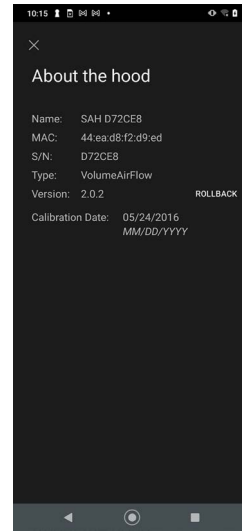


- 40. Select "HOOD CONNECTION" from the menu.
- 41. You should now be on the connected screen.

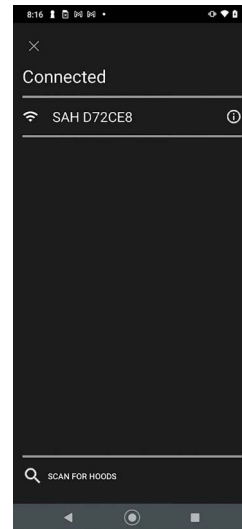


- 42. Press the info button next to the hood.

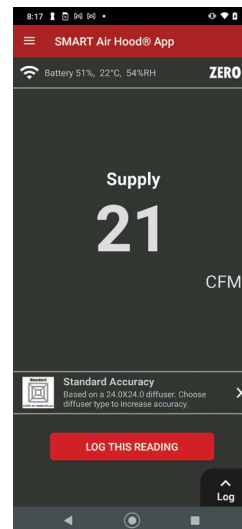
- 43. Verify the new firmware version is showing.



- 44. Press the "X" button in the upper left corner to get back to the connected screen.



- 45. Press the "X" button in the upper left corner to get to the readings screen.



- 46. At this point your SAH's firmware is updated and working.

