



## Series SAH SMART Air Hood® Balancing Instrument - SMART Air Hood® App Software iOS® Devices

### Specifications - Installation and Operating Instructions



Optional handheld  
device UHH7 shown



The **SMART AIR HOOD® (SAH) Balancing Instrument** is the most accurate and easy to operate air flow hood on the market today. The low profile design allows balancers to work in occupied spaces (bathroom stalls, MRI machines, cubicles, tables/chairs, etc.) and maneuver through doorways easier. By using the included 12 foot hood pole and wireless communications to a mobile device, one operator can balance a branch in less time than traditional balancing teams. Besides being lighter than most traditional capture hoods, the ergonomic design makes the technician exude less energy as the SAH has a lighter, balanced design. The rugged polypropylene base hood features Quad Flow Design Technology for controlling air flow and minimizing back pressure, which yields superior measurement accuracy. The Wi-Fi protocol back to the user's Android® or iOS® device gives the user real-time feedback, as they may be up to 200 yards (183 m) from the hood which saves the technician from unnecessarily going up and down their ladder multiple times to cut or open the dampers to balance the system.

The **SMART AIR HOOD® Application Software** reduces the number of steps in the air flow balancing process using Predictive Balancing. Predictive Balancing is a method of predicting the optimal flow set point for each register and the order in which they should be adjusted.

#### NOTICE

- Only compatible with firmware version 2.0.2 or later
- Android device and application version 2.2.0 or later required to perform firmware update

## I. SETUP - PORTING iOS FIRMWARE

### DOWNLOADING THE SMART AIR HOOD® APPLICATION SOFTWARE

Download the SMART Air Hood® Application Software on the App Store®. Using your iOS device, navigate to the App Store® by clicking on the icon shown below.



In the App Store®, search for SMART Air Hood® application software and press the icon shown below. If it is the first time accessing the application software, click "GET." Allow the application software to download. If the application software is already downloaded, press the "UPDATE" button to update the application to the newest version.

The SMART Air Hood® App should now be up to date.

### LAUNCHING THE SMART AIR HOOD® APPLICATION SOFTWARE

On your iOS device, navigate to the SMART Air Hood® application software by clicking on the software application icon.

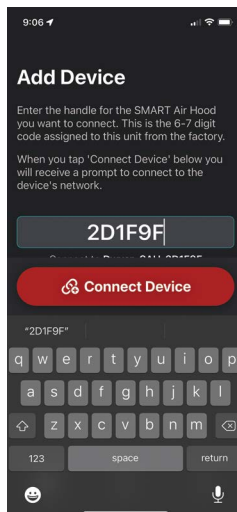


### CONNECTING TO THE HOOD

The first time you open the application software, the following screen will be shown which will allow you to add a new SMART Air Hood® device.

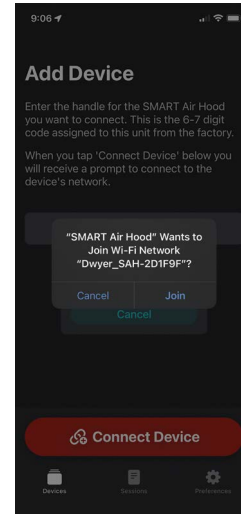


To add a new device, enter the device identifier for the unit you want to connect. The device identifier is the 6-7 digit code assigned to the unit from the factory. Enter the code from the SMART Air Hood® instrument into the text field on the Add Device screen.



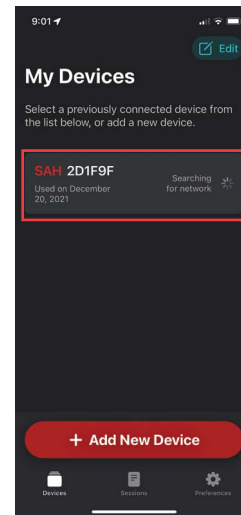
Once the identification number is entered, click "Connect Device."

A prompt will appear on the screen, shown below. Click "Join" to allow the iOS handheld to connect to the SMART Air Hood® instrument.



If a SMART Air Hood® device was previously connected to the iOS handheld, a list of known devices will be displayed in the My Devices list when the software application is launched.

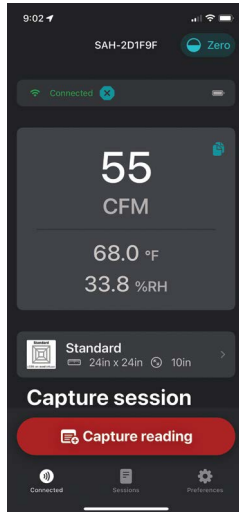
To connect to a previously connected device, select the device name from the list of My Devices.



If the SMART Air Hood® instrument you will be using has not been connected to the Application Software, click "Add New Device" to begin the connection process. Adding a new device follows the same steps as connecting to a SMART Air Hood® device for the first time, shown above.

While the SMART Air Hood® device is connecting to the software application, view the status of the connection in the My Devices list.

After the device is successfully connected, the application will automatically open to the home screen.

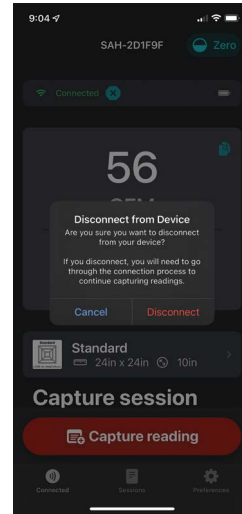


#### DISCONNECTING THE HOOD

To disconnect from the currently connected SMART Air Hood® click the device status bar on the home screen.



After clicking the status bar, click "Disconnect" on the prompt.

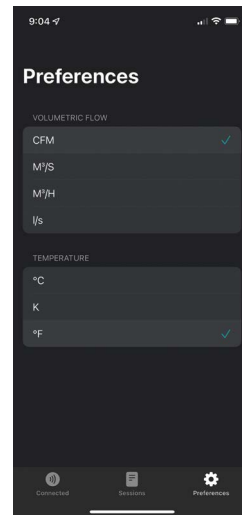


#### APPLICATION PREFERENCES

To access the application preferences, press the preferences icon located in the bottom navigation bar of the iOS application.



After pressing the icon, the following screen will appear.



To change the default units for volume airflow and temperature, click the preferred unit of measure from the list.

Return to the home screen by pressing the icon below in the bottom navigation bar.



### ZEROING THE HOOD

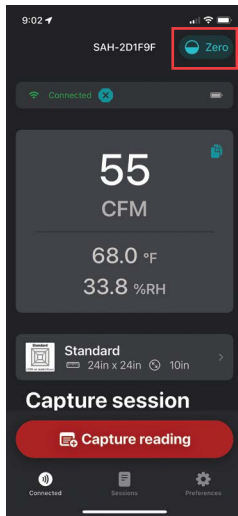
In order to zero the hood, place it in the desired orientation which will be utilized during the capture session. Make sure the hood is blocked so that no air is flowing through it.



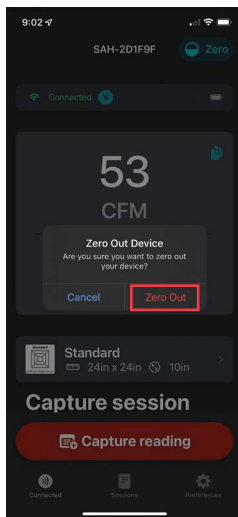
For ceiling diffusers

For side-wall diffusers

Validate the hood position to ensure the air flow is blocked. After validating the position, press the “Zero” button located at the top right of the home screen.



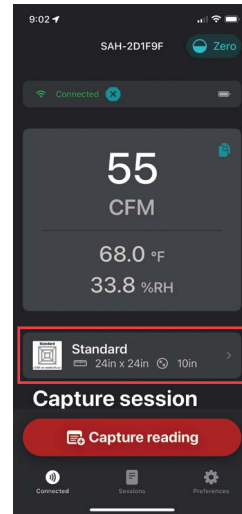
On the confirmation, select “Zero Out” to continue the zeroing process.



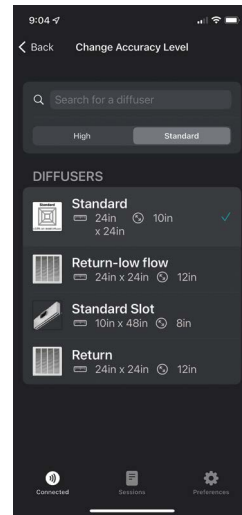
After the zeroing process is successful, the application will display a success message. Select “Okay” on the prompt to return to the home screen with a supply reading of “0.”

### SELECTING THE DIFFUSER

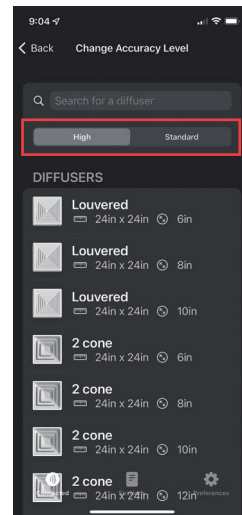
To select a diffuser, press the diffuser card located below the supply reading on the home screen.



Select the “Standard” accuracy level to take readings at the industry standard accuracy level.



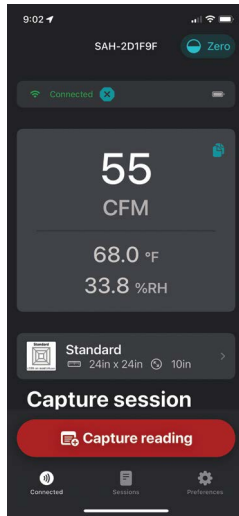
Select the “High” accuracy tab to take high accuracy readings. The neck size and diffuser type must be considered for high accuracy readings which results in a larger diffuser selection list.



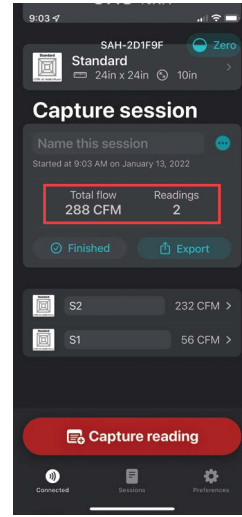
## LOGGING

Logging sessions can be created using the home screen of the software application. To begin logging, place the SMART Air Hood® in the desired position over the register to detect air flow.

To log a reading, press “Capture Reading” located at the bottom of the screen.

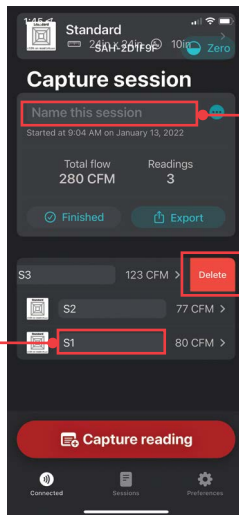


The Capture Session log will retain each individual reading from the session. In the Capture Session section, you can rename individual registers, delete individual readings, and name the Capture Session. As each individual reading is logged, the summary details for the entire Capture Session will be updated automatically. View the Total Flow and Total Number of readings in the summary section.



Once a reading has been captured, the full history of readings for a capture session can be viewed by scrolling down to the “Capture Session” section of the home screen.

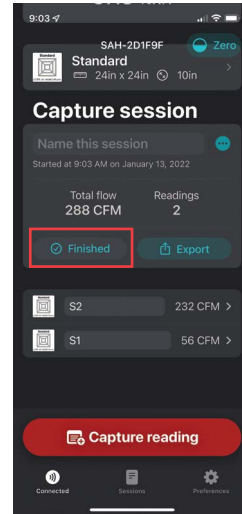
Once a Capture Session is complete, use the “Finished” button to save the session details to the History section of the application.



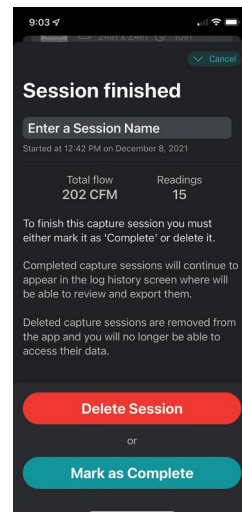
Name a Capture Session by clicking the “Name this session” box and begin typing.

Delete an individual reading from a session by swiping left on the reading then selecting delete.

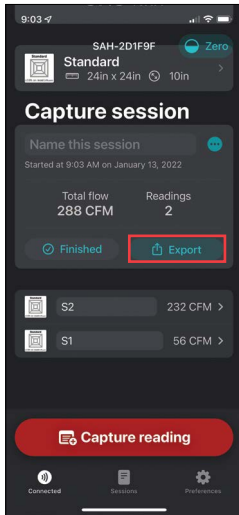
Name any of the individual registers by clicking the default name and typing.



After clicking “Finished” the screen will display a high-level summary of the entire session. From this screen, you can name the session before clicking “Mark as Complete” to save the session to the application history. If the session is no longer needed, click “Delete Session” to permanently delete the logs captured in the session.

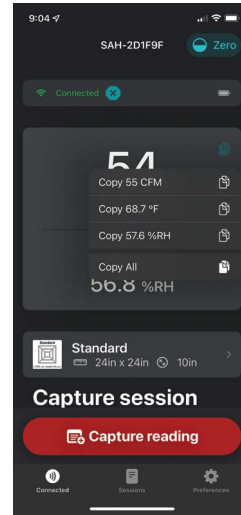


Logs can be exported by pressing the “Export” button in the summary section of the Capture Session.



### COPY/PASTE

This application supports copy/paste functionality for readings. To perform this action press the copy button next to the current reading then select the reading to copy or select “Copy All” to copy all readings.



After clicking “Export” use the iOS Share Options toolbar to email, save, or export to another application on your device.

### SESSION HISTORY

Review previous capture sessions from the History section of the software application. To navigate to the History, click the icon below in the bottom navigation bar.



Session History is sorted Newest to Oldest. To review the individual logs from a Capture Session, click the session.

From Session Details, you can review the details of a previous capture session and Export the session by clicking “Export.”

